# **Bruno Comby**

# RAW FOOD

# nutrition



Eat better, live better

English translation by Camilla Crombeke

### **Dedication**

This book is dedicated to my family, and to all doctors and health practitioners, for a more prevention-oriented medicine, and, above all, to you, dear reader, for a better life.

« Bruno Comby's book is the result of considerable scientific, theoretical and experimental research. The advice he gives is simple, beneficial, scientifically consistent, medically harmless, and tested by practical experience. He shows us how to eat better, and enjoy it, to enhance our health, and also our well-being. »

Doctor Christian Caussé Former doctor to the French Prime Minister

# About Bruno Comby's research on nutrition and raw food:

« There is a new book out by Bruno Comby, and I find the concept he proposes the most exciting approach to food I've seen in a long time. »

Michelle Leigh, Japan Times.

« Very convincing! » ... « After years of frustrating diets, nutritionists don't speak of diets any more but of food environmentalism » ... « A simple system to eat and lose extra-weight without effort. »

Daniele Bott, Vogue.

« How to make your food habits better for you and for the planet... Bruno Comby's latest success. »

Elle.

« Here is the answer to the world's food problems » ... « A gourmet's diet and the latest in French cuisine » ... « Dr Comby, a young scientist and nutritionist, whose revolutionary thesis on how to provide the human race with extraordinarily cheap and nutritious food has excited Paris. »

Safa Haeri, The Independent.

« Comby's method is not designed to lose weight, although it does give this result on those who need to. »

Montreal Newspaper.

« The best in the field of nutrition. »

Mark Perrault, ACSMF Radio.

« Raw food therapy is the best way to increase your eating pleasure... improve the quality of your skin... and save energy. The amount of energy used just to cook our food equals the energy production of 150 nuclear power plants of 1000 MW each operating full speed full time. »

Pascale Corbin, Your Health Magazine.

«In his latest book... Mr Comby recommends that the French forsake their culinary heritage»

Tom Rhodes, The European.

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«The idea Comby proposes in his book is an old one which has been forgotten in recent years... Natural, logical and simple, Comby's diet makes sense... It ensures that you consume all those health promoting natural medicines offered by fruits, vegetables and fish. And it gives you everything you need in its original form, and nothing you don't.»

Michelle Leigh, Japan Times.

These are just a few excerpts out of the more than 1.000 articles and interviews published in the main worldwide magazines about Bruno Comby's research and nutritional theories.<sup>1</sup>

<sup>&</sup>lt;sup>1</sup> With thanks to the Bruno Comby Institute.

#### **Notice**

Testing or adopting a natural diet does not in any way exclude medical surveillance. Have a complete medical check-up and blood count before changing your diet. Note your weight, your cholesterol and triglyceride levels (they are likely to drop if they are too high), and your blood pressure. Regular medical check-ups will allow you to scientifically observe and control under the supervision of your doctor the improvement of your state of health after your change of diet.

This book attempts to have a broad viewpoint about our scientific knowledge of human nutrition. The dietary advice it proposes is the result of studies performed by the author, and the Comby Institute, as well as other laboratories and researchers throughout the world. The manuscript of this book was reread, discussed, and corrected by doctors, professors of medicine, heads of hospital services and American, Canadian, German, British, and of course, French scientists. It is therefore the fruit of an international scientific and medical collaboration. But nothing, and especially not this book, can replace your family doctor and your own determination to eat better.

Nutrition is a serious subject: your life expectancy as well as its quality depend on it. By eating better, you can considerably improve your health, and, after a while, you it is possible that you may no longer need to take any medication. But go about it properly: nutrition must not be taken lightly. Make sure you only eat good quality products, preferably organically grown, and not altered by heat. To benefit from a more natural diet in the long term, and especially if you want to obtain therapeutic results, it is essential to:

- 1- Have regular medical check-ups, and to not interrupt or alter any medical treatment or diet you have already started, without consulting your doctor.
- 2- Learn to balance your meals correctly and buy quality foods. Long-term practice requires a real re-education with respect to your eating habits, something that goes much further than just reading a book.

By respecting these elementary precautions, you will benefit rapidly, both physically and psychologically, from a more natural, healthier, simpler and powerful diet, that will eventually not only give you a feeling of greater well-being, but also more gastronomic pleasure than a diet of adulterated junk food.

# FOREWORD by Pr Thieu Nghiem

Professor Thieu L. Nghiem, M.D, Ph. D., epidemiologist, M.Sc. in teaching preventive medicine, graduated from and former professor of the medical university of Hanoi, Vietnam (1952), university of Saigon, Vietnam (1956-1958), Harvard University, U.S.A. (1960), John Hopkins University, U.S.A. (1960-1965), Wayne State University, U.S.A. (1967-1973), Washington state epidemiologist (1973-1978). He is now retired, and lives in the State of Washington.

I first read this book in 1997. As a retired medical professor, three years ago, my arteriosclerotic heart was massively blocked, and gastric biopsy specimens from my stomach revealed histologic changes of gastric cells, showing dysfunctions and precancerous lesions.

Being former a former Washington State epidemiologist, medical professor graduated from the best medical universities, and having teached classical medical science at a number of well known medical universities in the world, unfortunately had not helped me avoid the adverse health effects cited above. Even though I could access to the best of medical knowledge available, and consult the most famous of my medical colleagues, this didn't help me much.

Antioxydants, vitamins and nutrients helped me bypass the bypass. Improved nutrition, as well as the daily practise of yoga, and Taoist physical exercizes reestablished my previous health. The progress and improvements observed as years passed by, and the new information available about human nutrition and longevity made me impatient.

Reading this book reminded me of the key role of nutrition, and especially of the importance of "Raw Foods", to human health in general and, in my case to reverse the trend toward the cancer of stomach resulting from my duodenal ulcer dating 50 years back, which the usual medical remedies had not solved.

I did not just read this book, but decided to experience it. The results were astonishing and in perfect accordance with the author's announced findings: raw foods not only replaced the indigestions by lightness feelings after meals nearly immediately, cured my occasional constipations and helped improve my stomach problems, but also trimmed fifteen pounds off my weight in ten days. I reduced the daily swallowing of twenty four tablets and pills of vitamins, nutrients, anti-oxidants to only four tablets.

A raw diet is not a « magic cure », it is just obeying the law of nature and offering our body the nutrients that it is genetically adapted to.

Biopsies, pharmaceutical treatments, and other expensive therapies, are sometimes useful, but a raw and balanced diet is often much more efficient to restore optimal health.

As a medical profesional specialized in Infectious Diseases, Parasitic and Tropical Medicine, this book presents a new approach which overcame my fears of infestation of tape-worms, other parasites in raw beef, fishes, etc. by very convincing scientific arguments on the role of a raw diet to strengthen the immune system, and therefore to help overcome some modern diseases. In fact, many of the diseases observed today seem to be nothing but the result of an inadequate nutrition.

To me, Bruno Comby is one of the first scientific researchers and writers to unify the knowledge of many fields, and to overcome the partial, distorting myths and evidences of the modern medical specialists' viewpoints.

Believe it or not, this book represents a real revolution in the field of health and medical science. From an epidemiological standpoint, the author's unusual experience of observing a group of several thousand raw-eaters throughout the world is a very unique research.

Bruno Comby is not a medical doctor, but, like Louis Pasteur, George Watson, Leonardo da Vinci, he is an outstanding pionneer in the field of health and of medicine.

The diet proposed in this book is the theoritical, fundamental and practical answer to many clinical diseases usually considered incurable. Humans are not doomed to be sick all their lives, but doomed to live happily, vibrantly, if they follow the laws of nature.

Nutrition is the basis of life. As Bruno Comby demonstrates that a raw diet, however different it may be from our standard inadequate industrial and denaturated modern diet, is the basis of human health. Such a diet can avoid and/or cure many modern diseases.

As one of the representants of the medical community, I honestly consider Bruno Comby's research on the clinical effects of a raw diet, described in this book, as probably being one of the most powerful medical breakthroughs ever presented to the public and to medical science professionals.

Professor Thieu L. Nghiem.

### PREFACE by Prof. Maurice Cloarec

Professor Cloarec is professor of preventive medicine at the University of Medicine of Paris, President of the National Association for Medical Prevention, Head of the Nutrition and Medical Prevention Service of the Tenon Hospital in Paris.

A considerable change of outlook can be observed today with respect to health. There was a time when we expected everything was going to be cured by scientific discoveries and the progress of biology with the creation of new, ever more efficient medication. Scientists have thought for centuries that health problems, from asthenia to depression, from lack of weight to obesity, could be solved by a whole range of medicines. Today, medical science has revised all this, drawn lessons from the past, and become aware of the importance of prevention and nutrition.

After believing blindly in science, we have now become aware that we do not know enough about the fundamental needs of the human body and that there remains much to be done before we humbly start to understand how it works. One example is the famous Framingham survey undertaken in 1949. This survey of a town was designed to isolate the factors involved in the incidence of arteriosclerosis, particularly hypercholesterolemia, high blood pressure, the role of diabetes, and the dangers of tobacco poisoning. But, with time, little by little, the organizers of the survey realised that other factors had to be taken into account: hormone levels, stress, and, more recently, the importance of the quality of sleep.

The problem of prevention is that it is much more difficult to carry out a survey on nutrition than to perform an electrocardiograph or a blood count. However, many studies have nonetheless revealed the importance of the food factor in the prevention of coronary disease, cerebral vascular accidents and high blood pressure. A better dosing of nutritional fatty acids can avert lipidic anomalies and improve our defenses against thrombosis. Furthermore, trace elements, also called oligoelements, have been shown to play an essential role in different metabolisms and in the fight against excessive free radicals.

In fact, we are rediscovering today the importance and even the necessity, in the field of nutrition, of getting closer to nature and to original raw foods. This is what is proposed here by Bruno Comby's book. But it is not enough just to eat better, we also have to learn to relax and sleep better to offset the stress of modern life<sup>1</sup>. Few scientists have looked into the consequences of the disruption of our rhythms of

<sup>&</sup>lt;sup>1</sup> See, on this subject, 'Power Sleep' by Bruno Comby.

sleep, aggravated in the modern world by magical electricity and the habit of late TV viewing.

We have therefore reached the stage where the role of a doctor is not so much to prescribe treatments as to give advice or serve as a confident able to identify and rectify errors of nutrition and lifestyle. The prescription of medicine should only be a secondary requirement.

Diet is one of the pillars of medical prevention. Here are the recent results of a nutritional survey made by our National Association of Medical Prevention on 5000 patients monitored for five years:

Initially, 32 % of them never ate fresh fruit or vegetables, 30 % ate very little fiber, and 37 % breakfasted on just a cup of coffee and some bread and butter. Qualitatively, this survey revealed a poor nutritional balance. After having given these subjects a little basic dietary advice, we observed and scientifically measured, with time, an objective improvement of the clinical and biological parameters, due to the sole effect of following this advice.

The public therefore must be taught the meaning of a healthier diet, from childhood onwards.

We therefore agree with the notion of nutritional environmentalism put forward by the author of this book, and we would like to encourage all those who participate in this project.

Pr Maurice Cloarec.

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#### FOREWORD BY PR. ABRAMS

Pr. Abrams is anutritionist and anthropologist at the University of Georgia,  $U.S.A.^{1}$ 

According to the scientific research of palaeontologists, the human species has existed on Earth for several million years. For over 99 % of this time, man was a hunter-gatherer, until the end of the Palaeolithic era.

Palaeolithic man had no choice but to choose his nutrients amongst whatever was edible and available in his natural environment. As a hunter-gatherer, he ate plants and animals in their natural state, as found in the wild. He followed the seasons when picking fruit, which he consumed ripe, with nuts, berries, and wild plants. He ate animals that he captured with his bare hands or with simple stone tools: small and large game, birds, insects, worms, reptiles, fish, shellfish, eggs, and even certain spiders. The remains of human skeletons from the Palaeolithic era show that these people had practically no dental decay and that they were in exceptionally good health<sup>2</sup>. Their diet was obviously particularly healthy.

About 10 000 years ago, man entered the Neolithic or agricultural era, which also saw the development of the use of fire to prepare food, that is to say cooking. With the advent of agriculture, man had to work harder than before to plant, grow, and harvest cereals. With time, the quantity of cereals that were consumed increased until they became man's main food (wheat, bread, biscuits, flour, etc.). At the same time, the state of humanity's health deteriorated to such a point that today, if we take dental decay<sup>3</sup>, and degenerative diseases<sup>4</sup> as indicators of a population's health, these disorders have become endemic<sup>5</sup>.

<sup>&</sup>lt;sup>1</sup> Professor of anthropology and sociology at the University of Georgia in the US., Professor Abrams has also worked at the University of Tokyo and at the University of Mexico. A specialist in nutritional anthropology, Prof. Abrams has conducted anthropological surveys in the field in Alaska, Mexico, the Yucatan, Asia, the Pacific, Africa, and the Middle-East. He is the author of 8 books and 156 scientific publications, and a member of the following associations in the U.S.:

American Anthropological Association
 American Sociological Association
 Scientific Research Society

<sup>-</sup> International Commission on Food and Food Problems
- Advisory Board of the National Foundation for Nutritional Research

<sup>-</sup> Committee on Nutrition of the American Anthropological Association

<sup>-</sup> Georgia Academy of Science.

<sup>&</sup>lt;sup>2</sup> We will come back later to this point which is contrary to certain popular beliefs. Three stages can be distinguished in the development of humanity: man the hunter-gatherer, man the farmer and man the industrialist. During the farmer stage that preceded industrial man by a few thousand years, our ancestors' health was precarious and their life expectancy much lower than that of modern man. But, if we go even further back into the past, to the time when man was still a hunter-gatherer and did not transform his food before eating it, it can be seen that his health, despite a much more threatening and wild environment, was better than that of today's industrial man.

<sup>&</sup>lt;sup>3</sup> Of which we find practically no trace on teeth from skeletons dating from before the Neolithic era.

<sup>&</sup>lt;sup>4</sup> For example, cancer, heart disease, and diabetes, which today strike at an increasingly early age, are very frequent (in the modern world) degenerative diseases linked to nutrition.

<sup>&</sup>lt;sup>5</sup> Endemic: which concerns a whole population or a large proportion of a population.

With time, man learnt to produce and preserve greater and greater quantities of food thanks to agriculture, processing, preservation, and the preparation of food before consumption. In doing so, he modified the nature and the quality of the food he consumed and he considerably reduced its variety. For example, the staple food of most human beings today is limited to wheat, rice, millet, sorgo, manioc, potatoes, and beetroot, and even sometimes just one or two of these foodstuffs in a given region. It should be noted that none of these products is consumed in its natural state: all are cultivated and altered by heat (cooking) before being eaten. In the Palaeolithic era, man consumed none of these foodstuffs or very few of them.

Our Palaeolithic ancestors ate a great variety of natural raw foods, without altering them, and they apparently lived in good health on this diet, which remained practically unchanged during the three or four million years of humanity's development.

As a result of our hunter-gatherer origins, and because human genetics evolves very slowly, the natural diet of our ancestors is undoubtedly the most ecological today, still perfectly adapted to the human species. Modern scientific knowledge in the field of anthropology and nutrition show that we can live better, easily achieve better health and halt the current process of degeneration of the species, simply, as this book proposes, by adopting a raw natural diet.

Pr. H. Leon Abrams.

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#### INTRODUCTION BY BRICE LALONDE

Brice Lalonde is former Minister of the Environment in France, one of the founders of 'Friends of the Earth' in France, President and founder of 'Generation Ecologie' (french environmental movement).

Environmentalism applies to every aspect of life and to diet in particular, which is why I was happy to accept writing a preface to this book by Bruno Comby; it presents nutritional environmentalism and follows his previous books, all in the domain of prevention, nutrition, and applied environmentalism: how to stop smoking, stress management, a better diet, efficiency in work, entomophagy (eating insects), and better organization<sup>1</sup>. Environmentalism, beyond political and scientific discussions, is only of interest if it is put in practise in our daily lives. Nutrition is part of these elementary acts that we repeat several times every day and that make up a large part of our existence.

Until now, man struggled to dominate nature and exploit its resources for his immediate profit. Today, we have to learn how to harmonize the satisfaction of our our daily needs with the respect of the environment. For a long time, we ate our meals without caring much about the deferred consequences of our dietary behavior, but we are now discovering little by little that we also have to take in consideration some ecological considerations in the determination of our diet. The food industry has produced what are now called 'food industry products' for several decades, as a function of immediate economic criteria; these have led to a decrease in the flavor of food, to the profit of a flourishing processing and distribution industry. The development of collective catering and fast-foods is the result of industrial agriculture. We have less time to go shopping and prepare food. This attitude, unfortunately, also has dramatic consequences on public health and the environment. Our present dietary habits favor a polluting food industry and a waste of energy through excessive cooking and processing of food.

Take the example of a fruit such as an apple: we can consume it as it is, or in the form of apple pudding. If we eat it in its natural form, we do not pollute, we benefit from all its vitamins and flavor, whereas in the form of an apple pudding dessert, an apple is less profitable for our health (its vitamin content has decreased), has less flavor (sugar has to be added), will be badly digested (bad food combinations in the pudding) and, in addition, energy was required to cook it and manufacture its container, which will finally end up on a refuse dump and pollute the

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 $<sup>^1</sup>$  See other works by same author: How to Stop Smoking, Stress-Control, Power Sleep, Exams in Your Pocket, Environmentalists For Nuclear Energy, Maximize Immunity, Revolutionary Stress-Management Program, and Eating Delicious Insects.

environment. We have everything to gain, therefore, with a little good sense: eat apples raw, as well as all other fruits, and why not our whole diet, as Bruno Comby suggests? Good sense is environmentalism in action.

We usually choose our foods according to three main criteria: their weight, their price, and their taste, an tend do disregard: the quality of foods, their nutritional value, our resulting health and well-being, the prevention of health risks (cardio-vascular accidents and illnesses, despite the fact that their human and financial cost is far from negligible), conviviality, the preservation of the environment, the protection of our species and of the planet for future generations. These factors, although their importance is difficult to estimate precisely, are fundamental and should play an essential part in our choices. This is what the nutritional environmentalism proposes.

We now know, as this book also confirms, that a great number of illnesses can be prevented by a more ecological way of life. By eating better, we can in particular prevent cardio-vascular disease (which kills one in two people at an early age in developed countries), as well as certain allergies and forms of cancer. The basic rules of daily environmentalism should be taught to children from their youngest age. A more ecological diet would contribute to solving the problem of the increasing cost of social security and public health expenses. The question of health is often mentioned in political discussions in terms of health care benefits (all patients should have access to medical care and be properly cared for), but another approach is possible, in terms of prevention and helping people be responsible about their health by instructing them a healthy lifestyle. We are in fact responsible for our health, as it is the result of our way of life and of eating, sleeping, smoking, and working. We can live in good health or, on the contrary, quickly become unwell. Environmentalism means, above all, emphasizing prevention so that we can at last benefit fully from the old saying "preventing is better than curing". This benefit would not only be financial for individuals and collectivities (less medical care expenditure and less absenteeism at work for example), but, better still, would mean greater vitality, efficiency, quality of living, well-being, and comfort for all.

There is no "perfect diet" applicable to everyone. But there is a simple, pleasant, and easily applicable way to eat better: eat more raw fruit and vegetables that are rich in vitamins and fibers, learn how to balance our meals, avoid cooked fats as much as possible as these are harmful to our cardiovascular system, avoid combining too many different foods together, choose quality foods whenever possible, and, above all, enjoy life and eat in a pleasant and friendly environment, because that is important too. We must also learn to beware from "food gurus". Nutrition is a science, and any kind of diet must first be consistent with all available scientific nutritional knowledge. There are too many dogmatic, dull, restrictive and

moralizing nutritional. Closed and monolithic systems that pretend they possess the truth do not lead to people's fulfilment, but rather to their confinement.

Bruno Comby is both a scientist and an environmentalist, who is striving to propose a constructive, open nutritional approach. He proposes but does not impose, he simply orientates us towards better dietary habits, and, as a result, we can all apply dietary environmentalism and benefit from better nutrition in our own environment. Company managers who eat at the restaurant every day for business, mothers who prepare meals for the whole family, students on a strict budget, single men or women with no time to cook, sportsmen wanting to improve their performance, all these people will benefit from this book.

Wanting to improve our nutrition, is a way of thinking that leads us to a greater ecological awareness and, for society as a whole, this also means greater importance granted to environmentalism.

This book is not just a theoretical work, but above all a practical guide that is easy to understand, filled with examples and enlivened with delightful drawings by Moebius, an artist of genius, whose interest in environmentalism is well-known.

We have neglected and sacrificed our health and quality of life for years, emprisoned as we were in artificial life habits, in the name of immediate pleasure and productivity. From this point of view, nutrition and gastronomy were considered as the short-term satisfaction of a vital need. It is high time that we take longer-term effects into account in our choices, as well as the qualitative effects of the foods we eat on our bodies.

Bruno Comby is a person full of good sense, who manages a prevention and nutrition research laboratory. In the following pages he invites you to share his wide scientific and human experience of dietary environmentalism. Read this book carefully and you will not be disappointed, as it can really help you to live better. It is at the heart of the ecological debate, and this is why I hope that reading this book will make you want to apply its guiding lines in your daily life, to enhance your vitality, health, and well-being, as well as your performance and efficiency.

If we want to be of some use during our brief passage on earth, we would be wise, before wanting to change other people, to change ourselves first. When we have learnt to live better, a little corner of the planet will be a better place, and we can then, all together, advance towards a better world.

Brice Lalonde.

#### **DEFINITION OF DIETARY ENVIRONMENTALISM**

"Research on the subject of nutrition is one of the finest and most worthy subjects of our attention."

Hippocrates.

Dietary environmentalism is the application of environmentalist reasoning in the domain of diet. Man, like all living creatures, lives in symbiosis with his environment. The delicate equilibrium of life is the result of a perfect balance between the genetics of a species, which determine its morphology and its physiological functions, and its environment. By breathing, man absorbs oxygen, which is essential to his survival and releases carbon dioxide. Thus, any modification of atmospheric composition, a shortage of oxygen, or the pollution or modification of the air can be harmful to our health. This is why atmospheric pollution in large cities is carefully monitored. But breathing only ensures our supply of oxygen. The main exchange of matter and energy between man and his environment comes from food<sup>1</sup>. Any processing of our natural food is therefore liable to harm the quality of our life if just occasional errors are made, and can endanger our survival as a species if more serious, widespread errors are systematically repeated. Will man survive long in the XXIst century with a totally artificial cooked diet?

Today, our planet is in danger, because of pollution and bad management of its natural resources. Environmentalism has therefore become a necessity, if we are to avoid the disasters that could result from deforestation, the pollution of the oceans, the destruction of the ozone layer, meteorological changes, the extinction of certain animal species, etc. Similarly, our diet at present is polluted and totally inadequate. Dietary environmentalism is therefore vital if we want to *live better*, prevent the degradation of our *health*, and the degeneration of the human species.

Dietary environmentalism immediately leads to a raw diet as the "natural reference", the type of diet we should strive for to regain the natural health that is our birthright.

In the ecological domain, we are all interdependent, FORESTS, ANIMALS, OCEANS, ATMOSPHERE, the HUMAN SPECIES are all aboard the same boat: the Earth, all interacting with each other. In the nutritional domain, on the contrary, each of us can benefit from his or her own actions. If you eat better, it is your own health which will improve, not your neighbor's. Planet-wide

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<sup>&</sup>lt;sup>1</sup> Topologically and geometrically, the inside of the human digestive tract is part of the environment. The digestive tract, however, plays a particularly important role in our environment because of the intestinal flora and the quantity of molecular exchanges and transformations that take place in it. Environmentalism and the respect of nature should also be applied to nutrition.

environmentalism concerns collective awareness, whereas individual environmentalism mainly depends on individual choices. Diet is for me the main part of individual environmentalism:

You can considerably improve your health and consciousness with a raw diet, and you're the only one that can decide to do it, or not!

Most environmentalist reasoning can apply to dietary environmentalism: the interaction of a system (the human body) with its environment (the food it ingests), the notion of pollution of a system (the Earth or the oceans in the framework of classic environmentalism, the human body in the framework of dietary environmentalism) by abnormal molecules (polluting substances or toxins), and, on the other hand, the dangers of such pollution, particularly if it increases with time. Fortunately, solutions do exist: the aim of dietary environmentalism and of the raw diet is to reveal these solutions and promote them.

The first step consists in questioning the way we eat, pinpointing possible errors and proposing solutions. What is the state of our knowledge in the domain of dietary environmentalism? Are there real problems and what solutions can we devise? How can we deal with all the questions relating to the nature of essential foods, the identification of unsuitable and polluted foodstuffs, the ways in which we can balance our diet, the proportions to respect between the different classes of food products, the importance of food quality (we must be wary of pesticides and synthetic fertilizers, for example, but also all other synthetic substances and processing systems), the usefulness or, on the contrary, the dangers of various food combinations, etc. RAISE YOUR CONSCIOUSNESS AS CONCERNS WHAT FOODS ARE TO BE CONSIDERED EDIBLE OR NOT. Learn that heat and fire are one of the main processing systems that dramatically affect the chemical structure of our foods. Learn that insects are edible... and many other exciting discoveries that nature will start teaching you once you adopt a raw diet.

Once we start getting a little more conscious of the importance of a raw diet (with or without the meat and the insects), the next step is implementation. This requires public and individual awareness, so that everyone can succeed in changing his or her dietary habits. This process has already begun. The wide variety and popularity of "natural" diets is an illustration of this transformation happening now before our eyes, although many of these so-called "natural" diets are crazy and much remains to be done.

Many different diets claim, on different bases, to be "the" best for man. The distinctive feature of this book is that it does not present just another method to add to the already long list of slimming diets that all fashion magazines advocate in spring, but rather defines working orientations to demonstrate the basic principles of a healthy diet. We will see that one of the first orientations of any positive dietary reform consists in eating more fruits and other raw foods, less adulterated and processed. This is also the orientation of modern "nouvelle cuisine", which consists in cooking food at very low temperatures, for as short a time as possible. Cooking causes numerous biochemical changes. The habit of cooking, mixing, and processing food by a number of processes has become so widespread, and the consequences on our health are such that this is certainly the main factor that should be questioned in our modern diets. This is why this book stresses the benefits of a more natural diet, composed of high quality raw foods, as opposed to the risks of a diet of processed foodstuffs.

There are many methods of natural nutrition. This diversity is an advantage because a diet that suits one person at a given time will not necessarily suit someone else. Each of us will therefore choose his or her method and what food he or she prefers to eat at a given moment, and learn how to balance his or her diet so as to suit his or her tastes, preferences, etc. The *point is to become aware that we can live better by eating better and at less cost*. Little by little, each of us can, in our own way, at our own rhythm, put dietary environmentalism into practice and benefit from its advantages.

From the moment you ask yourself what you are going to eat for your next meal, if you care about balancing your diet, if you are trying to increase your vitamin supply, if you want to stabilize your weight and improve your health, be more efficient at work, or perform better in sports or other more private activities, if you are interested in nutrition, if you want your children to be really healthy, if you like eating, if you want to feel better, if you have a sweet tooth, or if you simply want to live better, longer, more happily, more fully, without a big budget, then you are already on the path to dietary environmentalism and ready for your first steps towards raw nutrition.

#### **DEFINITION OF A TRULY NATURAL LIFESTYLE**

A truly natural lifestyle is a way of life that ensures optimal satisfaction of human physical and psychological needs, through the discovery, education, and satisfaction by rediscovering nature and the way we live: food, sleep, intuition, exercizing, affection in human relationships, etc. A natural lifestyle is not a barbarian regressive attitude to pre-historic times. On the contrary, it aims at learning to observe our feelings and emotions, and awakening the deepest and

subtlest senses that sometimes we have lost and that, once properly educated, can spontaneously guide human beings towards better satisfaction and fulfilment.

Non-natural, artificial and disrespectful attitudes such as taking artificial drugs (ecstasy, heroin, amphetamines...), smoking tobacco or marijuana, eating artificial, cooked, mixed or otherwise altered foods, sexual deviance, and other un-natural attitudes are strictly forbidden and can in no way be qualified as natural, even if they bring pleasure, because such events would simply not occur in a natural environment.

Therefore, a natural lifestyle encourages you to follow your senses, your intuition, and your pleasure, but within strict boundaries of what is "natural" and "moral". Therefore, a natural lifestyle is the art of respecting yourself, your body, your feelings, your friends and relatives, all humans, animals and nature, discovering a more natural way of life, and following your senses towards happiness, once placed in the adequate environment.

#### **DEFINITION OF RAW FOOD NUTRITION**

Any good-quality natural food is authorized in this diet, which consists in following the senses of taste and smell with strictly natural raw unmixed foods - by eating whatever food tastes GOOD in its raw form - and educating this instinct so that it comes to be a perfect guide to food-balance and body-health. A raw food diet is not in itself a therapy in the medical sense of the word, since no specific food is prescribed or recommended more than another in this diet. However, by following the body's indications, it happens that many diseases may sometimes be improved. Because it helps cure some illnesses due to inadequate nutrition, this diet is sometimes referred to as "RAW FOOD THERAPY" and is used by some medical doctors in different countries as a therapeutic response to certain situations. I prefer to speak of « RAW FOOD NUTRITION » than about therapy, because it is above all, a natural life style, rather than a clinical method.

#### **FOREWORD**

#### CHANGE YOUR DIET!

"Haphazardly, depending on trends, publicity, advice from diet-makers, who are generally nothing but clever businessmen, people sometimes eat one way, sometimes another, without ever really knowing if the food they absorb meets the needs of their bodies or is really food in the exact meaning of the term."

Henri-Charles Geoffroy.

For millions of years, our ancestors ate the food that nature offered them in its natural state. They had no choice. Then, about 380 000 years ago¹, man learnt to master fire, which was first used by certain populations for heat. Until that time, human food was only composed of raw foods eaten one by one, unseasoned, only one food at a time, and, of course, uncooked. Fire was used only on a small scale, by a still sparse human population. Much more recently, since the Neolithic era about 10 000 years ago, using fire to cook food rapidly became widespread among groups of humans. This change from hunting and gathering of foods to a sedentary and agricultural way of life is called the "Neolithization process".

The first signs of Neolithization were found in the Near-East. Cattle breeding apparently developed there during the 8th millenary BC. Then, at the end of the same millenary, the first cultivated wheat, followed by other graminae and legumes appeared. Later on, goats, sheep, and pigs were domesticated. At the same time, the habit of cooking, mixing, and processing food became widespread. These nutritional innovations served as a basis for the construction of our present civilization. The development of agriculture, cities, the notion of family "hearth" and the settling process generated a new model of society which was considerably perfected and became more complex with time, giving birth to today's modern civilization. Certain innovations resulting from this evolution have changed our lives in a positive manner and can be considered as extraordinarily beneficial technological particularly innovations such the telephone, progress, telecommunications, electronics, computer science, and transportation. Isn't it wonderful to be able to phone a friend on the other side of the planet in an instant? But sometimes progress also generates negative effects: factory work, military missiles, the atomic bomb, and the destruction of the environment. Aren't these part of the negative side of humanity's evolution?

In the nutritional domain, certain innovations can be seen as progress, such as means of transporting and refrigerating food, which enables eating fresh products in

 $<sup>^{1}. \\</sup> Iosette Renault-Mikovski, "The Environment in Prehistory," Masson, Paris, 1986.$ 

all seasons even in countries where, or seasons when, absolutely nothing edible grows. Unfortunately, other nutritional innovations can have very negative effects. Artificial lifestyles and the excessive processing of food have harmful consequences. Our modern diet is not well adapted to our species and has led to the increase of certain disorders, the rapid deterioration of our state of health, decreased physical performance, and increased physiological stress. Our pace of living forces us to be constantly running after work and money. We no longer take the time to enjoy life and find ourselves having to live on top of each other in huge cities with all their well-known urban problems: robbery, violence, transport overpopulation, etc. In this reckless race for work and money, people end up by quite involuntarily devastating the natural resources of the planet, and, even worse, they destroy their own lives and damage their health. Environmentalism can help us to be become aware of the ravages of the chemical and agricultural industry with respect to pollution. In the same way, dietary environmentalism can help us to become aware of the ravages of progress with respect to nutrition.

Scientists, doctors, nutritionists, and biologists all assert the same thing today: civilized man's diet is disastrous. We must urgently change our dietary habits. Back in 1977, the American Senate published a report<sup>1</sup> in which Senator Mac Govern wrote: "Our diet has changed radically in just over fifty years, with significant and sometimes very serious consequences for our health [...]. In all, six of the ten major causes of death in the United States are linked to diet". It is enough to see to what degree our eating habits have changed with time to measure the extent of the task to be accomplished. Just two examples: in the last half-century, the annual average intake of yoghurt and milk-derived products in North America as well as in Europe has been multiplied tenfold, and between 1900 and 1980, the annual average consumption of industrial sugar (candy, cookies, etc.) increased from 1.7 to 36.4 kilograms per inhabitant<sup>2</sup>.

In Europe, 827 food additives are authorized<sup>3</sup>: coloring, preservatives, stabilizers, flavoring, acidifying agents, acidity modifiers, fluidizers, coatings, etc. Present everywhere in our food, these food additives can, in some sensitive or predisposed persons, bring about intolerance reactions. We know nothing about their long-term

<sup>&</sup>lt;sup>1</sup> Dietary Goals for the United States.

<sup>&</sup>lt;sup>2</sup> Average consumption of sugar per year and per inhabitant in Western Europe.

<sup>&</sup>lt;sup>3</sup> Food additives are numbered from E100 to E927:

<sup>-</sup> E100 to E199: food coloring,
- E200 to E299: preservatives,
- E300 to E321: antioxidation agents,
- E322 to E495: emulsifiers, stabilizers, and gelling agents,
- E496 to E927: other food additives, including alkalis and acids from E500 to E578 and flavorings from E620 to E637.

toxicity or their combined effects with other molecules (the effect of several additives ingested at the same time or accumulating in the body).

Sodas did not even exist half a century ago, but are now the drink that young people consume most. A 33 centiliter can of cola contains phosphoric acid and 35 milligrams of highly addictive caffeine, that is to say nearly as much as a cup of tea or coffee. What will eventually happen to the health of these youngsters who drink a liter a day? Drinks called "tonics" or "bitter" do not contain caffeine, but quinquina, and a significant amount of refined industrial sugar: one liter of soda contains the equivalent of fifteen lumps of sugar.

Faced with the danger of our eating habits continuing to drift towards an increasingly adulterated diet, we have to revise the whole nutritional process: from modern methods of production and preservation, which decrease the quality of food (industrial agricultural processes should be replaced by the concepts of organic and natural agriculture), to the way in which we choose our foods (who should choose what we eat and according to what criteria?), not forgetting the ways in which we prepare our meals (processing, mixing, and even seasoning foods is open to question). This book proposes a simple answer to these questions: we have all to gain by choosing a healthier diet, eating better quality food, relearning which food can be eaten in its natural form, and discovering raw menus.

This book is addressed to the general public, to doctors as well as health practitioners, because we all need to better understand the fundamental principles of human nutrition. It is presented in four parts:

The first part explains what dietary environmentalism actually is, and why we should eat our foods raw ather than cooked. You will find a lot of information on the vitamin content of various foods and epidemiological surveys that compare the health of various populations according to their diet. You will also discover the results of scientific research, such as that of Professor Abrams and Doctor Pottenger in the United States, who have devoted their life to studying the benefits of a more natural diet.

The second part describes what raw food therapy is all about, the advantages for our health, of course, but also for our well-being, beauty, and vitality, to lose weight, to have a perfect figure, to be the best in sports, for the sake of planetary environmentalism, or simply to gain time and money!

The third part is practical, it teaches us how to eat better, practise raw food therapy, how to organize raw meals, how to balance a raw diet, how to preserve raw foods, which food combinations are good and which are bad, how to prepare seed sprouts, etc.

Finally, scientists (anthropologists, biologists, doctors, cancer specialists, nutritionists, professors, etc.) explain, each from his own point of view, why it is

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essential to eat better quality raw food for our health and well-being. A healthy and natural diet is not an environmentalist utopia: the most recent scientific knowledge shows that it has become vital for our health.

At the end of the book, there is a bibliography and a list of useful addresses for those who wish to go a step further.

The aim of this book is not only to explain why we should change our diet to raw food, but also to show what happier lives we can lead if we eat better.

# Why I wrote this book

"The amount of knowledge it takes to discover wisdom is very small, and it is of a very simple type."

Louis Lavelle.

So that you understand why I wrote this book, I have to tell about my personal itinerary in relation to nutrition. I was a greedy child with a tremendous appetite. When I was 20, I was a student at the prestigious French "Polytechnique" school, and as greedy as ever; I loved chocolate and cakes and ate them whenever I could. My favorite dessert was lemon meringue tart. I not only enjoyed refined dishes in great Parisian restaurants, but also plain food, like a nice plate of mashed potatoes with plenty of butter. The pleasure of eating played an important role in my life and I believe that has not changed since then. At that time I was far from imagining that natural food could be much more delicious than the best French cooking. I did not know, for example, that an avocado pear could have an infinitely more delectable savor than a salmon *gratin*, that cherries in season could taste better than lemon tart, and that the taste of a cricket far exceeded foie gras in the gastronomic hitparade. Which all goes to show! Read this book carefully, forget any preconceived ideas you may have, and you will discover a great many things about nutrition, as I did myself during in the last fifteen years of research, questioning, doubts, discoveries, experiments, and observation.

There I was, a student particularly attracted by basic sciences (mathematics, physics, computer technology, electronics, astronomy, etc.) and by nature (biology). As one learns fast when one is keen, my studies did not take up too much of my time, and I devoted most of the year to sports. During the summer vacation, I was a sailboard instructor in Corsica or Ireland, and at weekends during the rest of the year, I participated in university competitions, skiing in winter and sailing or windsurfing in summer. Because of all these activities, I had no time for cooking. But, above all, I suffered from rheumatism in my knees as soon as the weather turned humid, which bothered me when I did sports. This rheumatism first appeared during an attack of rheumatoid arthritis when I was thirteen, in 1973.

From this time on, the rheumatic pains in my knees first occurred occasionally then regularly and, in 1980, became a nearly permanent discomfort not only during the day, but also sometimes at night. This was not a catastrophe, but very often I was unable to go jogging or had to stop halfway when climbing up the stairs. The pain increased with effort. I was therefore limited in sports by this rheumatism.

During my military service in the Navy<sup>1</sup>, the pain in my knees spread to other joints: my wrists, ankles, shoulders, and hips. From time to time, I had difficulty in walking and I found it harder and harder to run or even walk up stairs. At night, the pain was sometimes so intolerable that I could not stand the weight of the sheets and blankets on my legs. I had, of course, consulted several Parisian doctors during those years, but none had been able to explain or relieve the rheumatism. Examinations, X-rays, anti-inflammatory treatment, more exercise, less exercise, I had tried everything they suggested, but nothing seemed to work. None of these doctors had advised me to change my diet, or had even questioned me about what I ate. The pound of chocolate I ate every day between my heavy and far from raw ecological meals obviously (seen from today) had something to do with my joint pains and a very simple question ("What do you eat?") would have soon pinpointed my excessive greed. Although apparently in good health, I also had, like everyone, a whole series of little disorders I had become accustomed to and considered inevitable; migraine, backache, haemorrhoids, a heavy feeling or "pins and needles" in my legs, a constantly blocked nose which meant I had to breathe through my mouth all the time, eye strain that often prevented me from working on a computer, foot odor, tiredness after meals, etc. At the time, I thought these slight disorders were more or less normal. Everyone has their share of little health problems, don't they?

After having sought other solutions in vain, I wondered if my rheumatism had something to do with my diet. Mainly motivated by a wish to perform better in sports and solve the pain in the joints, I completely changed my diet after a emotional disapointment one day. I then decided to change my life and become a new better person, and started reading a short book called "Nourish Your Body" about vegan diets. In his book, the author claimed that most of the ills of civilization, rheumatism included, were the consequences of our dietary errors. He explained how he had personally cured himself of a serious illness (chemical gas

<sup>&</sup>lt;sup>1</sup> The diet of the Navy seamen and officers on board the warships was particularly rich and mainly based on frozen and canned foods. In addition, we would eat too much, as meals were our main daily entertainment and helped us to forget the monotony of the work, the hot climate, and the stress of the operations (our warship was in charge of the military surveillance in the highly strategical Strait of Hormuz in the midst of the first Iran-Iraq war in the Persian Gulf in 1980-1981 - this zone was a war-operation zone, both Iraq and Iran in turn were menacing us and Occidental countries of stopping all oil production and sinking any civil or military ships on the zone, and the psychological tension there was fairly high). Our main distraction after the stress of operating the ship and accomplishing our mission in these difficult circumstances, was to eat endless meals composed of rather unhealthy foods.

poisoning during World War I) by eating fruit, raw vegetables, nuts, bean sprouts, and wholemeal bread. This book by Henri-Charles Geoffroy recommended eating more natural food of "organic" quality. Intrigued, as these ideas were not so popular then as they are now, I decided to immediately experiment with veganism for a given period. The diet was based on raw food with no animal products such as meat or dairy foods. It did me a world of good: in less than a week, my migraines and the practically continuous pain in my knees had completely disappeared. I understood later, as I re-introduced them one by one into my diet, that my consumption of chocolate and dairy foods triggered off my migraine and rheumatoid arthritis. With this new diet, I felt much lighter and much more energetic. For the first time in my life, I could breathe normally through my nose, which had become unblocked in just 48 hours. I felt as though I had begun a new life! As for sports, the result was almost magic: I was able to jog 12 kilometers with no pain at all in my knees after only ten days. A few months later, I easily passed my federal windsurfing instructor exam.

Encouraged by these first positive results, I started reading all the books I could find on human nutrition and various natural diets, over 200 books in all, and thousands of magazines and scientific literature on dietetics. All these publications seemed interesting, but in my opinion, none of the diets they proposed appeared to follow a simple and coherent scientific logic. The basis of these diets was either philosophical (vegetarianism, veganism, macrobiotics), or experimental (diets with a specific purpose such as slimming or reducing cholesterol). I did not need to lose weight, I had no desire to philosophize that much, and my cholesterol level did not particularly bother me. I still had to spend a lot of time cooking organic pizzas and make my bread on the vegan diet. All I wanted was to learn how to eat in a simple scientific and logical way which would develop my capacities in sports, be tasty, maintain the beneficial effect on my health and my knees, and which would not take up too much time, as I detested spending hours shopping, cooking, or washing dishes. I am not at all the sort of person who will appreciate cooking all week-end, weighing everything he eats (as in some weight losing diets), or spending hours in front of the stove cooking delicacies. I continued Geoffroy's 90 % raw diet several years and felt all the better for it, although I had a tendancy to become somewhat nervous and intolerant about the diet over time. This, I realized later, after developping the Stressometer, was probably the result of consuming fairly large amounts of organic whole bread and cooked cereals that overstimulate the nervous system. During this period, I often attempted reintroducing some industrial food

and dairy products into my diet, and was always surprised to see how quickly - sometimes the same day- my migraines and rheumatism came back each time<sup>1</sup>.

During the summer of 1985, a combination of circumstances allowed me to experiment with a 100 % raw diet for the very first time. I was spending my last student holidays after completing my university degrees, as a sailing and windsurfing instructor in Corsica, for a French sailing school, the UCPA. My new dietary habits were not compatible with the oily cooking being served at the local canteen, so I took the opportunity to experiment with a completely raw diet. I had no stove and no cooking utensils available, except for a plate and a knife, and I was therefore unable to prepare my food in any way. I discovered that nothing is really indispensable. The only modern accessory I could use was a small refrigerator. In addition to fresh fruit, vegetables and nuts, I bought cereals from a local farmer and would let them sprout in a little water in a dish or small jar according to my needs. For those three summer months, I ate plenty of tomatoes, peaches, plums, other fruit and vegetables, all raw, as well as nuts and sprouts for protein. This three-month 100 % raw food experience for the first time did me the greatest good: I had never been so happy, so well, and so fit in all my life! Sea, sun, surfing with a lot of fun, many friends, and a raw diet: everything was perfect.

During those months, I noticed that unseasoned tomatoes from the beautiful Corsica island could taste better then pizza. They were so delicious that one day I bought two full cases of them and started eating more than usual. They tasted so good that I couldn't resist them and ate more than I usually would, unseasoned because they were so delicious. I even remembered questionning myself about why people usually add seasoning to tomatoes if they taste so delicious in their raw form. But, after a dozen of these delicious "better than pizza" tomatoes, at the end of the meal, they started feeling very acid, biting my tongue, although they were exactly the same tomatoes as a few minutes before, bought in the same market and picked in the same field. I thought maybe the tomatoes had changed, tried two others (still acid) and wondered whether the tomato's taste had changed or if it was my body's perception of the tomatoes that had changed. The meal was over and three halfeaten acid-tasting tomatoes were abandoned lying on top of the case. On the next day, after a few hours of swimming and windsurfing, the tomato case looked and smelt very attractive again. The three broached tomatoes were still lying there on top and I almost threw them away. But I bit into one of them and was surprised to notice how it tasted delicious like pizza again, not acid at all any more. Same for the other two. But they were the same tomatoes that tasted acid on the previous day!

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<sup>&</sup>lt;sup>1</sup> This improvement was not just a psychological placebo-type effect, since I did not expect these results and, as I then enjoyed cakes, cheese, and elaborate cuisine, I would have much preferred to continue eating everything.

How strange! How can the same food be overripe, taste acid and then become perfectly delicious and sweet-tasting again? The idea then struck me that in fact the tomatoes hadn't changed at all, but that it was only my body's perception of them that had changed depending on the body's needs. At the end of the meal, after eating a dozen, I didn't need tomatoes any more, and this was the reason why they tasted acid, not the change in the tomatoes themselves.

The body's reactions and our perception of the taste and smell of food give us at each moment precious indications about whether or not we should eat a specific food: when the food is raw, it seems adequate to EAT IF GOOD, DON'T EAT IF NOT GOOD, AND BE AWARE THAT THIS WORKS ONLY WITH NATURAL FOODS, and is an automatic built-in food regulation system to tell us what we need to eat.

In another domain, emotionally, I had noticed the previous year that my girlfriend Véronique generally looked very attractive, but that sometimes she also, the same person, looked and felt like an ugly witch, when I had enough of her. But she was always the same person! Maybe some similar mechanism was happening with the taste of these tomatoes: they tasted good or bad depending if my body needed them or not. Experiments on the next days with various other raw foods showed that this "attraction-repulsion" mechanism also worked with peaches, apples, apricots, nuts, sprouted grains and various vegetables. However, the taste of fruit salads seasoned with vinaigrette and of chocolate bars (even organic chocolate from the best healthfood stores) seemed to be always attractive and never came to an "stop" by the taste, even when I ate too much. I then realized that I usually ate too much of these organic chocolate bars because they were always good and never came to the point where they tasted bad: the natural food may have stopped me if it was natural, but the "stop" did not work on artificial foodstuffs. And, unfortunately, organic chocolate is not a natural food, being industrially processed, and composed of various ingredients mixed and cooked together.

After this wonderful summer windsurfing and raw eating period, I started work as an engineer for Electricité de France (the national French power utility), still continuing my experiments in the nutritional field. I discovered fasting and fasted one full day a week as well as one whole week each year. Little by little, by dint of observation, bibliographical research and experimentation, I came to the conclusion that I could improve my vegan diet first by eating less, second by cooking my food less or not at all (more raw food), third by mixing them less, fourth by choosing better quality food, reintroducing some raw meat and raw fish as well (the insects

came in only a few years later), and finally by totally eliminating dairy products, which were the cause of my migraines and pain in the joints<sup>1</sup>.

After several years of further research and practise, I started teaching other people about a raw diet and its benefits, and finally decided to write this book in the early 1990's.

In 1988, I wondered why humans, who used to eat many insects, like other primates still do today in nature, had disregarded this particularly abundant natural source of protein<sup>2</sup>. With some difficulty to begin with, I do admit, I then started tasting crickets, locusts, and other insects which, to my surprise, I found absolutely delicious! After considerable bibliographical research into the dietary use of insect protein as a possible solution to hunger in the world, I systematically undertook experiments in insect gastronomy (also called entomophagy, from the greek "entomos": insect, and "phagos": eating) that consisted of smelling and tasting about 300 species of insects. They proved to be much tastier than I initially expected and since it seemed to me that they could contribute to solving the problem of protein shortage in the Third World (over one billion of the planet's inhabitants are protein deficient), I then introduced insects as a regular source of proteins into my diet and decided to write a book on the subject, <u>Delicious Insects</u>, which was published in 1990.

During this time, in the framework of the research laboratory I had set up in the Paris region to scientifically investigate man's dietary behaviors, I was able to observe and follow several thousand people to whom I taught how to eat raw foods. Some of these people simply wanted a better diet, others came to lose weight, and still others were there on the advice of their doctor for therapeutic reasons, including a number of severe cases of immune diseases referred by their physician. This laboratory that I founded, funded, and directed until 1993,³ was a unique research facility from the epidemiological and sociological points of view, since it was as far as I know the only place on earth where a group of people eating a 100 % raw could be observed. Today, all ethnic groups on earth alter their food by mixing and cooking it, even the last primitive tribes living deep in the Amazonian forest. I was a very lucky scientist to be able to live through this unique personal and scientific experience, participating in, and observing the only raw eating tribe of the planet, making fascinating observations on the effects of a raw diet and natural lifestyle.

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 $<sup>^{1}</sup>$  It was only later, after having met and observed several thousand people who had improved their diet that I realized that a well-balanced, natural diet following these simple rules was profitable not only in my own case, but, to all those I have observed (thousands over the years) who followed it correctly.

 $<sup>^2</sup>$  Insects make up 80% of the biological animal mass living on earth.

<sup>&</sup>lt;sup>3</sup> The author's researches, focused not only on diet but more generally on a natural lifestyle, are being continued in a new framework, that of the Bruno Comby Institute.

I was thus able to observe a total of about 10.000 people, knowing about their personal history, and making daily observations, taking down some written testimonies, sometimes being confided in by patients in desparate condition (who were, of course, receiving medical treatment from their usual doctor at the same time). I did the best I could, held their hands, helped some of them to pass away when they started the diet in extreme cancer or Aids conditions, noting the evolution of all sorts of illnesses in relation to the diet, without intervening from the strictly therapeutic point of view (which is the affair of the patient and his doctor), and giving general health advice. I dedicated much of my life to this research, and thus learnt a great deal from both the human and scientific points of view. Awareness of the importance of a more natural diet and its results deeply and positively transformed the lives of all those who, general public and doctors alike, accept to put it into practice.

Raw food nutrition, and a natural approach to lifestyle in general (including also sleep and the practise of the siesta), appears to be a major revolution in our understanding of the human condition and of the medical science.

As I was rereading this manuscript, a doctor friend of mine faxed me an article from a medical journal under the title "A Strict Diet More Efficient Than Corticoids". Many new articles now confirm our initial findings (see bibliography). However, this does not mean that we intend to oppose or criticize medicine in general, since modern medical science is very useful in some cases, but it must be admitted that the importance of diet and lifestyle has long been under-estimated.

#### We are what we eat

Today, I would like to share the fruits of these years of personal research, reading, experimentation, observations and instruction, applied to the field of nutrition. The application of a natural lifestyle to sleep or human relations may be the object of other future books. This volume will therefore concentrate on the food aspects. My sole wish is that after reading it you too will be able to eat better so as to live better. That is the only purpose of this book.

As for me, I now feel much fitter than before my change of diet. I no longer have rheumatism in my knees, although I had suffered from it for years. My migraines and eye strain in front of a computer screen have also disappeared. I can spend hours on end working on a computer screen without the least tiredness. In fact, I work more than before, more efficiently too, and with less stress. I am also, I believe, without false modesty, pleasanter, more open, more optimistic. No more

 $<sup>^1</sup>$  Dr. Bertrand Lalardie, "A Strict Diet more Efficient than Corticoids: A Random Study of 136 patients," Impact Médecin, No. 474, pp. 7 & 8, November 1993.

acne or pimples on my face, no runny nose in winter, heaviness in my legs, tooth pain, and tiredness after meals. I think I have attained my goal: a simple, efficient, and logical dietary system. In my previous books, I have already described natural and efficient methods to live a happier and healthier life: how to stop smoking, free oneself from stress, reinforce one's immunity, enjoy an inexhaustible source of protein (insects), get better results at exams (for students), use afternoon napping to reduce stress while gaining time<sup>1</sup>. It was therefore logical for me to then write this book to enable others to benefit too from the advantages of a better diet.

The layman must forgive my use of a few technical terms that cannot be avoided for accuracy's sake. The scrupulously scientific reader, on the other hand, must forgive me for presenting certain ideas in simplified form so as to make this book accessible to all.

This book is the result of intensive research put into practical experience, and, at the same time, it is a synthesis of research carried out by many other researchers and precursors in the field of nutrition, such as professors Joyeux, Abrams, Moeller, doctors Price, Pottenger, Gerson, Shelton, Kousmine, Wigmore, etc. Use this information well and you can live a much better, more energetic, happier, and perhaps longer life. If you are sceptical, all I can say is <u>try</u>: for at least a month, try eating better, try a raw nutrition, and see for yourself.

<sup>&</sup>lt;sup>1</sup> See, by same author: How to Stop Smoking, 1986, Stress Control, 1988; Maximize Immunity, 1989; Delicious Raw Insects, 1990; Power Sleep, 1992; Exams in your pocket, 1994; Environmentalists For Nuclear Energy, 1994.

#### **EUROPEAN CANCER CODE**

Certain forms of cancer can be prevented by following the simple advice below:

## First of all:

1. Don't smoke\*.

#### As concerns diet:

- 2. Keep your alcohol consumption down.
- 3. Eat fresh fruit and vegetables and fiber-rich food regularly.
- 4. Keep your weight down and restrict your consumption of fatty foods.

#### In addition:

- 5. Respect professional health care recommendations.
- 6. Avoid excessive exposure to the sun.

A greater number of cancer cases would be cured if they were detected earlier:

- 7. Consult a doctor in the case of abnormal physical changes.
- 8. Consult a doctor if you have a persistent disorder.

#### For women:

- 9. Have a regular smear test.
- 10. Check your breasts regularly.

These recommendations constitute the "European Cancer Code".

<sup>\*</sup>On this subject see works by the same author with a preface by Professor Henri Joyeux, cancer surgeon, International Cancerology Award (1985), Head of the Digestive Surgery Service at the Institut Curie (Paris): *Tobacco, Free Yourself* (1992), and *How to Stop Smoking* (1986).

#### FIRST PART

#### WHY EAT BETTER

"Faced with simple ideas, men are like bats in light: blind."

Aristotle.

# Modern food is artificial, adulterated, polluted and unsuitable.

"All our food products are transformed to facilitate sales... Our era will be called the 'age of falsification' as the first eras of humanity were named the stone and bronze ages."

Paul Lafargue.

With the appearance of new technologies, food processing is becoming increasingly complex. How do these techniques affect our health? No one really knows the answer. Microwave ovens, ultra-high temperature sterilization, irradiation, preservatives, chemical fertilizers, hydroponic crops, adulterated foodstuffs, sweeteners, etc., most of the techniques used today to process food did not even exist 40 years ago. The aim of all this processing and altering was never to produce better quality food, but always to sell more, make people consume more, and reduce losses for greater financial profit. The result is simple: the quality of our food is decreasing but the food industry is thriving, while our health is declining. Since foodstuffs represent a huge market, they interest a great many people who continually propose new processed products, while boasting of their qualities. We are sold foodstuffs as though they were lucky bags: brand X is the best in the world, good for this, rich in that, etc.

Most of the time, the wholesaler and the retailer do not even know how the foodstuffs they distribute and sell are made. When we buy fresh cream or frozen French fries in the supermarket, we are mainly interested in their taste, price and presentation, since these are the only elements that the consumer can evaluate and appreciate in the short term. The pleasures of sight and taste are immediate, as is, perhaps, the satisfaction of having bought food cheaply. But these can be falsified with taste enhancers and attractive packing. The effects of this food on the health and vitality of the consumer interests no one, neither the manufacturer, nor even, very often, the buyer, since the consequences of the ingestion of foodstuffs on our health are deferred. Fortunately, medical developments are there to help correct the

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effects of our nutritional errors and excesses. How many of us would still be alive or in what state of health without antibiotics or without medical and dental care?

The harmful effects of processed foodstuffs are not immediate, but are obvious in the medium term. A few days suffice to feel less well with a denatured diet, just as a few days are enough to observe a physical and psychological improvement with a better diet. By increasingly processing our food, we have disregarded our physiological needs. I propose to treat the root of the problem. What happens when you put diesel oil into an gasoline engine? The engine splutters, coughs, and stalls. Which is why it is advisable to fill your car with the fuel recommended by the manufacturer. The same holds true for the human body. The manufacturer here is nature, which has developed our genetics, and the fuel designed by the laws of evolution is the food to be found in the wild.

# The different food processing methods

"What threatens us most today is the recent intrusion of chemistry into the privacy of our environment and bodies."

Prof. Künnig.

Various processes are currently used to transform food. These may sometimes have advantages, but also drawbacks that we will later describe in detail:

- Chemical processing: This consists in adding one or several chemical substances to the food for a specific purpose, for example, the addition of preservatives, treatment by immersion in baths containing acid or basic solutions, fungicides, pesticides, taste enhancers, etc. Apples treated with insecticides before harvesting, or mangoes immersed in a fungicide bath to avoid mold, have been subjected to chemical treatments. The damaging effects of chemical processing are becoming better known, but favoring organic, non-denatured produce is not yet common practice. Standard quality food, such as the oranges or cucumbers one can buy in a supermarket, have often undergone some thirty different chemical treatments before and after harvesting. In the long run, is this produce really natural and harmless?
- Thermal processing<sup>1</sup>: This consists in altering the chemical composition of a food by an abnormal elevation or reduction of temperature: heating, cooking, hot drying, sterilization, freezing, and deep-freezing. Thermal alteration is widely used since practically everything we eat has been frozen or cooked at least once. For example, bread is a synthesis food obtained by the reduction of grain into flour,

<sup>&</sup>lt;sup>1</sup> J.M. Douglass et al., "Nutrition, non-thermally prepared food and nature's message to man", Journal of the International Academy of Preventive Medicine, Vol. VII, No. 2, July 1988.

humidification, the action of yeast, fermentation, then thermal alteration by baking. Ultra-high temperature sterilization is also a method of thermal alteration, just like micro-wave cooking, or the drying, at about 80° C, of cereals¹, hazelnuts, prunes², apricots, figs, or dry fruit. Simply plunging a chicken into boiling water so as to pluck it more easily, then turning it a few seconds over a flame to remove any remaining down (an industrial and artisanal plucking technique) is the beginning of boiling and grilling, and therefore a thermal alteration. The common practice of immersing tropical fruit, such as bananas, mangoes, dates, and many other imported fruits, in a bath containing fungicides at a temperature of 70° C alters them twice, chemically, using fungicides, and thermally. From the biochemical point of view, thermal alteration through cooking is one of the main alterations that food can undergo. The extent and consequences of the thermal alteration of food are so generally underestimated that cooking recipes³ have become the basis of modern diets.

- *Mechanical alteration*: by milling, grinding, reduction into flours or powders, crushing, etc. For example, cereal flours, like any food that is ground, crushed, chopped, grated, pressed, or rolled, have been mechanically processed. Grated carrots, crushed apples, squeezed oranges and all fruit juices oxidize very rapidly in the open air and can only, therefore, be preserved using antioxidants. A chemical alteration is often added to a mechanical alteration.

- *Agricultural alterations*: The species cultivated today are no longer the wild species of old, but selected varieties which would not survive in the wild. The seed selection process has modified the composition of produce, which has become larger and larger, but less and less nutritious. The price of produce per kilogram has decreased, but since its nutritional value and taste have also decreased, we have to eat more to meet the same needs.

As a result of these and many other alterations, due to modern or old production methods, the produce cultivated today has little in common with the produce that our ancestors used to gather wild. Did you know, for example, that a considerable quantity of the tomatoes and lettuces sold in supermarkets did not grow in earth, but were grown hydroponically, the earth being replaced by synthetic foam containing fiberglass, polyurethane and polystyrene, and humidified by a synthetic liquid whose composition is determined by computer? Did you know that the farmers who use these state-of-the-art methods are on excellent terms with their bank managers and receive subsidies paid by your taxes, whereas those who

<sup>&</sup>lt;sup>1</sup> The aim of heat drying cereals, by means of hot air flow, is to remove molds and parasites.

 $<sup>^2</sup>$  Even prunes from Agen (France) are, like practically all the dry fruit available on the market, heat dried. Prunes are not therefore  $100\,\%$  natural, as is generally believed, since they have been thermally altered.

<sup>&</sup>lt;sup>3</sup> The etymology of the word cuisine necessarily implies a cooking stage, as though we can no longer eat food unless it is cooked.

continue to grow their tomatoes and salads in the earth the old-fashioned way are given less financial support and go bankrupt? As a result, there are more and more tasteless processed products on the market, and less and less real produce grown in soil. Surely the government should subsidize healthy produce rather than industrial production methods that only benefit large food industry groups, which are not the least concerned with consumers' health.

- Alterations related to packing and preserving: The storage of food can also alter it a little bit more. In the wild, animals eat food as they find it. The great apes do not store food in anticipation of shortages, unlike bees (honey), squirrels (nuts), ants and voles (which store sections of dandelion roots for winter). The storage of foodstuffs is an advance for the human species, provided it does not excessively alter the food. Storing food in the open air results in desiccation and oxidation, and fats turn rancid. Packaging in vacuum or in jars or cans does not alter food very much since the object of these processes is to prevent changes due to the presence of air. However, food in a vacuum does not age in exactly the same way as food left to age naturally. Toxins can eventually develop, which can even be fatal, such as botulism. Most modern food preservation processes consist in protecting the food from air and microbes in plastic, in boxes, in tubes, etc., or in irradiating it so as to kill any micro-organisms that would otherwise develop.

Some modern preservation processes, particularly refrigeration, are used insofar as they allow the consumption of imported or out-of-season food (if this is really necessary, which is debatable), but we should also ask ourselves what consequences these processes may have on the chemical composition of our food and therefore on our health. No storage is ideal and it is always preferable to eat produce when it is fresh. Of all the various preservation processes, simple refrigeration (not freezing) seems to me the most efficient and the least harmful.

- Food irradiation or ionization: Ionizing food means subjecting it to high energy radiation made up of accelerated electrons or photons (X rays or gamma rays). This technique is increasingly used to extend food shelf life<sup>1</sup>. The rays pass through the food, and if there is a sufficient dose of irradiation, destroy all forms of life, molds, and microbes. The ionized food is generally first packed in plastic so as to prevent any recontamination by bacteria after its irradiation. The advantages of this process are that the food is preserved considerably longer, onions and potatoes no longer germ, strawberries that usually go moldy in less than a week are still intact some fifteen days after being irradiated, resulting in fewer losses, more flexibility, and greater financial gain for both wholesalers and retailers.

<sup>&</sup>lt;sup>1</sup> Pernette Langley-Danysog, "Food Irradiation," La Recherche, Vol. 16, No. 165, pp. 556-566, April 1985.

The irradiation of food is quite strictly regulated, in particular by a committee of experts from the IAEA, the FAO, and the WHO¹, and by the legislation in force in each country². A maximum dose of 10 kGy³ must not be exceeded. This legislation controlling the irradiation of food is indispensable, but has considerable shortfalls: there is no means of analysis that can be used on a large scale to determine whether a food has been irradiated or not, or at what dose. The laws regulating irradiation exist, but there is no way of checking their application, nor of proving that a company has infringed on them. Abuse is easy.

The products that can be irradiated vary according to each country's legislation. In all, irradiation is authorized in over 45 countries, 23 of which practise it industrially. In Eastern European countries, wheat and potatoes are very often irradiated to avoid mold and germination. In France, potatoes have been irradiated since 1972, garlic, shallots, and onions since 1977, and certain cereals, pulses, dried fruit, mechanically processed meats, frogs' legs, and strawberries since 1988. South Africa irradiates numerous food products, particularly fruit for the export market since 1982 (strawberries, mangoes, and avocados for example). Australia and Japan, followed by a dozen East Asian and Pacific countries, irradiate seafood, such as shrimps, and tropical fruit.

How does the ingestion of these irradiated food affect our health? No one can answer this question with any certitude, as the chemical reactions that occur in food under the effect of radiation are very complex. Irradiated food does not become radioactive<sup>4</sup>, but it is altered. The radiation that goes through the food releases a considerable number of free radicals that interact and produce new molecules called radiolysates. Laboratory rats were fed with partially irradiated food for two years at Karlsruhe in Germany, and exhibited no visible disorders<sup>5</sup>. The irradiation companies concluded from experiments of this type that ionization was harmless for human beings. But since these studies were commissioned and subsidized by industrial irradiation companies so as to obtain the authorizations they needed, are these results credible? What do we know, for example, about the toxic effects of these radiolysates on man rather than rats? And what about their long-term

<sup>&</sup>lt;sup>1</sup> IAEA: International Atomic Energy Agency; FAO: Food and Agriculture Organization; WHO: World Health Organization.

 $<sup>^2</sup>$  A precise list of the foods that can be irradiated and the irradiation authorizations delivered by each country is published in our book on the advantages and drawbacks of nuclear energy from the environmentalist point of view.

<sup>&</sup>lt;sup>3</sup> One kGy is equal to one thousand grays. One gray is equal to 100 rads, one rad being the quantity of energy absorbed corresponding to one joule per kilogram of ionized matter. This dose is higher than the dose that would kill a human being exposed to the same radiation as that to which food is subjected.

<sup>&</sup>lt;sup>4</sup> With present ionization processes that use a cobalt 60 source or accelerated electrons, this is technically impossible, since the energy used is enough to ionize the food, that is to say strip its atoms of peripheral electrons, but not enough to split the nuclei of the atoms, which would make the food radioactive. Today's irradiation facilities therefore produce irradiated food which is in no way radioactive.

<sup>&</sup>lt;sup>5</sup> Observer, "Irradiation in Question," Special Observer supplement No. 2, pp. 2-19, November 1991.

accumulated effects? Their effects on other rats? On children? After several generations? Nothing.

The defenders of the process also justify it by the fact that the molecular changes resulting from the ionization are supposedly less harmful than the use of certain chemical substances and less extensive than the alterations resulting from cooking. It has been shown that some sixty radiolysates are identical to those resulting from cooking or classic processing methods<sup>1</sup>. Ionizing food is very likely no more dangerous for one's health than cooking food. This reasoning cannot serve to validate irradiation, since it is based on the assumption that the regular ingestion of cooked or processed food is harmless, which we now know is false. As in the case of any other new technique, we must be very cautious and query any food processing technologies, such as chemical treatment, of course, but also irradiation, whose harmlessness, whatever the companies involved may say, has not yet been proven. Personally, I eat non-irradiated organic food that have absolutely not been thermally or otherwise processed.

# Irradiation destroys certain vitamins and denatures food

Irradiation leads to a significant, even considerable, loss of certain vitamins<sup>2</sup>. Riboflavin, niacin, and vitamin D are not very sensitive to irradiation, but the same is not true of vitamins A, B1, B6, PP, E, and K which are, on the contrary, very easily destroyed by ionizing, vitamin K being the most unstable. Moreover, as many irradiated foods may have been heated or dried before being ionized (to prevent the development of molds favored by a humid environment), the accumulated loss of vitamins resulting from the processing and heating must be taken into account. The more water there is in their environment, the more fragile the vitamins become. This is the case of all fruit and vegetables which are man's main source of vitamins.

The chemical structure of irradiated carbohydrates changes considerably. For example, the irradiation of one kilogram of corn starch at 10 kGy (the maximal permissible dose), produces the following effects:

- The degree of polymerisation is halved;
- 2.5 grams of new soluble substances are formed.

Lipids are particularly sensitive to irradiation because of the ease with which they can self-oxidize. The ionization of products rich in lipids such as fish, meat, etc.

<sup>&</sup>lt;sup>1</sup> M. Novich and M.M. Heckler, Federal Register, Vol. 49, p. 5714, June 1984.

<sup>&</sup>lt;sup>2</sup> Op. cit. p.22.

causes abnormal smells and tastes, that the food industry then has to correct by means of aromatic chemical substances (taste enhancers).

- Mixing foods before their ingestion: The habit of eating a mixture of several foods, for example in a salad, is a modification of the conditions of natural nutrition, whose consequences are not well known. Dr. Shelton, of whom we will speak later, has worked several decades on this sole issue. Certain food associations, if they are repeated regularly, can become harmful. Others may be beneficial. Much research remains to be done on this question. One thing is certain, modern man mixes too many foods when cooking and eating, and this has not always been the case: he has done so only since the Neolithic era. Is this progress? The experience of a diet with a restricted number of mixtures has proven that the simultaneous consumption of too many foods is a mistake that needlessly complicates the organization and digestion of meals. And, by the way, notice that many foods are not usually available in the same place in nature...

Chemical, mechanical, thermal, and agricultural processing, selection and irradiation, food mixtures: it is enough to make one lose heart completely, since practically nothing in our modern diet is really natural any more! Fortunately, it is easy to eat better by avoiding as many as possible of the harmful effects of all these alterations, by learning to do things differently at home, in the restaurant, and out shopping. This does not mean eating *drearily*, but, on the contrary, eating *better* and more joyfully. Have fun and be happy! That's what life is all about!

## A new industrial process: high pressure cooking

Cooking without heat and freezing without low temperatures: the recipe consists in subjecting food to pressures of several thousands of tons per square centimeter<sup>1</sup>. A Japanese invention, this culinary called new process, "pressurization", seems to have good prospects and greatly interests the food industry. This type of process would respect the chemical structure of food better than traditional cooking at high temperature, which considerably reduces its vitamin content. Pressurization apparently has less drawbacks than traditional thermal cooling. This is fine, but we know nothing about the exact consequences of such alterations on food processed this way. Wouldn't it be simpler to not alter food at all and just eat it fresh? Cooked, chemically treated, irradiated, or pressurized

 $<sup>^{\</sup>rm 1}$  Laurent Schwarz, "Pressure Cooking," Sciences et Avenir, November 1992.

strawberries will never have the taste and the authentic qualities of natural strawberries: we must respect food if we wish to appreciate it better.

The extent of the molecular alteration within a food can be classified as follows, from the most altered to the least altered:

- The higher the dose with which it is treated, the greater the alteration of the food and the greater its potential toxicity (certain doses for each chemical substance must not be exceeded);
- The higher the cooking temperature, the greater the alteration of the food. High temperature cooking alters food more than low temperature cooking. For example, frying in boiling oil at 200° C results in a greater and more harmful alteration than cooking in water at 100° C, which, in turn alters food more than steaming at 70° C; ideally, of course, it is better, whenever possible, to not cook food at all;
- The longer the cooking time, the greater the alteration of the food. For example, a steak cooked 30 seconds in a frying pan obviously changes less than a steak left to cook half an hour;
- *The higher the irradiation dose*, the greater the alteration of the ionized food. The irradiation dose is a function of the intensity of the radioactive source multiplied by the exposure time and inversely proportional to the square of the distance separating the radioactive source from the target;
- As regards *mechanical alterations*, reducing food to powder or flour transforms it more than crushing or grating, which nevertheless alter compared with the product in its entirety. For example, the finer one grates an apple, the more rapidly it will oxidize in contact with the oxygen in the air. As for food treated using the new method of pressurization, the greater the pressure that is applied and the longer its duration, the greater the denaturation of the food.

To efficiently protect the health of the consumer, regulations concerning food processing should be much stricter than they are at present. Today's system for delivering authorizations to use new molecules as food additives or in agriculture, consists in authorizing treatments that are economically advantageous and that do not seem dangerous in the short term. A few years or a few decades later, more extensive statistics show that grilling and barbecuing meat, for example, produces carcinogenic benzopyrene, or that some molecule in a food additive, a medicine, such as thalidomide, or an agricultural process, the use of nitrates and pesticides for example, have much longer term risks. It is then decided to vote in a law to limit its

use¹: this was the case for a great number of chemical food additives that were authorized for a long time, then prohibited by the FDA in the United States². Surely it would be more logical to wait for proof of the total harmlessness of the food additives and processes used to alter food before delivering these authorizations. Until now, the law has been motivated more by the financial interests of food companies and retailers than by regard for the public, who, in fact, serve unawares as a testing ground for new substances.

The strawberries you buy at your local greengrocer's and believe are natural produce, are treated on average some fifteen times before reaching the shop, first before being harvested (pesticides, insecticides, fertilizers, growth agents, etc.), then afterwards (fungicides, preserving agents, coloring, etc.), then by wholesalers and intermediaries (further preserving treatments, hydration, coating, possibly irradiation, etc.). The customer and the greengrocer, both placed at the end of the distribution chain, are not even informed of the treatments that the food has been subjected to. Those who do know, the farmers who treated the produce, and the wholesalers who processed it after harvesting, do not eat the food they sell; they are aware of the dangers of the treatments they use and do not treat part of the harvest that they keep back for themselves. Most produce farmers have small isolated plots for their own consumption, far from the farmlands and crops that they inundate with chemicals. But why do unto others what you would not have them do unto you?

The chemical substances used in agriculture to produce our food, are far from harmless, even in small doses. They are often highly active. A recent newspaper article described the fate of a farmer who was about to use some of these substances to treat his crops. He accidentally dropped a screwdriver in a drum containing concentrated chemical substances in liquid form. The instructions recommended wearing gloves and a mask for all handling operations. However, as he was in a hurry, the man plunged his hand a few seconds into the drum to recover the screwdriver, after which he rinsed his arm thoroughly in water to remove all traces of the toxic product. A little later, he began to feel faint and unwell. He lay down to rest and died a few hours later. A minute quantity of the product had penetrated his skin and had been enough to cause fatal poisoning. Is it reasonable to spray such products, even diluted, onto food? Farmers often pay with their health for this

<sup>&</sup>lt;sup>1</sup> Such laws are generally not applied, since they are opposed to behavior patterns that have become traditional: the food industry no longer knows how to preserve food except by using additives, farmers do not know how to grow food except by flooding their crops with chemical products, etc. Reversing the process is difficult, since, with our short-term outlook, we have chosen the easy way for years, the one with the maximum benefit and minimum cost per kilogram, without worrying about any other possible effects; we now know the long-term disadvantages of these other effects, but finding a different approach is extremely difficult.

<sup>&</sup>lt;sup>2</sup> The Food and Drug Administration regulates the production and sales of food in the United States.

invasion of chemistry into agriculture: cancer is a common occupational illness in this profession, because of the toxic substances they handle.

Dietary environmentalism questions all the alterations cited above. Man, like all living creatures, should live in symbiosis with his environment. Human nutrition should, in principle, be composed of fresh food, not processed, heated, crushed, selected, mixed and irradiated food. Some processing can, however, prove useful, and not too harmful. For example, preserving food at ambient temperature or in a refrigerator (not a freezer) is useful and has no particular disadvantage. Food ageing this way is liable to undergo slight oxidation or drying that we can consider natural, since the same is true in the wild. Food beneficial to the human species is mainly composed of fresh, fully ripe produce to which can be occasionally added semi-dry or very ripe products. The exclusive consumption of dry or putrid food is reserved in the wild for other animal species. Phytophage insects<sup>1</sup>, for example, whose only food is dry wood unsuitable for human consumption, or vultures, whose food is mainly putrid meat.

In a world where everything is increasingly processed and adulterated, the most certain way of protecting one's health, one's well-being, and that of one's family is to:

- Buy best quality, fresh produce that is organically grown<sup>2</sup> and has not undergone any thermal denaturation, rather than processed food;
- Avoid altering food before eating it; this particularly means avoiding mixtures of various food and the greatest molecular alteration of all: cooking. Even if a product is not of perfect quality, such as tomatoes grown hydroponically for example, it is always preferable to eat it raw rather than cooked, since cooking will alter its molecular structure even more.

### Cooking denatures food

"Cooking destroys fragile and beneficial elements, such as certain vitamins, vegetal hormones, leaven, aromatic substances and lysozymes found in all living cells."

Dr. Catherine Kousmine.

A simple food, such an apple for example, is a complex assembly of infinitely minute elements called molecules. During cooking, the molecules are excited and change form. They break and collide violently with each other. This is why a heated

 $<sup>^{</sup>m 1}$  Termites possess special bacteria in their intestines that transform cellulose into nutritious matter.

<sup>&</sup>lt;sup>2</sup> Non selected produce grown in non-polluted wild areas would be even better, but such produce is obviously inaccessible for city dwellers. Organically grown fruit and vegetables are however of good quality, and their nutritional quality is relatively close to that of wild produce, in the case of species that are not over-selected. In the organic produce field, there are several designations with different guarantees, but all exclude the use of synthetic chemical products.

food no longer has the same chemical composition, nor the same taste color or consistency of the same food when raw¹. Thus, numerous molecules that are essential to life, such as vitamins, disappear during cooking and numerous synthetic molecules appear: these can be harmful, such as benzopyrenes, which are known to be carcinogenic and are formed during grilling: toast, barbecued meat, roasted coffee, etc.² Another disadvantage is that cooking fats produces saturated lipids that are considered as a cardiovascular risk factor. Cooked dishes are tasty, for sure, but their alluring savor is only the first, visible part of their alteration. In depth, it is not only the taste of a food that is changed during cooking, but its whole chemical structure, resulting in the appearance of a great number of synthetic molecules such as carcinogenic benzopyrene³ ⁴.

#### Vitamins are essential for life

"Vitamin C reinforces the immunological function of the body and thus contributes to preventing cancer."

Prof. Henri Joyeux.

Vitamins are nutritive substances that are essential to the body's correct functioning and they can only be found in food. A very small daily quantity of vitamins is enough, a few milligrams or even a few micrograms<sup>5</sup> in some cases, but their presence is vital. Vitamins can be found in raw food, mainly fruit and vegetables, but also in meat, fish, and offal. They are fragile and most disappear during cooking. A natural raw food based diet therefore guarantees a maximum supply of vitamins. If, in addition, this diet is sufficiently varied and balanced, all vitamin needs will be covered without difficulty. Today, we do not consume enough vitamins B, C, and D, which is why children are advised to consume more fruit, wheat germ, cod-liver oil (or failing that, as we shall see, edible insects that even richer in vitamin D, easier to find in the wild, and much tastier than cod-liver oil), or, in a pinch, vitamin pills.

The first time people became aware of the harmfulness of an artificial diet was in the 18th century in the British Navy. At sea, the crew only ate dried and salted food. They were subject to a terrible illness, scurvy, which, after several months of sailing, became manifest in bleeding teeth and rotting gums. This illness often

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<sup>&</sup>lt;sup>1</sup> R.J. Priestly, "Effects of Heating on Foodstuffs," Applied Science Publishers, London, 1979.

<sup>&</sup>lt;sup>2</sup> W. Lijinsky and P. Shubik, "Benzopyrene and other Polynuclear Hydrocarbons in Charcoal Broiled Meat," Science, Vol. 145, pp. 53-55, 1964.

<sup>&</sup>lt;sup>3</sup> R.J. Williams and D.K. Kalita, "A Physician's Handbook on Orthomolecular Medicine," Keats Publishing Co., New Canaan, Connecticut, USA, 1977.

<sup>&</sup>lt;sup>4</sup> R.H. Rigdon, J. Neal, and J. Mack, "Leukaemia in Mice Fed Benzopyrene," Tex. Rep. Biol. Med., Vol. 25, pp. 553-557, 1967.

<sup>&</sup>lt;sup>5</sup> One microgram is equal to one millionth of a gram.

ended in the death of the victims. A number of theories attributed its origins to the sea air, to salt, to humidity, to the sailors' homesickness, to diabolical spirits, etc. In 1746, for example, a squadron from the French Navy under the orders of the Duke of Enville set forth for what was to later become Canada, at that time in the hands of the English. During the long voyage, scurvy soon caused terrible losses among the crew, even causing the death of the Duke himself. One of the sailors described the epidemic as follows: "Their teeth were loose in their sockets, and their gums became extraordinarily rotten and shredded away"<sup>1</sup>.

Meanwhile, in Great-Britain, James Lindt, a naval doctor, thought of putting scurvy patients on a diet complemented by vinegar for one group, by oranges for a second group, and fresh lemons for a third group. All those who ate fresh fruit soon recovered, escaping the illness as if by miracle. Lindt also proved the effectiveness of his treatment at sea in the same year, 1746, thus demonstrating that humidity, salt, sea air, and homesickness had nothing to do with the illness. But the doctors of the time refused to believe in the efficiency of this dietary treatment. In 1780, 34 years later, in a treatise on the causes of scurvy and its remedies, a Parisian doctor was to write: "Using a fan is a powerful means of preventing scurvy". Fifty years later, English naval doctors acknowledged the accuracy of Lindt's work and it was only then that lemon juice was systematically distributed to English crews as a precaution. Two generations of sailors had continued to die in the meantime...

It was only much later, in 1856, nearly a century after Lindt's experiments, that lemons were distributed to French naval crews. Since this time, the importance of citrus fruits in a balanced diet has been well known and doctors and dieticians the world over recommend eating fresh fruit. The active principle of vitamin *C*, a molecule called "ascorbic acid" because of its anti-scorbutic qualities, was only discovered, however, much later, during the 20th century. This vitamin plays a role in the fabrication of the blood vessel conjunctive tissue, cartilage, and bone ossein, and stimulates the development of red corpuscles<sup>2</sup>.

The fruits richest in vitamin C are kiwis, rosehips<sup>3</sup>, and black currants, followed by citrus fruits (oranges, lemons, grapefruit). The minimum daily requirement recommended by dieticians is 60 milligrams, but the body's needs can be greater, particularly during an infection or during growth, for children. We will see that the Stage I or II diet we propose later on in this book supplies on average a quantity of

 $<sup>^1</sup>$  Quoted by Dr. M. Corcos, "The Deficiency Origin of Scurvy, A Difficult Truth to Acknowledge," La Synthèse Médicale, No. 98, 5 January, 1989.

<sup>&</sup>lt;sup>2</sup> In reality, the Greeks had used lemons as a remedy for scurvy (which at that time did not yet have that name) since Antiquity, but this ancestral and empirical knowledge had disappeared with time.

 $<sup>^3</sup>$  Rosehips are the richest fruit in vitamin C, of which they contain up 1% in weight (1000 mg / 100 g). They are the small red berries produced by the wild rose, which is commonly found along lanes in temperate countries. Rosehips are the same size as small olives and slightly oval in shape. They are edible, but be careful, not all the red berries to be found in the wild are edible!

natural vitamin C ten times greater that the minimum requirement recommended by dieticians. If you follow our recommendations you will never suffer from vitamin C deficiency<sup>1</sup>! In addition, there is no risk of absorbing too much natural vitamin C<sup>2</sup>; any excess is automatically neutralized and evacuated in the urine.

Vitamin A (axerophtol) plays a role in the growth and renewal of the tissues. It has an anti-infection effect and allows the regeneration of the visual purple. Certain animal fats (liver, offal, egg yolk, shellfish) contain liposoluble<sup>3</sup> vitamin A, and some vegetables and fruit, such as carrots, oranges, mangoes and apricots (all red or orange) contain one of its precursors, provitamin A, that can be transformed by the liver into vitamin A.

## Carrots are good for you!

Vitamin A is vital for the eyesight, the skin (suntanning), and the correct functioning of the metabolism. Cheap and easy to grow, carrots are, of all vegetables, the richest in beta carotene, a vitamin A precursor. They contain 6.6 mg/100 g, i.e., more than twice as much as mangoes ( $2.9 \, \text{mg}/100 \, \text{g}$ ), another provitamin A rich food. Carrots also contain a sizeable proportion of fibers that are beneficial to the digestion and the intestinal transit time, vitamin B1 ( $0.06 \, \text{mg}/100 \, \text{g}$ ), vitamin E ( $0.45 \, \text{mg}/100 \, \text{g}$ ), and zinc ( $1.5 \, \text{mg}/100 \, \text{g}$ ). A ration of 50 grams of carrots or 100 grams of mango cover daily vitamin A needs (the equivalent of 300 grams of persimmon or 600 grams of tangerines).

The hydrosoluble<sup>4</sup> vitamin B group, comprises several vitamins: B1, B2, PP, etc. are all synthesized by yeast or bacteria. Group B vitamins can be found in particular in the outer envelope of cereals (B1), and in all food that has become gamey and is rich in yeast and bacteria. The Eskimos used not to eat any cereal products, but lived only off meat, such as seal and reindeer, and fish. Fresh meat and fish contain no vitamin B, which is why the Eskimos met their needs for these vitamins by eating the offal and letting the meat and fish age or even rot, so that suitable yeast, capable of synthesizing B vitamins, developed in them. Their food drying and hanging

 $<sup>^{1}</sup>$  With this diet, there is therefore no need to take synthetic vitamin C tablets; the supply of vitamin C in fruit is more than sufficient if one eat enough.

<sup>&</sup>lt;sup>2</sup> The danger of vitamin overdoses does not concern vitamin C, but other vitamins, especially when they are synthesized.

<sup>&</sup>lt;sup>3</sup> Liposoluble means that a substance dissolves easily in a fatty solvent.

<sup>&</sup>lt;sup>4</sup> Hydrosoluble means that a substance is soluble in water.

techniques thus compensated for the dietary imbalance due to the scarcity of resources in the Arctic.

Vitamin B1 (thiamine), mainly found in whole cereals and in certain yeast, as well as in peas, prunes, apricots, bananas, seafood, and carrots, affects carbohydrate catabolism<sup>1</sup>. A vitamin B1 deficiency called beriberi can result from the exclusive use of refined cereals or an intestinal absorption disorder. Beriberi can be observed in some chronic alcoholics. Daily vitamin B1 needs are on the order of 1.5 mg/day and are proportional to the quantity of carbohydrates that are consumed.

Vitamin B2 (riboflavin) participates in cell oxidation reactions and in intestinal carbohydrate absorption. It is mainly to be found in animal offal (liver, heart, and kidneys), in eggs, fish and certain vegetables such as lettuce, carrots, etc. Daily needs are about two milligrams.

Vitamin B3 or PP (nicotinamide) is found in the same food as the other B vitamins. Daily needs are 20 milligrams. The bacteria of the body's intestinal flora can make it. A vitamin B3 deficiency causes pellagra, an illness that is rare in the West, but found mainly in Asia and Africa.

Vitamin B4 (adenine) is supplied by animal protein (meat, fish, etc.) that largely meet daily needs. Vitamin B4 deficiencies are rare, even in vegetarians. This vitamin is used, however, to treat certain leucopenia<sup>2</sup>.

Vitamin B5 (pantothenic acid) is necessary for the metabolism of lipids and carbohydrates. It is found in animal tissues. Daily needs are 15 milligrams. Vitamin B5 deficiencies<sup>3</sup> are rare. The vitamin is used to treat certain hair diseases (alopecia).

Vitamin B6 (pyridoxine), supplied mainly by yeast and eggs, facilitates a considerable number of metabolic processes, especially those involving the use of lipids and carbohydrates, as well as the conversion of glycogen into energy-giving glucose. It is found mainly in leaf vegetables (lettuce), cereals, and bananas. Daily needs are two milligrams. A vitamin B6 deficiency results in disorders of the nervous system.

Vitamin B8 or H (biotin) is synthesized by the bacteria of the intestinal flora. It is also found in liver and kidneys and in egg yolk. Daily needs are 20 milligrams. No vitamin B8 deficiency occurs in man.

Vitamin B9 (folic acid) is supplied by yeast and green vegetables. Daily needs are 15 milligrams. This vitamin is essential for the maturation of the megaloblasts and for the metabolism of certain amino-acids. A vitamin B9 deficiency results in anaemia and growth disorders. We must also ensure that our daily menu contains Vitamin B12 (cyanocobalamine) which participates in the formation of red blood

<sup>&</sup>lt;sup>1</sup> A set of chemical reactions in the body that degrade substances while producing energy.

<sup>&</sup>lt;sup>2</sup> A drop in the number of leukocytes (white corpuscles) in the blood.

<sup>&</sup>lt;sup>3</sup> Illnesses brought about by a shortage or lack of vitamins.

corpuscles. Daily needs are two milligrams. It is made by yeast and can be found in large quantities in the outer envelope of cereals. A vitamin B12 deficiency results in anaemia.

Liposoluble vitamin D helps fix calcium and phosphorus (regulation of phosphocalci metabolism). Vitamin D can in great part be synthesized by the body under the effect of the ultraviolet light, from a provitamin present in the skin. Its deficiency causes rickets. The foodstuffs commonly eaten in the West for the last few centuries were poor in vitamin D, which is why rickets was a frequent illness up until the 19th century, particularly at the time when it was thought beneficial to protect children entirely from the sun. The children in question, already lacking vitamin D and nearly totally deprived of light, became rachitic, as their bones could not fix calcium properly and therefore became soft. Sun is vital, and so is an adequate supply of vitamin D, especially during growth. Large quantities can be found in certain fish liver oils and in insects. Bee larvae, for example, are ten times richer in vitamin D than cod liver oil and have a delicious creamy taste.

## The importance of vitamin D

The daily vitamin D needs for an adult are 0.025 milligrams and increase during pregnancy. Although the most serious vitamin D deficiencies (rickets) have become rare since cod-liver oil has been recommended for children, it is important to pay particular attention to this vitamin as it is estimated that about 98 % of the population consume less than the recommended dose. Man's main supply of vitamin D when he was a hunter-gatherer was insects. But, since we have stopped eating insects, we have a nearly permanent vitamin D deficiency. When science discovered the high vitamin D content of cod-liver oil and its physiological importance, we forced our children to take it, despite its awful taste. I would like to suggest, therefore, that it would be more reasonable, simpler and more logical to consume more insects. By eating a few larvae or orthoptera every day, like our ancestors did in the wild since the beginning of time, our vitamin D needs would be largely satisfied without additional supplies in the form of tablets or cod-liver oil. Perhaps one day crickets and grasshoppers will be on sale in pharmacies and in supermarkets?

Liposoluble vitamin E (alpha-tocopherol) is not well known, but it is thought to play a role in fecundity and in the functions of the genital system. It is found mainly in green vegetables and cereal germ. No E hypovitaminosis is known for man.

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The liposoluble F vitamins are polyunsaturated fatty acids that participate in the metabolism of fats. These substances are called essential because they are indispensable to life. They cannot be synthesized by the human body. There are many essential fatty acids, but the most well known is probably linoleic acid<sup>1</sup>, which enters into the composition of the cell walls and plays an determining role in our immune balance. Cooking changes the properties of F vitamins at 58 to 60° C, which is why oils should never be heated<sup>2</sup>. Vitamin F is found in natural, non-processed fats and in vegetable oils, provided they have been cold pressed, which is practically never the case, as commercial oils are obtained by refining at a temperature of 160 to 200° C. Dr. Kousmine's works on nutrition<sup>3 4</sup> attach great importance to this vitamin with respect to our health. F hypovitaminosis is indicated by an abnormal thirst, by infections, by an alteration (drying) of the skin, and, eventually, the appearance of tumors and heart disease.

Liposoluble vitamin K (phylloquinone) is found in green vegetables and is in large part directly synthesized by the body's intestinal flora; It plays a role in the liver for the synthesis of coagulation elements (prothrombin). Daily needs are four milligrams. K hypovitaminosis causes haemorrhages.

The P vitamins (citrine, rutine, esculoside) can be found in all fruits. These substances protect the walls of the blood vessels. A vitamin P deficiency causes the appearance of red blotches<sup>5</sup>.

Cooking destroys vitamins, some at a temperature as low as 50° C. This is why diets that are too restrictive and monotonous, or that comprise too much cooked food is dangerous for our health: only a diet comprising a wide variety of raw vegetables and fruit can cover all our vitamin needs.

In addition to the main vitamins we have listed above, there are in fact thousands of others, vital substances supplied by a suitable diet. These vitamins are to be found in all the foods nature offers us. There is no better way of ensuring a correct vitamin supply, than a diet based on raw vegetables and fruit and natural food. There is no need to complicate one's everyday life by referring to scientific

 $<sup>^{1}</sup>$  Not to be confused with linolenic acid, another essential fatty acid which is also one of F vitamins. Unsaturated fatty acids can be divided into three families: linoleic acid, linolenic acids, and arachidonic acid.

<sup>&</sup>lt;sup>2</sup> Unfortunately, the oils on the market are heat extracted, as this increases yield, including those said to be made by "cold first pressing," which are in fact always treated at a temperature of over 60° C.

<sup>&</sup>lt;sup>3</sup> Dr. Alain Bondil and Marion Kaplan, Votre alimentation selon l'enseignement du docteur Kousmine, éditions J'ai Lu, 1992.

 $<sup>^4</sup>$  Dr. Catherine Kousmine, Sauvez votre corps! Prévenir and guérir les maladies modernes, éditions Robert Laffont, 1987.

<sup>&</sup>lt;sup>5</sup> Small cutaneous haemorrhages in the capillary micro-vessels.

manuals at each meal; nothing would be more tedious than to have to resort to scales and a calculator in order to weigh and count everything up. What would be the attraction or pleasure of such a diet? A sufficient variety of raw food, with a regular supply of green vegetables, fish, meat, fruit, citrus fruits, carrots, and vegetable oils (various nuts, coconuts, avocado, etc.) will guarantee that all the necessary vitamins are present.

The table below gives the vitamin C content in milligrams for 100 grams of various foods, listed in decreasing order<sup>1</sup>:

# Vitamin C content in mg / 100 g

Rosehip: 1000	Kiwi: 94 to 300	Guava: 250	
Hawthorn: 250	Parsley: 200	Black currant: 180	
Lemon: 100	Orange: 60	Strawberries: 60	
Mango: 60	Papaya: 60	Chervil: 60	
Cauliflower: 50 to 100	Tangerine: 40	Grapefruit: 40	
Tomato: 38	Red currants: 36	Lamb liver: 33	
Beef liver: 30	Litchi: 30	Pineapple: 25	
Cereal sprouts: 25	Nectarine: 24	Blackberries: 24	
Raspberries: 20	Avocado: 18	Blueberries: 17	
Quince: 15	Sharon fruit: 15	Rhubarb: 15	
Chestnut: 14	Cherries: 12	Apple: 9	
Apricots: 8	Peach: 8	Banana: 8	
Watermelon: 6	Grapes: 5	Pear: 5	
Plum: 5	Pomegranate: 4	Hazelnuts: 4	
Figs: 3	Walnuts: 3	Prunes: 3	
Meat: 3	Medlar: 2	Fish: 2	
Dried cereals: 0			

Vitamin C is modified by cooking at temperatures as low as 50 to 60° C in the presence of air.

The next table gives the percentage of losses in vitamins B1, B2, PP, and C for a few foods during cooking in water at 100 ° C for 15 minutes (a dash (-) indicates an unknown value)<sup>2</sup>.

<sup>2</sup> Interdepartmental Committee on Nutrition, Public Health Report, Washington, Vol. 75, No. 687, 1960.

<sup>&</sup>lt;sup>1</sup> From the Table of Food Composition, Food and Nutrition Board, US.

Vitamin	Meat	Eggs	Green leaf	Tomatoes	Other	Potatoes
			vegetables		vegetables	
B1	35 %	25 %	40 %	5 %	25 %	40 %
B2	20 %	10 %	25 %	5 %	15 %	25 %
PP	25 %	0 %	25 %	5 %	25 %	25 %
С	ı	-	60 %	15 %	60 %	60 %

There are also other indispensable elements that are even more fragile that the vitamins we have just discussed: these are enzymes that, more generally, participate in various stages of our metabolic functions. A certain number of enzymes are synthesized by the body using DNA, while others (digestive enzymes) are provided by food or synthesized by intestinal bacteria. In the body enzymes play a role similar to that of vitamins, but these molecules are usually larger, more complex, and therefore even more fragile than common vitamins such as vitamin C, whose molecular structure is relatively simple. Because of their complex chemical structure, enzymes are even modified by cooking at temperatures as low as 47° C¹. Low temperature cooking methods, increasingly in fashion these days (steaming, nouveau cuisine) preserve certain vitamins, but nevertheless transform food, though to a lesser degree, by modifying their chemical structure and the form of the enzymes².

### What kiwis can do for you<sup>3</sup>

Actinidia chinensis was described for the first time around 1850 by a French Jesuit missionary in China, Father Le Chéron. Traditional Chinese doctors recommended eating this fruit for a better digestion, to relieve rheumatism, to prevent kidney stones and premature greying of the hair, as well as for curing haemorrhoids and dyspepsia. In the middle of the 20th century, the name of kiwi was given to this fruit by the New Zealanders, from the name of their country's national bird emblem. It was only in the seventies that other countries, -Japan, Italy, the United States, and France- adopted this fruit and started to grow it. One hundred grams of kiwi contain 57 calories. It is therefore not an energetic food and can be

<sup>&</sup>lt;sup>1</sup> A.I. Virtanen, "Die Enzyme in lebendigen Zellen," Suomen Kemistilehti, B. XV, 1942.

<sup>&</sup>lt;sup>2</sup> E. Howell, Enzyme Nutrition, Avery Publishing Group Inc., New Jersey, U.S.A.; "Enzyme Dietetics," Retz, Paris, 1986.

<sup>&</sup>lt;sup>3</sup> H. Joyeux and M.C. Gouttebel, The Kiwifruit in Nutrition and Cancer, Entretiens de Bichat Thérapeutique, October 23, 1991.

consumed in quite large quantities without fear of excess. It contains little protein, of the order of 1 %, and practically no lipids.

With respect to nutrition, the main advantage of the kiwi lies in its rich vitamin C content (from 94 to 300 mg/100 g, that is to say double that of an orange). The kiwi is at the top of the list of vitamin C-rich fruit available on the market: just one 75 g kiwi more or less covers an adult's daily vitamin C needs, that is to say 80 mg. The kiwi's vitamin C content is fairly stable in time, as its skin efficiently protects the pulp from oxidation by the oxygen in the air. As for mineral salts, a kiwi supplies potassium (394 mg/100 g, more than a peach), magnesium (27 mg/100 g) and calcium (38 mg/100g). The magnesium/calorie ratio of the kiwi is twice as high as that of chocolate or dried fruit. Among the oligo-elements, the kiwi also provides iron (0.8 mg/100 g), that is to say twice as much as grapes), manganese (0.075 mg/100 g), and zinc (0.1 mg/100 g).

## Various systems of natural nutrition throughout the world and history

"Anything that is in accordance with nature is worthy of esteem."

Cicero.

In addition to medical dietetics, whose leitmotif consists in "a balanced diet", there are a great number of nutritional schools practically all of which are oriented towards environmentalist nutrition, with its greater respect for the quality of food and better nutritional balance<sup>1</sup>. The argumentation of these various dietary movements, however, is based on different grounds: experimental, theoretical, ideological, and philosophical. Whether they are talking of good or bad carbohydrates, good or bad fats, vitalizing food or food dissociation, all these methods recommend a balanced diet, and all, except for macrobiotics, avoid too much processing of food. The aim of this book is to make a logical synthesis of these various teachings, to group them into categories for better clarity (Stage 0, I, or II), while taking into account current scientific knowledge, and to give the reader practical pointers on how to choose the diet that suits him best, via a dietary environmentalist approach. Here is a presentation of some of the main dietary movements throughout the world:

*Vegetarianism*: This diet advocates not eating animal flesh, to which we are apparently not adapted. Leonardo da Vinci and Hitler were fervent vegetarians as well as, in much earlier times, Pythagorus, Plato, and the poet Hesiod, and more recently, Paul McCartney and a growing number of Hollywood stars. If we include

<sup>1</sup> With the exception of macrobiotic diets.

Hindu countries and populations whose poverty does not allow them even to buy meat, about half the world's population is vegetarian at this time. Becoming vegetarian is often, in developed countries, the first step taken by those who wish to change their diet, since vegetarianism is the most well-known natural nutrition system and is fairly easy to implement. It is true that an excessive consumption of meat can be harmful and that, in the wild, it only represents a very small part of the diet of primates. Most vegetarians do not only exclude meat: a certain number of them stress the importance of fruit and vegetables, as well as to cereal sprouts. I myself was a vegetarian for several years and have the greatest respect for this approach. Each person is free to choose what he eats! It is certain that our contempories eat too much meat, whose quality leaves much to be desired because of the processed feeds given to cattle. Meat eaten cooked is triply harmful because of 1) the change in the proteins under the effect of cooking, 2) the quality of meat, and 3) its excessive consumption.

Nevertheless, many peoples have lived in good health while eating a good quantity of meat, or even a great deal of meat<sup>1</sup>. If it is of good quality and not cooked too much, meat obviously does not have the same drawbacks as when it is of industrial quality, consumed grilled or in a sauce. It is therefore not indispensable to totally eliminate meat from one's diet. Excellent results can be obtained by eating less, but better quality meat, and avoiding cooked pork meats (sausages, paté, etc.) and meat from badly-nourished, industrially-raised cattle. Total vegetarianism obviously, is still possible for those who wish to apply it, provided other sources of protein are available. In this case, it is a philosophical option rather than a physiological necessity.

Veganism: Vegans eliminate all animal products and by-products, including eggs and dairy products. The vegan movement was particularly popular in Europe under the impetus of a Frenchman, Henri-Charles Geoffroy, from the middle of the 20th century onwards. This diet is composed of fruit, vegetables, sprouts, and nuts. Veganism is a rather restrictive dietary system, recommended for short periods in the form of cures to clean the organism. Vegans often eat cooked cereals, which it would be better to replace by cereal sprouts, that are richer in vitamins. Veganism is one of the rare diets that completely dismisses dairy products, quite rightly in my opinion. Vegans justify the exclusion of dairy products either by motivated physiological arguments: on the one hand, animal milk is specific and suited to each species, and on the other hand, green vegetables and nuts are good calcium sources; or by dogmatic arguments with less scientific grounds: one should never eat meat, fish, or an animal by-product (milk, eggs, shellfood), as this would be

<sup>&</sup>lt;sup>1</sup> This is the case of Eskimos and Lapps.

"impure".¹ One can also become vegan for medical, scientific, philosophical or spiritual, or even emotional reasons (some people are shocked on visiting a slaughterhouse, and no longer want to eat any animal products). The vegan diet totally excludes meat, fish, eggs, and insects, which, in the wild, nevertheless form part of the diet of the great apes. In order to avoid any protein deficiency, it is advisable to avoid long-term veganism and not to apply this diet to children or pregnant women who have considerable protein needs.

The Hollywood diet: This diet proposed by Judy Mazel in the form of revitalization and slimming courses (of limited duration) is based on fruit and raw vegetables. It involves eating specific foods at each meal for six weeks, whose list is given by the author in the form of tables specifying each menu, day by day. This diet, which is very efficient for slimming, as it is nearly exclusively composed of raw food, is the rage in Hollywood and the United States. Over one million copies of Judy Mazel's book, *The Hollywood Diet*, have been sold.

The Essenian diet: The benefits of a natural diet of fruit and vegetables was not discovered in the 20th century. They were already known and used by the Essenians, a monastic Jewish sect who lived isolated in the mountains at the time of Jesus. They were said to be people who lived to a great age in excellent health. Thanks to their knowledge, they treated and cured neighboring peoples. The Essenians' way of life was rediscovered and taught throughout the world by Doctor Edmond Bordeaux-Szekely, one of the precursors of the natural diet fashion in California and Mexico. In 1915, Szekely, together with the writer Romain Rolland, founded the international biogenic society, which advocated an Essenian diet, as they themselves practised it. The biogenic diet is composed of 40 % fruit, 30 % raw vegetables, and the remainder of fresh or dried nuts and cereals (sprouts or biscuits dried in the sun).

The biogenic diet: Pursuing the teachings of the Essenians and the work of Doctor Edmond Bordeaux-Szekely, founder of the biogenic diet, Doctor Christian Schaller (nicknamed "Doctor Sun") proposes a system close to the "living food diet". Food is classified into four categories: biogenic food and bioactive food -fresh fruit and vegetables and sprouts- generate and sustain life. Biocidic and biostatic food -cooked and processed food- kill or do not sustain life. The "Biogenic" or "Sun" diet also recommends paying attention to the body's needs. Doctor Christian Schaller gives conferences throughout the world, and is the director of a publishing house, a library (the Sun library), and a foundation (the Sun Foundation), whose vocation is to teach the public the "laws of health".

 $<sup>^{1}</sup>$  The physiological argument is scientifically supported, whereas the dogmatic explanation is more difficult to accept; with reasoning of this type, just about anything could be proved.

Macrobiotics: This is both a philosophy and a way of life, as well as a source of Taoist inspiration. Macrobiotics divides food into two categories: yin food and yang food. A balanced diet should, according to macrobiotics adepts, come to terms with these two opposed and complementary principles. In practice, this diet has certain therapeutic results, like all restrictive nutritional methods, as it allows the body to progressively get rid of its toxins, with good short-term results. The macrobiotics diet is however, in my opinion, dangerous in the long term, as this method nearly completely excludes the consumption of animal protein and fresh fruit. Macrobiotics advocates, therefore, mainly eat vegetables and cooked cereals. I do not recommend this diet in the long term. I have seen people in a lamentable state after 5, 10, or 30 years of macrobiotics. Professor Abrams even talks in his book of "macrobiotic rachitis"<sup>1</sup>. Perhaps a yin and yang philosophy could be developed that would give greater attention to the body's needs, offer a wider choice of food, including more fruit and possibly animal protein, with less cooking. This would be a form of macrobiotics that, for the future, would be much more promising than the quite often devastating macrobiotic practised today, which does not even correspond to what the original taoist chinese used to recommend. Macrobiotics today has unfortunately driven away from its original bases and purity, almost nothing in common with the ancient taoism such as it was historically experienced in China.

The Kousmine diet: Doctor Catherine Kousmine, a Swiss doctor, considers that our deficient, over-refined and devitalized modern diet is the main source of our health problems. She proposes a diet that is as little denatured as possible, which gives a choice place to fresh fruit and raw vegetables, with very little meat, and, however, a few cooked cereals. In particular, Doctor Kousmine recommends using virgin cold-pressed oils, that are less denatured than commercial oils, because of their high vitamin F content. For several decades, she has successfully applied her diet to patients suffering from serious degenerative illnesses, such as cancer, multiple sclerosis, leukaemia, etc. As I do, she believes that modifying our diet in the direction of a raw diet is enough to eliminate the cause of all our degenerative illnesses. However, the diet she proposes is ony about 80% raw, and it is not natural in the sense that foods are mixed and seasoned, and therefore cannot be chosen adequately by smell and taste. She does already, however, obtain spectacular health improvements, even on serious illnesses, with this almost raw diet.

Doctor Ann Wigmore's "Living food diet" in the United States<sup>2</sup>: This diet based on fruit and vegetables eaten just as they are or in a salad, comprises a significant proportion of wheat sprouts that are prepared in a blender ("wheat grass juice"), and

<sup>&</sup>lt;sup>1</sup> See the bibliography at the end of this book.

<sup>&</sup>lt;sup>2</sup> A. Wigmore, Recipes for Longer Life, Rising Sun Publications, Massachusetts, U.S.A., 1978, and Be Your Own Doctor: A Positive Guide to Natural Living, Avery Publishing, Garden City Park, N.Y., U.S.A., 1983.

consumed two or three times a day. Doctor Ann Wigmore and her students have opened several centres in the United States (in Boston, in Florida, in Porto Rico, and in California), where the public comes to follow her courses, learn how to grow wheat sprouts and apply her diet. Brian Clement, one of her ex-disciples, teaches a similar diet in the Hippocrates Institute he has founded in Florida. Ann Wigmore and Brian Clement have obtained interesting results with respect to slimming, reducing cholesterol levels, and other pathologies, as is the case with any diet based on raw fruit and vegetables. In my opinion, this diet nevertheless lacks variety and possibly animal proteins (it is vegetarian). For someone used to a standard American diet, however, this type of diet is already a positive revolution and represents a considerable improvement; it can be used as a slimming diet or as a get fit diet for a few weeks.

The Montignac method: Michael Montignac is a Frenchman, former senior manager of an American multinational pharmaceutical company. In 1982, new responsibilities led him to travel more and eat business lunches every day in restaurants. Already a little "plump", he soon put on weight and decided to find a way of keeping his figure while continuing to eat in restaurants. His dietary method consists in eating more natural food and particularly in avoiding certain mixtures, certain food (especially potatoes, which are always eaten cooked), without depriving oneself; in eating more raw food, preferring better quality food, eliminating certain processed foodstuffs (sugar, in particular) and certain food additives, etc. Michel Montignac, whose method was rapidly very successful with the public and with nutritionists, shows that excess weight is the result, not of too many calories, but of a metabolic deficiency due to a poor diet. It is perfectly possible to remain slim while eating a great deal, provided one eats well. On the contrary, a person who eats little but poorly can become overweight. According to Michel Montignac, vitality, good health, and correct weight result from a balanced diet, rather than a low-calorie diet. Although our method differs from Montignac's by placing more emphasis on the need to respect the chemical structure of food, we completely agree with him on the subject of mixtures and the exclusion of certain processed foodstuffs (I even go considerably further in this domain), as well as his assertion that a poor diet upsets the metabolism and leads to obesity. We will come back to this question of weight later on. Michel Montignac has become a member of the Comby Institute in 1994. Since then, the diet he proposes to his millions of readers has been getting closer to a raw diet... and he does a very good job at opening people's dietary conscience and changeing their dietary behaviours for the better, if not for the best.

*Natural hygiene*: The natural hygiene movement developed considerably in the United States and in Europe at the beginning of the century, under the impetus of Dr. Shelton, Carton and Tilden. They established a set of natural principles and

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practices to improve and preserve health: a diet based on fruit and raw vegetables, advice on living, and ways of using water, air, the earth, the sun, etc. The hygienists were often vegetarians. The basic rules of natural hygiene are excellent and one can only regret that certain hygienists tend to be a little sad or moralists (not all of them, though): one can eat better without losing one's sense of humour!

#### Should one eat meat?

Eating too much meat is harmful. It has been shown that an excess consumption of meat, as practised today in our society, is extremely harmful to our health and is the cause of cardiovascular disease<sup>1</sup>. However, eating a minimum of animal protein is essential to a properly balanced diet, particularly for children's growth. Cooking fats and proteins changes their chemical structure and changes good fats (unsaturated and polyunsaturated lipids) into bad fats (saturated lipids) that are less exploitable by the body. Meat and fish eaten raw are delicious and do not contain the indigestible harmful saturated fats generated by cooking.

# Are apes vegetarian?

The proportion of meat in the diet of apes in the wild is not preponderant, but they do eat meat regularly. About 10 % of their food is composed of insects; other animal proteins (crustaceans, fish, eggs, and meat) represent about 1 % of their diet. Primates other than man therefore are practically vegetarian as they eat very little meat, but they are, however, extremely entomophagous². For human beings, about 5 to 10 % of animal protein in the total weight of food consumed seems reasonable, to be divided between meat, fish, and crustaceans. Those who wish, can, at least occasionally, eat insects as part of their protein supply: in doing so, they will reap the benefits of a natural primate diet. Lacking insects, whose consumption has become quite rare, preference should be given to fish, crustaceans, shellfish, and occasionally meat, in that order.

Sheltonism: At the beginning of the 20th century, Doctor Shelton, a renowned American doctor and pionneer of the natural hygiene movement, studied in

<sup>&</sup>lt;sup>1</sup> W.E. Conner and S.L. Conner, The Key Role of Nutritional Factors in Prevention of Coronary Heart Disease, Preventive Medicine, Vol. 1, pp. 49-83, 1972.

<sup>&</sup>lt;sup>2</sup> Entomophagous: insect-eating, from the Greek "entomos:" insect, and "phagos": to eat.

particular the effects of food combinations. He proposes a diet that is mainly raw and that respects very precise rules of food combining. Nearly a century later, Shelton's work is still topical: it is preferable to avoid mixing certain food during the same meal, and we will come back to this point later. Altering one's food less is, in any case, of greater priority than mixing or not mixing certain foods. We do, of course, agree with Shelton, but one must not forget that the first rule of a natural diet is to eat fresh food and a sufficient quantity of raw fruits and vegetables; then, after that, we can think about avoiding certain food mixtures.

*Raw food*: A raw food diet consists in eating raw food, of organic quality if possible, and thereby avoids their thermal processing. The Swiss doctor Bircher-Benner (1867-1939) is one of the pioneers of the raw food diet<sup>1</sup>. He, and his family, adopted a raw food diet and opened a clinic and a publishing house, that still exist, in Switzerland. Later, Doctor Schnitzer, a German dentist born in 1930, continued his work, investigating, in particular, the links between diet changes and dental decay. At the same time, in the United States, Doctor Price was carrying out similar research<sup>2</sup>.

The Max Gerson diet: This German doctor (1881-1959), a contemporary of Bircher-Benner, suffered from migraine which the specialists at that time diagnosed as being incurable. Gerson then started experimenting with changes in diet. He first tried consuming more milk, thinking that as this was the ideal food for babies, it might cure him. But it only aggravated his migraine. Then he tried fruit; if his ancestors, the apes, were able to live off a diet of fruit, nuts, and green vegetables, so then could he. His headaches disappeared, and only came back when he lapsed in his diet. Max Gerson spent the rest of his life treating, free of charge, all sorts of illnesses with his fruit-based diet. He obtained good results with cancer, and particularly with systemic lupus erythematosus, a disease that is usually incurable. Gerson became the doctor and best friend of Doctor Albert Schweitzer, when, by means of his diet, he cured the latter's wife, Hélène, of lung tuberculosis. Max Gerson's book; Cancer Therapy, the Results of Fifty Cases, published in 1958, was highly successful, particularly with doctors. According to him, the origin of all illnesses resides in a sodium-potassium imbalance, with too much sodium in relation to potassium. Gerson proposes re-establishing this balance by reducing the consumption of salt and sodium-rich cooked dishes, while increasing that of

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<sup>&</sup>lt;sup>1</sup> Bircher-Benner, The Prevention of Incurable Disease, James Clark & Co., Cambridge, 1981; Way to Positive Health and Vitality, Bircher-Benner Verlag, Erlenbach, Zurich, Switzerland, 1967; A Turning Point in Nutritional Science, Foundation for Nutritional Research, Milwaukee, Wisconsin, U.S.A.,; Eating Your Way to Health, Faber & Faber, London, 1961.

<sup>&</sup>lt;sup>2</sup> Although they worked at the same period on the same subject (the relation between food denaturation and dentition), the two doctors did not know each other and never met.

potassium-rich raw food, especially fruit. He thus obtained therapeutic results, particularly with terminal phase cancer patients.

Instinctive nutrition: method based on the reactivation of one's nutritional instinct to meet one's nutritional needs. This diet is exclusively composed of raw food chosen according to the body's needs, thus taking into account a form of "dietary instinct". The quality of food is considered essential and it is chosen instinctively, that is to say according to dietary pleasure, smell and taste, like animals in the wild. This diet, no doubt the closest to the natural diet of primates in the wild, gives very good results when it is correctly practised. The main drawback of this diet, excellent for one's health, is that it differs considerably from our current table habits and is therefore socially difficult for some people, to put it into practise. For this reason, this book proposes solutions to render compatible a diet as natural as possible, and yet maintain a normal professional and social life.

Doctor Price's primitive diet: Weston A. Price, an American dentist, was also a pioneer in the field of natural diet. He traveled the world from 1920 to 1939 in order to study primitive societies<sup>1</sup>. In particular, he studied the ossification, the dentition, the frequency of dental caries, and the mental and physical health of the peoples he encountered. In 1939 he recorded the results of his researches and statistical calculations in a scientific paper, then, in 1945, in a work destined for the public entitled Nutrition and Physical Degeneration. In this book, he concludes that a "primitive diet" based on fresh food eaten raw is the best way of living in good health. On his return to the United States, Price continued to advocate a primitive diet, but, just like Max Gerson, Bircher-Benner, Szekely, and Ann Wigmore, he was ridiculed by most of his colleagues, as his diet was deemed too simplistic by the obtuse scientists of his time, accomplices, despite themselves, of the technological drift of our society. Events have however, demonstrated the great value of Doctor Price's works. The Price-Pottenger Foundation still exists in California, and continues to diffuse the results of Doctor Price's work.

Some of these various nutritional systems have a scientific basis, others a more philosophical or ideological basis. My feeling is that **our choices with respect to diet must be decided upon by the physiological needs of the body and not by philosophical theories. Nutrition is a matter of science, not ideology.** 

#### A return to natural laws of nutrition

"To write properly on the diet of man, one must first be well informed on man's overall nature and know his origins."

 $<sup>^{1}</sup>$  W.A. Price, Nutrition and Physical Degeneration, The American Academy of Applied Nutrition, Los Angeles, 1939.

In the scientific field, current knowledge has become so precise and varied that science has split up into a great number of specialized disciplines. Dietary environmentalism is neither an exact science nor a new discipline, but calls upon an overall view of several specialities related to nutrition, such as ecology, dietetics, epidemiology genetics, immunology, cancerology, molecular biology, the study of primates, anthropology, and paleopathology<sup>1</sup>. Scientific discoveries in these specialities all converge towards the fact that we should eat better, that is to say, more natural, less processed food, with a sufficient quantity and variety of fruit and vegetables, but also fish, seafood, and probably also a little meat, and, for those who wish, insects:

- The purpose of *dietetics* is to study human nutritional needs and to propose diets adapted to each individual case. This branch of medicine has made considerable progress over the last few years. Scientists have discovered in particular the essential role of the vitamins contained in natural food (fruit, vegetables, fish, meat, insects). Dietetics also show us that the excessive refining of flours and cereals is harmful, as a certain quantity of vegetable fiber is indispensable to the proper functioning of the intestinal tract. All dieticians therefore advise us to make sure that there is a sufficient proportion of raw food (for its vitamins) and fruit and vegetables (for fiber) in our diet.

- *Epidemiology* is a science that studies the health of populations as a function of their way of life and particularly their nutrition. All the epidemiological studies performed for the last forty years reach the same conclusion: that diet is by far the most influential factor in the health of a population. These studies are often long and expensive, as the evolution of several parameters has to be studied on groups of several thousand people for several decades or even for several generations. A great many epidemiological studies show that peoples who consume a greater amount of raw food and less dairy products, like the Japanese before World War II and traditional Eskimos, do not suffer from the heart disease and cancer that are devastating the West.

Other epidemiological studies show that the increase in height of the human species<sup>2</sup> is apparently the result, not of a genetic evolution of the species<sup>3</sup>, but of a

 $<sup>^{1}</sup>$  Paleopathology: the study of the illnesses of primitive man in the Palaeolithic era of hunter-gatherers, before the development of modern civilization.

<sup>&</sup>lt;sup>2</sup> The measurements performed on existing populations on the one hand, and on ancient skeletons, on the other, show that our ancestors were shorter than we are: they measured about 20 centimeters less than the average height of the inhabitants of today's developed countries.

<sup>&</sup>lt;sup>3</sup> Such a modification could not occur so suddenly, but progressively over several generations. Furthermore, it is not an improvement, as when the length of the bones increases, their diameter decreases, resulting in a more fragile skeleton.

change in nutritional habits. The moment in history when a population grows taller corresponds to a change in its diet. The increase in height can be very rapid, 20 centimeters in a single generation, which refutes the hypothesis of a slow genetic mutation. The introduction of bovine dairy products, too rich in growth elements and calcium, is probably the cause of this sudden increase in the height of various peoples. The Masai, for example, an African tribe whose diet is based on bovine milk, are very tall, whereas this is not the case for other neighboring tribes who do not consume animal milk. Until the middle of the 20th century, the Japanese were relatively short (about 150 centimeters in height). The Japanese who emigrated to the United States raised their children the American way on a diet rich in yoghurt, dairy products, and ice cream. These children, whom one would expect to be the same height as their parents, still have slanting eyes, but they are as tall as other American children!

- *Genetics* is the study of our genes and chromosomes. These evolve in time, but very slowly. This is why we speak of the genetic stability of a species. A great deal of time is needed for our chromosomes to change, several million years. However, the metabolic functioning of our body (all its chemical changes), and particularly our digestive system, is determined by our genetics. We should therefore perhaps only change our diet at the same rate as our genetics, that is to say infinitely slowly and cautiously.
- *Immunology* is the branch of medicine that studies the functioning of the immune system. The latter's role is to incessantly clean the organism by ridding it of foreign substances called antigens. Modern immunology shows that the regular introduction of abnormal molecules into the body can generate numerous disorders such as, for example, allergies and auto immune illnesses.
- *Cancerology*: A great number of studies are being conducted to determine the causes of cancer. It seems that diet may be the main factor, even before smoking, which also introduces substances to which we are not adapted into the organism. One in two cancer cases may be of nutritional origin. This is why most cancerologists propose that we change our diet<sup>1</sup>. These recommendations generally concern the following three points: The elimination of certain additives suspected of being carcinogenic, the reduction or suppression of grilled foods that contain carcinogenic benzopyrenes<sup>2</sup>, and a greater consumption of raw fruit and vegetables which have preventive qualities against cancer.
- Molecular biology examines the pathway of certain molecules in the body, the chemical reactions undergone by a particular molecule or a particular

<sup>&</sup>lt;sup>1</sup> Prof. Henri Joyeux, Cancerology Center of Montpellier, author of Change Your Diet, 246 pp., 1990.

<sup>&</sup>lt;sup>2</sup> R.H. Rigdon, J. Neal, and J. Mack, "Leukemia in Mice Fed Benzopyrene," Tex. Rep. Biol. Med., Vol. 25, pp. 553-557, 1967.

enzyme, etc. This still rapidly developing science is helping us, above all, to understand the extraordinary complexity of the chemical reactions in a living organism. It is therefore not surprising that major dietary changes lead sooner or later, to disorders in the functioning of the human machine.

- The study of primates has shown that the great apes in the wild mainly eat fruit, vegetables, roots, and insects, always raw. Changes in relation to this diet often result in infections and degeneration, when it is not the death of the animal. When we look at the diet of modern man, we should consider ourselves fortunate to still be alive, as many species would not have survived such dietary upsets! The fact that a few of our ancestors succeeded in surviving and reproducing on a denatured deficient diet is no reason to continue in the same way, as today we can see that there is another, much more efficient way of living and eating.

- Anthropology and paleopathology show that man's health has improved since the Middle Ages, but that it has deteriorated since the time when our huntergatherer ancestors lived in the wild and practised dietary environmentalism unawares<sup>1</sup>. The improvement in living conditions and recent medical progress in the 20th century have partly put the health situation to rights in relation to previous centuries, and this is expressed by a considerable increase in life expectancy, but there remains much to be done to prevent degenerative illnesses and improve the quality of our food<sup>2</sup>. While health and medicine have improved, our diet has become increasingly artificial and our sleeping habits, like our rhythm of life, have become increasingly perturbed, bearing little relation to our physiological needs. It has therefore now become urgent, at the turn of the 20th century, to learn how to live, eat, and sleep better.

### Squirrels can teach us a lesson

If we want to live happier, more efficient, and healthier lives, we should reason simply, with reference to the elementary laws of nutrition: to each animal species there corresponds a biotope, a well-defined environment, and a perfectly adapted diet. Today, all sorts of theories on human nutrition clash and contradict each other. Let us imagine that, while walking in the forest one Sunday afternoon, we find a little squirrel with a broken paw. We take it home and want to give it the right food so that it will live a long time in good health, although it is in captivity. How will we feed it? It is quite simple: we look at what this species eats in the wild and we

<sup>&</sup>lt;sup>1</sup> The hunter-gatherers' good health sometimes seems surprising; we will come back to this subject later.

 $<sup>^2</sup>$  E. Goldsmith, Medicine in Question: For a Health Science Beyond the Myths of Technique, éditions Fernand Nathan, 1981.

give it the same thing in captivity. Thus, we discover that the squirrel particularly likes hazelnuts, pinenuts and acorns.

Finding out what food naturally suits a species and conforming to it is the basis of dietary environmentalism. What if we apply this reasoning to man? We then see that the best diet for the human species is approximately the same as for other primates: about 50 % fruit (that we will call "Category A"), about 30 % vegetables (Category B), and about 20 % protein-rich food, such as meat, fish, eggs and insects (Category C). All these foods should be eaten whenever possible in their natural form<sup>1</sup>.

#### Research on Palaeolithic nutrition

"Many things will be reborn that had been long forgotten."

Horace.

Pr. H. Leon Abrams, who did us the honor of writing a preface to this book, is a professor of anthropology at the University of Georgia and a member of a great many American academic societies. He has lived in the Honduras, in Brazil and Bolivia, and has studied the dietary habits of primitive peoples in Mexico, Africa, and Alaska. He is the author of numerous scientific publications, some of which are cited in the bibliography at the end of this book, as well as two books for the general public, which interest us in particular, as these works, entitled Health Versus Disease and Your Body is Your Best Doctor<sup>2</sup>, describe the benefits of a more natural diet.

Pr. Abrams is a specialist in Palaeolithic nutrition. He has devoted his life to the study of the hunter-gatherer diet and the interest of a Palaeolithic diet as a nutrition model for the health of modern man. His principle is that the diet of our ancestors obviously excluded any processed or cooked food. At that time, man lived on raw fruit and vegetables, with a significant proportion of animal proteins. According to Professor Abrams, most of modern man's degenerative illnesses are the consequence of the dietary changes that have occurred since the Palaeolithic era. The rate of dental caries is usually considered a good health indicator; no dental caries have been found on Palaeolithic skeletons. Dental decays appeared in history when man changed his nutrition, from a hunter-gatherer diet to a cooked, cereal-

 $<sup>^1</sup>$  These proportions (50 % category A, 30 % category B, 20 % category C) are very important and we will see later that they are the basis of a balanced natural diet.

<sup>&</sup>lt;sup>2</sup> H.L. Abrams, Health Versus Disease and Your Body is Your Best Doctor, Keats Publishing, U.S.A.

based diet. Dental caries were already frequent, for example, more than 3000 years ago, in Egypt<sup>1</sup>, where the staple food was wheat cooked in cakes.

Professor Abrams focused his studies in particular on the traditional diets of the African pygmies, the Lapps, the Masai, and the Eskimos, whose food is largely composed of raw meat. The Eskimos and the Masai have a surprisingly low cholesterol level and little heart disease for carnivores. All the great apes in the wild occasionally eat meat. Professor Abrams came to the conclusion that humans, like all primates, need a minimum amount of animal protein in their diet and that strict vegetarianism has certain dangers, particularly for growing children. From an anthropological point of view, a certain quantity of meat or other animal protein should therefore form part of the human diet.

Professor Abrams has not studied the advantages of eating insects instead of meat in detail, but does mention the importance of entomophagy as a protein source for the Pygmies. He insists above all on the fact that Palaeolithic man never consumed dairy products<sup>2</sup>, or cooked cereal products (bread, biscuits, flour, etc.).

The degenerative illnesses that have developed in modern societies are, according to him, not related to the consumption of meat, as vegetarians would have one believe, but rather to an excessive consumption of dairy products and refined carbohydrates (flours), to the disappearance of our basic food (good quality fruit, vegetables, roots, and insects), and to the ingestion of processed foodstuffs and chemical additives to which we are not adapted.

### Prehistoric man's life and health

"Man originates from the animal world; we were born in Africa, perfectly adapted to the tropical world, and the gorillas and chimpanzees are undeniably our closest relations."

Prof. Yves Coppens
(Professor at the Natural History Museum of Paris).

If we want to learn more about the advantages and drawbacks of a natural diet, it is particularly interesting to study the data available on the health of primitive man. It is usually thought that primitive man was barbaric, violent, often ill, and that he died early of disease. This picture is relatively accurate with respect to the last ten thousand years, for populations living beyond the humid tropical zones, which were the primitive birthplace of humanity. A great deal of data (remains of skeletons, registers, accounts) is available on health deficiencies, illnesses, and death rates since the Neolithic era. Barbarity and violence were commonplace.

 $<sup>^{1}</sup>$  Mummification techniques and the treatment of corpses in ancient Egypt have left us many bodies and skeletons in a good state of preservation, on which this type of examination is easily performed.

<sup>&</sup>lt;sup>2</sup> Except for maternal milk, which is obviously indispensable for an infant.

The majority of children died young of infections and, several times in history, epidemics have decimated whole populations. Life expectancy on average seldom exceeded 30 years. However, it should be noted that during this era, food was not eaten raw, but cooked. The three staple foods were soup, bread, and whenever possible, game that was hung, then roasted over a fire or stewed.

If we go back further in time, to the era of the hunter-gatherers before fire was used to cook food, much less data is available, as skeletons are scarce and less well-preserved. In addition, as writing was invented after the mastery of fire, we have no texts from the pre-culinary era<sup>1</sup>. Furthermore, the habit of burying the dead is also relatively recent, hence the absence of tombs, tumuli, or Palaeolithic burial places, and the relative scarcity of anteculinary skeletons. We have to content ourselves with analyzing the few bones that remain to find out something about man's health before the mastery of fire.

As we know that people's health after the Neolithic era was not brilliant, it is tempting to extrapolate this knowledge to more ancient times, and to generalize about all primitive men. We tend to assume, rather too quickly, that they all lived in unenviable conditions, that they were even more violent than we are, and were constantly the victims of serious diseases. It is then easy to conclude that following a primitive-type diet today would only take us back to the presumed barbarity of ancient times. In fact, as we will see, the little data that is available shows exactly the contrary: primitive man, before cooked food, probably lived in better health than modern man; his skeleton is better constituted and more solid, and he was less affected by degenerative diseases than we are today.

The branch of anthropology that studies human illnesses in the Palaeolithic era involves serious scientific research; it is called paleopathology. The data available in this field² reveals that cancer³, tooth decay, and bone lesions of syphilitic origin were practically nonexistent. No trace of cancer has been found on Egyptian skeletons dating from about 2800 years BC. Bone tumours appear later, at the same time as the cultivation of wheat used to make gruel and bread. Dental caries, unknown in Palaeolithic hunter-gatherers, became frequent in Neolithic farmers, with the appearance of agriculture and cooking, although it never attained today's levels. For example, out of all the bones discovered in the Neolithic tumulus of Fontenay-le-Marmion in France, 11.7 % of the skeletons had tooth decay. The only anomalies found to date on Palaeolithic skeletons (at a time when using fire to cook food was much rarer), are traces of accidents (falls, fractures), wearing of the tooth

 $<sup>^1</sup>$  The most ancient texts that have been discovered were written on clay tablets (Sumerian cuneiform text in 5000 BC) and on Egyptian papyrus, in 4000 BC.

<sup>&</sup>lt;sup>2</sup> L. Dutrait, "The Illnesses of Prehistoric Man," Préhistoire et Archéologie, No. 32, pp. 6-12, July 1981.

<sup>&</sup>lt;sup>3</sup> One cancer in three on average leaves visible metastases on the skeleton.

enamel<sup>1</sup>, which was not enough to cause decay, and, in certain cases, compression of the spinal column or wearing of the vertebra (which can also be found in modern man). During the Neolithic era, when the use of fire for cooking became generalized, the skeletons begin to show (for example, at the site of Teviec in Brittany, about 6000 BC), traces of bone tuberculosis, congenital malformations of the skeleton, rheumatism and deformation of the vertebra due to inflammation (spondylosis).

Because of the little available evidence, our information on primitive man's health is far from complete. However, the scientific elements that are available show that, before the invention of cooking and the drift in our dietary habits, our hunter-gatherer ancestors practically never suffered from cancer or degenerative illnesses and enjoyed better health than man today.

### The diet of primates in the wild

"Doctors must learn from nature."

Hippocrates.

No primitive tribe today still has an entirely natural diet. All men transform their food by cooking, not because this bestows any special advantage on the species, but because cooking gives pleasure to our taste buds and induces an addictive effect, like any source of artificial pleasure; when one gets into the habit, it is difficult to do without. Just as it is easy to start smoking and much more difficult to free oneself from what has become a habit, slipping from raw food to cooked food is easy, practically spontaneous, whereas going from cooked food to raw food involves a personal choice, like the decision to stop smoking, a desire to live better, and requires at least some willpower. One could be tempted to think, at first, that cooking is a step forward with respect to the evolution of the species, but we now know, that our bodies, unfortunately, have difficulty in accepting the presence of certain new chemical substances generated by cooking, such as carcinogenic benzopyrenes and Maillard molecules, for example<sup>2</sup>.

In the Rocky Mountains of Canada, garbage cans are not placed on the ground, like in Europe, but hung from trees or from metal poles. Do you know why? To prevent bears from knocking them over with a swipe of their paw and gobbling up

<sup>&</sup>lt;sup>1</sup> This wearing of the tooth enamel comes either from 1) chewing, necessarily more forceful with raw food than with cooked foods, or 2) food deficiencies or imbalances leading to premature ageing of the quality of the enamel. The second explanation is most likely the right one, as modern man, who eats too much and badly, and does not chew his food very much, has teeth in bad condition, just like today's inhabitants of third-world countries who chew little, but whose small amount of food is cooked. An American dentist, Doctor Price (see the bibliography) clearly demonstrated the link between the deterioration of dental health and food denaturation.

 $<sup>^2</sup>$  W. Lijinsky, and P. Shubik, Benzopyrene and other Polynuclear Hydrocarbons in Charcoal Broiled Meat, Science, Vol. 145, pp. 53-55, 1964.

the contents, because when a bear, attracted by the mouth-watering smells wafting from the garbage cans, eats processed human food leftovers, it becomes more aggressive than in the wild. Bears do not, in principle, attack human beings, but when they have fed in garbage cans, they may behave abnormally and sometimes dangerously, somewhat like a drug addict in want. It should be noted that the remains of bread and cooking from human beings' garbage diet differs considerably from a wild bear's diet, that is to say, fresh meat, berries, small animals, and sometimes honey. Fascinated by the smells and the unusual flavors of human food leftovers, a bear, even if it has only tasted them just once, will come back regularly to prowl around people's houses in the hope of finding a piece of bread or cooked meat<sup>1</sup>.

The changes in behavior of the bear and the addictive effect of seasoned or cooked food can easily be reproduced in other animals. If a domestic cat fed raw food since birth is given a piece of bread or cooked meat just once, it will constantly ask for more, and, at the same time, changes in its behavior will be observed: it will mew differently, become more aggressive, bristle at the slightest sound, etc<sup>2</sup>. A dog that has been fed several days on nothing but industrial or cooked food, will bite more readily, and bark more than a dog fed raw meat, whose temperament will be calmer.

The habit of taking drugs, -tobacco nicotine, hashish, opium, heroin, excessive alcohol, coffee, etc.- generates such an addictive effect (one cannot leave off, and soon one cannot do without), that when a person starts, he cannot stop, and will even try to get the people around him to have a go too. These habits or addictions will therefore always tend to spread in a group of human beings. In the same way, because it was so easy to slip from a raw diet to a cooked diet, all men progressively started using fire to prepare their food; fire was then replaced by an oven and a stove, with gas or electricity, microwaves, or magnetic induction for more convenience<sup>3</sup>.

Whether we like it or not, it is a fact that since the Neolithic era, fire, the flame that heats the pot, has become the symbol of human nutrition. The tribal or family hearth was a gathering place, not only because of the heat<sup>4</sup> it produced, but above all

<sup>&</sup>lt;sup>1</sup> At this stage of the book, some of the manuscripts' reviewers were surprised, as they did not understand why the nutritional instinct of the bear, the dog, the cat, and wild animals don't protect them from eating denatured or cooked foods. We will see later that instinct does not function correctly with in presence of altered foods, and sometimes even gives contradictory signals; thus animals in presence of denatured foods may be drawn to eat foods that they shouldn't (which could not happen with natural foods).

<sup>&</sup>lt;sup>2</sup> Irritability, stress, and nervous disorders following the consumption of artificial foods can also be observed in children who are more sensitive than adults. These effects on the nervous system can be measured using a stressometer (a device for measuring tremor), which we will describe later.

<sup>&</sup>lt;sup>3</sup> One has to live with one's times!

 $<sup>^4</sup>$  In tropical countries, the symbolic system of fire is also extremely rich and varied, although its heating function has no use. See on this subject, the rather arduous but very well-documented "Raw and Cooked," by the philosopher Claude Lévi-Strauss.

because it enabled making the food simmered over the fire that we wrongly believe to be indispensable. Even the last primitive tribes in Amazonia and in Papua New Guinea, today use fire to cook their food¹. We therefore have no wild or primitive human model from which we could learn about the human diet in the wild. There are no longer any men still living off a 100 % natural diet in the forest. All the inhabitants of the planet cook their food. Blinded by progress (some of it very useful, some very harmful), and too busy with the constraints of modern life, we do not really know any more where we come from, nor what we should be eating. How many people, left on their own in the wild, would know how to live off fruit, wild plants, and insects?

The only groups of humans who currently eat in a relatively natural way are small groups of civilized individuals living in developed countries (mainly in France, Germany, and the United States), who have chosen a more ecological diet. The observation of these people provides fascinating results, not only from the epidemiological point of view<sup>2</sup>, but also from the sociological and behavioral points of view. However, these observations can be overshadowed by the fact that the modern world is perhaps not the ideal living environment for man and that the foods we are in the habit of eating<sup>3</sup> are not necessarily those that suit us the best. How many of us know that we should eat insects? How many have tried them? It is because we have been cut off from nature for centuries that we have forgotten the delicious taste of natural food that we think is insipid, although, in reality, it is much tastier than our gourmet cooking. We must urgently learn how to eat better and recognize what suits us best, in order to live better.

Although lacking subjects eating a natural diet, we can observe the dietary behavior of the great apes, such as the chimpanzee, the closest primate to humans with respect to the evolution of the species. The observation of these animals may provide us with some interesting information concerning our own nutritional needs. In the wild, the chimpanzee eats fruit, a few leaves, roots, insects, and sometimes eggs or meat<sup>4</sup>. In Tanzania, chimpanzees were observed which, in addition to their ordinary diet of fruit, plants, and insects, occasionally killed and ate birds and young antelopes<sup>5</sup>. This chimpanzee diet is practically identical to Dr. Price's "primitive diet" and to the natural diet we propose in this book. The fact that

<sup>&</sup>lt;sup>1</sup> The Yanomani Indians, for example, who live isolated in the Amazonian forest and who have been the subject of several studies conducted by the scientist, Jacques Lizot, cook tubers, meat, and most of their food before eating it.

<sup>&</sup>lt;sup>2</sup> A study of the health of these groups, compared to other groups taken as a reference. For example, the average cholesterol level of the Chinese until the fifties, traditional Eskimos, and western raw food eaters today, is much lower (1.0 to 1.5 g/l) than the reference group (about 2 g/l for the population as a whole).

<sup>&</sup>lt;sup>3</sup> These habits are the result of a progressive drift of diet to increasingly more evolved and refined forms of cooking over the centuries;

<sup>&</sup>lt;sup>4</sup> Hladik & Viroben, 1974; Courtois & Mortelmans, 1969.

<sup>&</sup>lt;sup>5</sup> C. Zuber, The Great Apes, Flammarion, Paris, 1977.

these three different approaches converge towards one and the same mode of nutrition is proof of their soundness.

## The amazing health of the Eskimos

"Most of the illnesses that kill prematurely, particularly heart disease and many types of cancer, could be averted or delayed if we changed our dietary habits."

Christian Remésy.<sup>1</sup>

Gontran de Poncins, one my great-uncles, was one of the first westerners to have lived with the Eskimos in the most distant regions of the Arctic, north of Canada. He was an explorer and spent part of his life with peoples cut off from the rest of the world, in China, India, the New Hebrides, and the Pacific islands. In a book that has just been republished<sup>2</sup>, he gives an account of fifteen months in the Arctic, in which he describes in detail the daily life of the Eskimos at the beginning of the century. They ate what local resources were available, that is to say mainly caribou, seal, and bear meat, fish, and during the summer months only, small animals, algae, and certain berries. They managed to balance this mainly proteinic diet by eating the offal and entrails of seal, fish, and animals. They particularly enjoyed the (full) entrails of caribou, considered a delicacy, which shows how much nutritional taste can vary depending on the cultural context: in the West, such a dish would put most people off!

The Eskimos could obviously not make fire in their igloos in winter and they did not cook in summer either, because wood is a rare and precious commodity in the Arctic. The traditional food of the Eskimos was therefore entirely raw, sometimes dried at ambient temperature or frozen in the ice. They mainly ate fresh meat and fish. Sometimes they left them to become gamey in the sun before eating them, then dried the remainder that they preserved frozen in the ice in winter or hidden under stones and earth in summer. They hunted seal and fished through the ice in winter to complement their food stores. This diet, that we can consider unbalanced, full of animal proteins and microbes and bacteria of all kinds, was raw. And the most surprising thing of all is the fact that the Eskimos withstood the rigors of the Arctic winter very well and did not suffer from the "ills of civilization" that we know now. Gontran de Poncins tells, for example, how, with minus 40° C outside, he was frozen stiff and stayed in his sleeping bag all day, while his Eskimo host made fun of him and went about the igloo naked to the waist, without apparently feeling the cold.

<sup>&</sup>lt;sup>1</sup> C. Remésy, Food Which Protects Us," Le Monde, pp. 11-13, September 9, 1992.

<sup>&</sup>lt;sup>2</sup> Gontran de Poncins, Kablouna, éditions Actes Sud, Arles, France, 1991.

At the beginning of the 20th century, another renowned Arctic explorer and anthropologist, Vilhjalmur Stefansson, also lived several years with the Eskimos in polar regions, north of the Arctic circle<sup>1</sup>. At one time, he remained with the Eskimos for more than five years without interruption (1913-1918). It was then that he adopted the Eskimo diet composed of nearly 100 % raw meat. Finding himself in better health on his return from this expedition than on his departure, he decided to pursue a natural diet based on raw plants and meat until the end of his life, which he did. He only died in 1962, at over 90, after having always lived in good health<sup>2</sup>. Knowing that he did not eat fruit, one may wonder where he found vitamin C. He found it in raw meat, which in fact contains a largely sufficient amount of vitamin C (usually destroyed by cooking). In his last book, Cancer: a Disease of Civilization (1960), Stefansson explains that most of the degenerative illnesses that we suffer from are caused directly or indirectly by our "modern", processed diet.

More recently, a number of scientific studies<sup>3</sup> have demonstrated another surprising phenomenon: the Eskimos have very little heart disease. This seems paradoxical as, in the West, a diet of meat, rich in proteins aggravates heart disorders. The Eskimos' diet was therefore carefully analyzed in order to identify the substance protecting them against heart disease, in spite of their large consumption of meat. The biologists tried to identify a specific molecule playing this protective role. Several molecules were found, particularly EPA (eicosa-pentaenoic acid), a fatty polyunsaturated acid found in raw fish. As this fatty acid is very fragile, it disappears when cooked. As we usually eat fish cooked, we are deficient in these fatty acids that play a useful role for our health and are only found in raw fish.

The researchers, whose work is financed by laboratories which have to make their research pay, logically concluded that capsules containing this indispensable fatty acid should be commercialized. Which is why today, on the market, there are all kinds of food supplements based on raw fish oils. Wouldn't it be simpler, more efficient, and less expensive to recommend that people eat raw fish instead4? This would be much more logical than to promote new and expensive food supplements as being indispensable for our health. Especially as they have not really proven their effectiveness: raw meat and fish are the basis of the Eskimos' good health, not capsules. The laboratories' argument goes as follows: the Eskimos are in good health

<sup>&</sup>lt;sup>1</sup> V. Stefansson, Food of the Ancient and Modern Stone Age Man, Journal of the American Dietetic Association, Vol. 13, No. 2, 1937; My Life with the Eskimo, The Macmillan Co., New York, 1951.

<sup>&</sup>lt;sup>2</sup> The life expectancy of traditional Eskimos is much lower than this and can be accounted for by their very hard living conditions in the Arctic and the lack of variety in their diet.

<sup>3</sup> See the bibliography: Elvevoll, 1990; Horrobin, 1987; Innis & Kulein, 1988; Keenleyside, 1990; Kromhour,

 $<sup>^4</sup>$  "And what a delicious surprise it was to discover fresh raw sardines, to savor their soft roe, and the succulent flavor of the thin layer of fat between the skin and the flesh" (a friend's remark, after having reread the manuscript, following his first taste of raw sardine).

because they eat raw fish and meat, so just take our raw fish oil-based capsules three times a day, and you too, will be in good health. This reasoning is easy to understand and justifies the laboratories' profits. The only drawback is that it is wrong.

One can avoid disease by eating raw meat or fish, of course, but particularly by avoiding cooked or processed foodstuffs. Ever since the Eskimos, through their contacts with whalers, discovered flour-based cakes, and, more recently, sodas, beer and alcohol, they have been the victims of catastrophic epidemics that have decimated their numbers, especially in the region of Hudson Bay and the Mackenzie detroit, although they still eat meat and fish, but cooked¹. Fortunately, Westernstyle treatment with antibiotics has allowed them to avoid a certain amount of infection, but has had an unexpected effect: the Eskimos now feel the cold like Westerners, and, shivering, shut themselves up in their huts all winter through. Here again, civilization has brought them fibreglass and fuel oil just in time, so that they can keep warm and withstand the rigors of winter. The only problem is that with this new way of life, they have lost their traditional good health. The Eskimos are now the victims of heart disease and cancer and, in addition, are ravaged by alcohol. But the laboratories do not publicize the second part of the story: for obvious reasons, all we are told about are the benefits of raw fish oil pills.

With respect to feeling the cold and resistance to cold, it is easy to show that with a better diet, one no longer feels the cold, or much less, and this after about one year of a natural diet with good quality products. Even a small quantity of toxins apparently are enough to perturb thermogenesis (the generation of heat in the body) and make one sensitive again. It is possible, of course, to eat partially raw or in cures (Stage I) and will give good results in any case, but for certain symptoms that are particularly sensitive to exceptions, practising this diet 95 % is not enough. This is the case for sensitivity to cold: results are observed in Stage II, but not always in Stage I.

Another surprising phenomenon: the selective attraction of gamey food for the Eskimos. They loved to eat quite gamey meat and fish. This might lead one to think that they did so because they lacked fresh food. On the contrary, when they had the choice, they left the meat or fish to age a few days rather than eat it fresh. After a few months on an entirely natural diet, one notices that food that one used to find repulsive (such as insects or the smell of spoiled fish) suddenly becomes very attractive, and that some people now find it delicious. Meat, fish, and seafood thus become tastier when they have aged a little. Fish aged a day or two acquires a

 $<sup>^1</sup>$  A. Keenleyside, Euro-American Whaling in the Canadian Arctic and its Effect on Eskimo Health, Arctic Anthropology, Vol. 27, No. 1, pp. 1-19, 1990.

delicious cheesy taste and meat dried a few days (in a refrigerator or in a pantry away from flies) has an unforgettable savor. Since the beginning of my research on nutrition, ten years ago, I personally have often had the opportunity of eating meat, shellfish, and fish at different stages of ageing. As long as the food is of good quality and that the taste is pleasant, I, myself, and others have never noticed the slightest digestive disorder following their consumption. I do not teach this practice, however (these were simply scientific experiments) and to begin a natural diet, one should, of course, eat fresh, good quality products.

## Why are we disgusted by spoiled food and insects?

The same food that seem repulsive in our civilization are the delight of primitive peoples who are in perfectly good health. The disgust felt by modern man for insects, very ripe fruit, fish that is gamey, and other unusual food, is apparently not innate, but acquired and reversible. This disgust seems to be on the one hand the result of the absence of these foods in infancy, and, on the other, to the presence of processed foodstuffs that, very early in infancy, distort the reactions of the body related to pleasure and psychological fixations of nutritional origin. Experience shows that, even an adult can re-educate his sense of smell and detect the delicious tastes of certain foods that had been forgotten, even if they are being discovered for the first time.

Eating food in an "advanced state" does not necessarily make one ill, in spite of appearances, although such food is a real culture medium for microbes and bacteria of all sorts<sup>1</sup>. The Eskimos withstood infection, 'flu, sudden cold, and various diseases, despite the hard climate.

It has been clearly demonstrated that traditional Eskimo communities lived in good health, rarely suffered from heart disease, and were able to withstand cold, effort, and infection, all this apparently the consequence of their ancestral dietary habits. Unfortunately for them, most Eskimos today have adopted a Western style of life, in which beer, coffee, sodas, hamburgers and french fries have replaced gamey seal meat and salmon fillets dried in the sun. Numerous studies show that since this change, they have been the victims of the same illnesses as us. Thus, rheumatoid arthritis, asthma, allergies, stress, and, of course, clogged arteries and

<sup>&</sup>lt;sup>1</sup> Provided they are eaten raw, that they are of good quality, and they have a pleasant taste. It should be noted that the fatal botulism toxin cannot appear in "natural" culture media obtained by maturation in the open air, as this toxin only develops away from air in totally airtight packing.

heart attacks, unknown previously, have now become frequent. As, in addition, the Eskimos are easily bored (the winter is really long in the Arctic), they spend their time smoking and drinking whiskey, hence a considerable increase in violence. Eskimo communities contaminated by alcoholism, prostitution, and petrodollars (the oil resources of Northern Canada are highly exploited) are now experiencing very high rates of suicide and criminality. The case of the Eskimos illustrates the change from one way of life, that although not perfect, was based on a relatively natural diet (with some deficiencies), to an artificial diet that has led to the decadence of the whole community. Is this process inevitable? Wouldn't it have been better to let the Eskimos live and eat according to their ancestral habits, rather than impose our way of life to them, with all its faults?

# The benefits of the polyunsaturated fatty acids in raw fish

"One spoils one's life by accepting just anything instead of the best."

Jacques Chardonne.

Three populations used to eat large quantities of raw fish<sup>2</sup>: the Eskimos, the Japanese, and the Polynesians in the Pacific Ocean. We still talk about Tahitian style fish to designate fish cut into cubes or slices (fillets) and seasoned with lemon juice. Today, when one wants to eat raw fish in a restaurant in Paris or New York, or in any other large city, one goes to a Japanese or Tahitian restaurant, as this is still one of their specialities.

Eating fish is recommended by numerous nutritionists ever since it has been proved that fish oils play a protective role against heart disease. As these oils are very unstable, they cannot withstand any elevation in temperature and there is therefore no other solution than to eat fish raw if one wants to profit from the benefits of their unsaturated fatty acids<sup>3</sup>, such as, for example EPA<sup>4</sup>, which apparently plays a protective role against heart disease<sup>5</sup>.

The flesh of raw fish is a very fine, delicate dish, exquisite to eat just as it is, without seasoning. Fatty fish, such as sardines, salmon, mackerel, herring, tuna, etc. are also excellent. White fish, such as haddock, cod, etc., can also be eaten raw. Their flavor is sometimes very pleasant, but generally speaking, they are less appreciated

<sup>&</sup>lt;sup>1</sup> Some scientists have suggested that the decadence of the Eskimos may be due to consanguinity. This explanation seems unlikely as, on the one hand, this degeneration was very rapid (one generation) and coincides exactly with their change of way of life and diet. On the other hand, among the Eskimos, as everywhere, modern transport means have led to a greater mixing of populations and therefore to less consanguinity than previously.

<sup>&</sup>lt;sup>2</sup> This is still the case today, but to a lesser degree.

<sup>&</sup>lt;sup>3</sup> Unsaturated fatty acids or UFA.

<sup>&</sup>lt;sup>4</sup> EPA: eicosapentaenoic acid.

<sup>&</sup>lt;sup>5</sup> E.O. Elvevoll, P. Moen, R.L. Olsen, and J. Brox, "Some Possible Effects of Dietary Mono-Unsaturated Fatty Acids on Cardiovascular Disease," Atherosclerosis, Vol. 81, No. 1, pp. 71-74, 1990.

than the former, perhaps just because they are less rich in fatty acids and we particularly need the "good" fats fish contain.

The benefits of fresh sardines<sup>1</sup>

The nutritional interest of fresh sardines goes much further than the classic can of sardines shared out during a Sunday picnic. Its value in calories is similar to that of meat (about 160 kcal/100 g) and its cost price is much cheaper. Sardine proteins are easily digestible, with a protein use index higher than that of beef, and its cholesterol content is lower than that of meat. The sardine is a relatively fatty fish (though less so than the least fatty meat), and the fats are mainly unsaturated or polyunsaturated fatty acids that are indispensable to the body. The sardine is rich in vitamins D and E, as well as in potassium, magnesium, and iron. Its vitamin A content is far from negligible. The most interesting characteristic of the sardine is undeniably its abundance of unsaturated fatty acids of the omega-3 series (20 to 30 %), whose protective effect against cardiovascular disease is well known. One hundred and fifty grams of sardine are enough to cover an adult's daily needs in protein as well as in vitamins D and E.

### Three hundred nutritionists gathered for a congress in Stockholm

"The birth and development of civilization is a fascinating and marvellous phenomenon, but improper use of civilization is a terrible thing that kills millions of people well before their time. To understand the reason for this phenomenon, one must observe the way of life of primitive men. We have a lot to learn from them [...] some Eskimos are still living as they did in the Stone Age [...] they live, or have lived until very recently, on a diet solely composed of raw meat [...]. Their health is amazing and they are not affected by any of the degenerative illnesses that are so frequent in our civilization."

Prof. H. Leon Abrams.

In 1988, an international congress in Stockholm on the topic of nutrition gathered over 300 nutritionists from all over the world. They of course discussed vitamins, nutritional balance, processed food, hospital meals, and the prevention of cancer. The nutritionists' main recommendations concerning this last issue were to eat more raw fruit and vegetables. If the advantages of fish rich in polyunsaturated fatty acids are now widely known, certain nutritionists broke a taboo by proposing during this congress to encourage the consumption of raw meat, which was something quite new. Among these, Doctor Lars Landmark from Stockholm,

<sup>&</sup>lt;sup>1</sup> Data taken from Panorama du médecin, "On the Virtues of Fresh Sardine," No. 3505, p. 9, December 11, 1991.

asserted that meat should not be heated as, over 40° C, he said, certain enzymes are already irremediably altered. Steak tartare, after all, is highly appreciated by the French, a people who have a solid reputation in gastronomic matters.

The French commonly eat not only cooked beef, pork, mutton, poultry, and offal, but also frogs, which disgusts the British and Americans. Other peoples enjoy other meats: rat and guinea pig are apparently highly appreciated in China. Others, like traditional Eskimos or certain primitive tribes, prefer to eat their meat raw and gamey rather than cooked. I myself have tasted, on a purely experimental basis (I had no intention of making it a habit), just out of scientific curiosity, frog meat, racoon, lizard, and even mice, whose flesh eaten raw has a slightly spicy taste, which is quite pleasant. All these meats were of course carefully selected; I avoided industrially bred animals of poor quality, and only chose wild species from wild regions in order to avoid urban pollution. Nature today is not what it used to be, these types of animals often feed in garbage dumps and drains, and it is obviously not recommended to eat them just anywhere! Under suitable conditions, however, their flesh is quite edible and palatable.

Eating meat, even if it only, in principle, represents a minimal part of our total food supply, can play an important role in certain specific cases. I have seen young children, patients, people who were overweight, but also former vegetarians and old people eat large quantities of raw, unprocessed meat, that they found delicious, for several days, after which their state of health considerably improved. One can eat meat very fresh or slightly dried and aged in the refrigerator (see the Eskimos drying technique). The quality of the meat is essential and we will come back to this point, as the great majority of slaughter animals are bred in batteries without ever seeing the sun, are stuffed full of processed foodstuffs, anabolics, antibiotics, the residues of the dairy industry (whey), hormones, and all kinds of treatments; these are then found in their meat and eventually make the animals anaemic. This is why certain industrially produced meats are increasingly pale, particularly veal and pork, which melt away like snow in the sun when they are fried and in certain countries, are artificially recolored so as to be accepted by the consumer.

### Instinctive nutrition and vegetarianism

"To acquire prudence, one should give up meat."

Hippocrates.

I am often asked what I think about vegetarianism and whether it is possible to live in good health as a vegetarian. I do not think man, even in the natural state,

is strictly vegetarian. It is true that modern man certainly eats too much meat. The meat is of bad quality to begin with and its cooking and alteration (grilling, barbecuing, etc.) do not help. This is why many people feel better when they become vegetarian. Although it is beneficial on the whole for adults, I do not think that vegetarianism should be practised strictly and certainly not imposed on children. However, for those who have chosen this option, it is possible for adults to live without meat, provided they eat enough other proteins as a substitute (fish, shellfish, insects, eggs, or enough properly selected plant proteins).

In the framework of a natural diet as the one proposed in both Stages I and II, meat is not the main nutrient, except for the Eskimos<sup>1</sup>. The basic foods, if they are available, are fruit and vegetables, and meat is an occasional dietary supplement. I personally eat meat about once a week and find that quite sufficient. The other days, I eat plant proteins (walnuts, almonds, seed sprouts), insects, fish, seafood, and eggs. There is no shortage of protein sources other than meat!

If raw meat is good for the health and its taste is pleasant, why, except for moral or philosophical reasons, should one deprive oneself? Prof. Abrams, who has studied human nutrition and that of various species of primates for a long time now from an anthropological point of view, also thinks that a certain proportion of meat and animal protein in the diet is beneficial to health, particularly for children's growth.

Many vegetarians are nauseated by the thought of eating meat. It is a question of personal choice. In the wild, it is normal that an animal species regularly or occasionally eats one or several other species. This type of biological cycle is the basis of all ecosystems and I do not think that man is the exception to this rule. Only physiological considerations (health) and the pleasure of eating should, in my opinion, dictate our dietary choices. However, those who choose vegetarianism can perfectly well eat better and follow our advice while remaining vegetarian.

For the world to be a pleasant place to live in for each and every one of us, we must all be free to choose our philosophical convictions and eat what we please. The inevitable counterpart to this freedom is that we must also respect the freedom of others.

# The outstanding experiments of Doctor Pottenger

"One must go back as far as possible to the cause, and to the causes of the causes.

Hippocrates.

<sup>&</sup>lt;sup>1</sup> The Eskimos are obliged to eat a great deal of meat and fish as they lack fruit and other food.

From 1932 to 1942, Dr. Francis Pottenger<sup>1</sup> performed a series of experiments on the effects of raw and cooked diets on cats. He studied the health and behavior of 900 cats divided into groups that ate their food either raw or cooked, and observed them over several successive generations.

In the beginning, Dr. Pottenger performed experiments on suprarenal hormones. This was at a time when medicine was discovering the hormonal system and the use of synthetic hormones. He practised suprarenalectomies<sup>2</sup> on laboratory cats to study their ensuing survival and health if he injected them with various synthetic hormones. The cats took the operation badly and, though he had used the best surgical technique of the time, many cats died shortly after the operation. In his efforts to improve the preoperative health of the animals, Pottenger put them on a diet considered by specialists of the time to contain all the nutrients required by cats: cow's milk, cooked meat leftovers from a neighboring sanatorium, and a little cod's liver oil as a supplement in vitamin D. As the experiments became more extensive, the number of cats had to be increased, and soon the sanatorium's leftovers did not provide enough meat to feed all the cats. Pottenger then resorted to a butcher to recover scraps of *raw* meat. The pieces used were the same as before -intestines, meat, and bones- but they were raw instead of cooked. In just a few months, Pottenger noticed that the cats fed raw meat took the operation better and were in better health than the cats fed cooked meat. He put an end to his experiments on suprarenal hormones and then conducted a series of nutritional experiments on the cats, separating those fed raw meat from those fed cooked meat. The results were so spectacular that he prolonged the experiments and devoted the rest of his life, more than ten years to them. The cats were regularly monitored and the observations on their health were carefully recorded. All the cats whose cause of death was not obvious were autopsied. When necessary, Pottenger performed biological analyses and X-rays.

Dr. Pottenger worked on cats and the results he obtained cannot necessarily be transposed to man. However, the parallel with human illnesses is so evident that one cannot help noticing it.

The "raw diet" cats enjoyed constant good health. They all weighed about the same weight and had constant morphological characteristics<sup>3</sup>. Their fur was glossy and of good quality, and they showed no signs of allergy or aggressivity. The "raw

<sup>&</sup>lt;sup>1</sup> PPNF (Price-Pottenger Nutrition Foundation). *Nutrition and Physical Degeneration, Pottenger's Cats* and *The Guide to Living Foods Workbook,* Price-Pottenger Nutritional Foundation, P.O. Box 2614, La Mesa, Ca. 91943, U.S.A.; 5871, Elcagon, San Diego, CA 92115, U.S.A.

<sup>&</sup>lt;sup>2</sup> Suprarenalectomy: a surgical operation consisting in the ablation of the suprarenal glands. Out of respect to antivivisectionists, I would like to point out that we would feel some reluctance at the idea of practising these experiments on ourselves. But as they have been made, we might as well draw some useful conclusions from them for our health.

<sup>&</sup>lt;sup>3</sup> Dimensions of the skeleton, jaw, skull, and teeth.

diet" kittens weighed on average 119 grams at birth, and the five kittens at each litter were easily suckled by the mother.

As for the "cooked diet" cats, the average weight of the kittens at birth was 100 grams. They often presented defects of conformation, some were too big, others too small in the same litter. The female cats often had difficulty in giving birth and suckling the kittens, which sometimes had to be given milk out of a bottle. The bones of the "cooked diet" cats tended to grow in length and decrease in diameter compared to those of the kittens whose mother ate raw food. The degeneration increased progressively over several generations until cats of the third generation could no longer reproduce, which put an end to the line: there was no fourth generation of "cooked diet" cats. At the third generation, their bones became soft and the cats suffered from numerous bone fractures, evidence of imperfect osteogenesis<sup>1</sup>.

The cats fed cooked meat were also much more irritable than the others. It was even dangerous to try to catch certain females. Three of them were named Tiger, Cobra, and Serpent because of their propensity to bite and scratch. Skin disease<sup>2</sup> and allergies appeared frequently in the "cooked diet" cats and became more widespread at each generation. Pottenger also observed deviations in the sexual behavior of the cats, with a tendency to role inversion, the males becoming more submissive and the females more aggressive, with the appearance of homosexual behavior (the males coupling with other males, taking them for females, whereas this behavior was not observed in the "raw diet" cats). Microscopic sections of the lungs of second and third generation "cooked diet" cats showed abnormal respiratory tissue, whereas that of the "raw diet" cats was normal. The following illnesses were frequent in the "cooked diet" cats: cardiac problems, myopia or hypermetropia, deficiency or inflammation of the thyroid, infections of the kidneys, the liver, the testicles, the ovaries, and the bladder, inflammation of the articulations, arthrosis, allergies, infectious diseases, behavioral problems, aggressivity, etc.

When the first and second generation "cooked diet" cats were fed raw food, in just a few weeks their health and behavior improved. Three generations of cats fed only raw food were then necessary to eliminate all these disorders in their descendants. At the second generation of "regenerated" cats, there were still a few allergies and deformities in the kittens at birth, the sequels of their parents' nutritional past. After the third generation fed a raw diet, the kittens whose ancestors had eaten cooked food were perfectly identical to those which had always eaten raw food.

<sup>&</sup>lt;sup>1</sup> Fabrication of osteocytes (bone cells), from the Greek "osteo", bone, and genesis, birth.

<sup>&</sup>lt;sup>2</sup> Pelada, eczema.

One of Pottenger's most striking discoveries was that when a cat was fed a "cooked" diet for at least 12 months, it could no longer give birth to a normal litter, nor suckle its young properly.

If a denatured diet leads to all sorts of disorders in the cat, what about man? Fortunately these disorders are mostly reversible, since Pottenger's experiments show that, in the cat, a return to a natural diet, even after several generations on a cooked diet, enabled them to regain better health.

# An outstanding ecological source of protein: insects

"Insect proteins can be found in abundance around us. It has been established that these proteins have a high nutritive value."

Prof. Gene Defoliart.<sup>1</sup>

Insects are commonly eaten even today in many countries, for example in Mexico in Africa, Australia, Indonesia, the Philippines, China, etc. For our ancestors of the Palaeolithic era, as for other primates, they were their main source of animal protein in the wild. Many insects are edible and can be eaten just as they are or prepared in various ways; for example, locusts, crickets, grasshoppers, cicadas, maybugs, certain butterfly chrysalides, certain caterpillars, certain beetles, most ants and termites, and even certain wood lice (which are not insects, but arthropods). These little creatures are perfectly digestible and rich in protein of excellent nutritive quality. The protein content of insects is often higher than that of a traditional steak. These proteins, whose quality is as good as those of an egg yolk, are easily assimilated.

The most surprising thing is that most insects, contrary to what one would expect, taste perfectly delicious, as proven by gustatory tests<sup>2</sup>. I have thus tested the taste of about 300 species to date. The idea of putting an insect in one's mouth usually arouses a strong feeling of repulsion, but the actual act not only reveals these tiny creatures' great protein value, but also their gastronomic value. The exquisite, melting taste of insects recalls that of caviar, but is even better and more digestible. Furthermore, they exist in abundance on the surface of the planet, since they represent about four fifths or 80 % of the biological animal mass on earth. They are, therefore, an enormous natural resource that we are massively exterminating with insecticides. Yet, insects could help solve the problem of hunger in the world, especially in the regions most affected by famine, that is to say Africa, India, and Mexico, there are great quantities of insects that are easily gathered

 $<sup>^{1}</sup>$  Professor Gene Defoliart was for many years the director of the entomology department of the University of Wisconsin in the United States. He has published very interesting works on the nutritive use of insects.

<sup>&</sup>lt;sup>2</sup> About 95 % of these tests were positive.

(particularly the migratory locust Schistocerca Gregaria); they could, in the future, play a much greater nutritional role than they do at present.

The excessive consumption of meat in the West is not natural and generates serious health problems (cardiovascular disease). The human species is, in my opinion, much better adapted to the consumption of insects than to the consumption of meat. Apart from modern man, who has stopped eating them, all species of ape eat great quantities of insects which they are very fond of. Let us not forget our palate: insects contain proteins which, if they are eaten raw, prove to be particularly flavorful and can be prepared by those who wish in all kinds of ways using delicious recipes! The reader who would like to know more on the subject can refer to Delicious Insects<sup>1</sup>.

# Why raw foods are better than processed food: the man-ape theory

"It is likely that one of the first of man's mistakes was to emigrate from the tropical countries of his origins, which were able to nourish him all year through thanks to their sunshine and practically constant abundance of fruit and plants. He then had to invent fire..."

Alain Saury.

There is a great difference between man and the apes: it is the incredible development of the human intellect that generated a model of society comprising cultural, scientific, and political activities of amazing complexity. The human brain is flexible: it is able to integrate new data in record time. What chimpanzee is able to program a computer, walk on the moon, or use a video game? Our intellect, our psyche, and our language are more complex than those of a chimpanzee, but from the genetic point of view, man is still, as we will see, a primate like the others. Our digestive system, our metabolism, and even our brain functions with enzymes similar to those of the apes.

The man-ape theory is simple, even obvious: it reminds us that not only is man descended from the apes (Darwinism), but that, physiologically and metabolically, we are still very close to other apes. Because of the slow genetic evolution of the species, we would be well advised to recognize our primate state with respect to diet and to eat natural food for another few million years, the time the human organism may need to adapt itself properly to new chemical substances and denatured foodstuffs.

<sup>&</sup>lt;sup>1</sup> Delicious Insects, The Proteins of the Future, Jouvence, Geneva, Switzerland, 160 p., 1990; Insetti, che bontà!, Edizioni Piemme, Casale-Monferrato, Italy, 159 p., 1991; Kostliche Insekte, Eichborn Verlag, Frankfurt, Germany, 160

From the theoretical point of view, this assumption is based on the following argument:

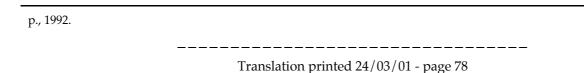
- 1. Modern man is a primate very like the other apes, from the genetics aspect. In other words, primate genetics evolve very slowly, too slowly for man to become a very different animal from the other great apes with respect to metabolism and nutrition.
  - 2. The digestive and metabolic processes are coded in our genetics.
- 3. Human genetics, like that of the other primates, only changes very progressively on a time scale of the order of millions of years.
- 4. Our distant ancestors, at the time when man was still an ape, ate fresh food found in the wild.
- 5. Modern man can still eat naturally. This is in perfect harmony with his genetics which has evolved very little.
- 6. A natural diet based on raw fruit and vegetables is not only possible for modern man, but is even recommended in the framework of nutritional environmentalism.

Let us look at each of the assumptions above in more detail:

1. According to the theory of evolution, modern man is a primate and we share a common ancestor with the apes, which are still close cousins. With respect to enzymes, metabolism, and immunity, the human organism still functions in almost the same way as that of the apes.

To give an example of the physiological and metabolic similarity between man and the chimpanzee, here is an extract from an exhibition on the origins of man, that was held in the Museum of Man, in Paris, in February 1990: "Man and the chimpanzee are two close relations and have 99% of their genetic material in common... Normal hemoglobin is made up of 146 amino acids whose composition differs from one animal to another. There are 61 differences between a frog and man, 27 between the horse and man, and none between the chimpanzee and man." This example illustrates the fact that, with respect to genetics, man is very close to the chimpanzee.

Most of the chemical reactions of the body, coded in the chromosomes, are nearly identical for both species. For example, the blood groups of the various primates are the same as human blood groups (A, B, O... and rhesus positive or



negative<sup>1</sup>). The techniques of modern genetic engineering even allow measuring the quantity of information common to the two species<sup>2</sup>. The percentage of genetic information common to man and the chimpanzee was thus evaluated: 99.3 % exactly. Yet the two species have evolved separately for about seven million years... Very few mutations actually take place in time, which is fortunate, since this ensures the stability of a species. The evolution of a species over time, via mutations in certain genes, and tending towards increasing perfection, does take place, but at very slow rate, of the order of 0.5 per thousand every million years. This slowness is useful, since it leaves time for natural selection to separate "good" mutations, that are advantageous to the species, from "bad" mutations, that produce less efficient individuals, eliminated in time by selection over several generations. Excessively rapid genetic evolution would not permit this selection. This is why man is still an ape, a primate nearly like the others, at least with respect to genetic data!

## 2. The digestive and metabolic processes are coded in our genetics.

All the chemical reactions of the body are catalyzed by enzymes that bond with the molecule to be transformed, perform the transformation, and release the product of the reaction. The whole operation takes place in a fraction of a second. A single enzyme can thus catalyze up to 10 000 reactions per second. Enzymes are large molecules made by our cells using the information inscribed in the DNA molecule. Genetics regulate all the chemical transformations in the body through enzymatic synthesis. These include, in particular:

- The digestive processes. Digestion is a huge chemical transformation which, from food, whose chemical composition is highly complex, produces substances that can be used by our own organism. Digestion is ensured first by the impregnation of food by the saliva, then by gastric juices, which contain numerous salivary and digestive enzymes. By means of these enzymes, the digestive processes are therefore genetically coded. The digestive processes provide the organism with the material and energy it needs to function properly.

- The "Krebs cycle" and the "respiratory chain" of the intracellular energy plants called mitochondria<sup>3</sup> burn oxygen and provide useful energy and heat. The Krebs cycle also produces CO<sub>2</sub>, which is then rejected out of the body in the atmosphere by

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<sup>&</sup>lt;sup>1</sup> The existence of rhesus positive and negative groups was in fact demonstrated in the Rhesus monkey.

<sup>&</sup>lt;sup>2</sup> These comparisons between the genetics of the various primates were made in particular by the Morris Goodman team, at the University of Detroit in the United States. Fragments of the genetic material of man, the chimpanzee, and the gorilla were analyzed for comparison.

<sup>&</sup>lt;sup>3</sup> It is interesting to know that these mitochondria (whose nuclear and membrane structure is very similar to that of bacteria, whose multiplication ability they have retained) derive exclusively from the genetic capital of the ovocyte of the subject's mother. Their DNA is absolutely independent of that of the chromosomes. With respect to mitochondria, nature is very matriarchal

the lungs. This chemical cycle is the same for all animals. It provides the energy necessary to all cell life and especially, in man, to the brain and the muscles, and to maintain a body temperature of 37° C.

As the digestive processes consist of a succession of enzymatic reactions and the enzymes are entirely determined by our genetics, it is clear that we are very close to the apes not only with respect to genetics, but also to digestion.

3. Human genetics only evolve very slowly, so slowly, in fact, that the expression "genetic invariability" of the species is sometimes used. The diet to which our genetics is adapted can therefore only evolve very slowly too.

The genetics of a baby is the result of a recombination of the chromosomes of both its parents, but comprises very few really new characteristics, that is to say not derived from either its mother or father. New characteristics are the result of "genetic mutations", that appear from time to time. They do exist, but are extremely rare. It is a useful process, as it is thanks to these mutations that a species can evolve in time and remain well adapted to its environment. Too many mutations would be harmful, as the processes of adaptation and selection would not have time to accomplish their work. This is why genetics is in fact very stable.

DNA copying mechanisms are so accurate that Jacques Monod, a Nobel prize winner for medicine, even talks of "genetic invariability". This is fortunate, as it ensures the existence and relative stability over time of a species' characteristics. The sole function of numerous mechanisms is to verify the exactitude of the message transcribed during DNA duplication so as to pinpoint and immediately repair possible errors. One of the consequences of this "genetic invariability" is that a species' diet can, and should only evolve very slowly in time, as all the digestive processes are coded in the chromosomes. We have seen that the genetic difference between man and the chimpanzee is only about 0.7 %, despite the seven million years of separate evolution of the two species. The rate of renewal and evolution of our genetic code is therefore of the order of one per thousand per million years<sup>1</sup>.

Man's genetics being almost identical to that of other primates, it seems reasonable to think that the ideal human diet should also be very similar to that of the great apes.

 $<sup>^{1}</sup>$  To be more precise, the drift rate of a species is therefore 0.5 per thousand per million years, as if two species evolve separately at the same speed, the difference between them increases twofold, i.e., one per thousand per million years (assuming that the mutations that occur are not the same for the two species, which is statistically likely). For our argument, only the very low order of magnitude of this figure is important.

In the situation in which we find ourselves today, man has drifted so far from his original diet that he no longer knows what to eat. Torn between various dietary systems based on totally different arguments, we sometimes have difficulty in clearly identifying which diet really suits us. Although many dieticians try for a perfect dietary balance, our best nutritional models are perhaps our cousins the primates, in the wild. In other words, the most intelligent thing we can do with respect to nutrition consists, in my opinion, in "aping" the apes. The problem of human nutrition is easier to solve when it is tackled from an anthropological point of view, rather than confining it to dietary considerations.

# 4. Our distant ancestors, at a time when man was still an ape, ate all their food without altering it, including meat, fish and insects. They practised dietary environmentalism without knowing it!

Things could not have been otherwise. In their natural environment, the primates eat what they can find as it comes, and this is the case of all species of wild ape. It is therefore obvious that the common ancestor of the great apes, which dates back about 15 million years, ate raw food. Our genes have practically not evolved since that time<sup>1</sup>, we still have the genetic characteristics of "raw food eaters" and, incidentally, of entomophages.

# 5. Civilized man can still eat natural food, and this is perfectly in accordance with his genetics since the latter has evolved very little since the time when natural food was our only nutritional resource.

From a theoretical angle, this point of view is only a logical deduction based on the previous ones. In practice, the satisfactory state of health of individuals who have adopted a natural diet and who therefore constitute real observable cases, shows that civilized man can, even today, live off natural food without preparation. The experience of thousands of people prove in particular that:

- Natural food, including exotic fruit unknown in the West and insects, is for the most part perfectly digestible and well assimilated by modern man in the country or in the city, starting from his first "natural" meal, even if he has never eaten this type of food before (no digestive problems, no undesirable side-effects, normal stools, etc.<sup>2</sup>);
- Organic quality food, that has not been processed, may change taste from one meal to another, or even during the same meal. This phenomenon can be observed at the very first intake of new food: fruit, for example. It is not, therefore,

<sup>&</sup>lt;sup>1</sup> G. Hervé, The Evolution of Protein, Masson, Paris, 1983.

 $<sup>^2</sup>$  Remark: the greatest caution is to be recommended, however, during one's first consumption of new foods. The specific case of colitis or diarrhoea triggered sometimes by the absorption of raw vegetables is addressed later.

an acquired phenomenon, but is innate. These changes in the perception of the taste of food have been studied scientifically by several researchers, who have dubbed this phenomenon "gustative alliesthesia". In studying these phenomena in detail, one notices that these reactions help to regulate body weight and determine the needs of the organism<sup>2</sup>. In simpler terms, we are referring here to the nutritional instinct (we will come back to this question later, in the section entitled "Can dietary balance still be ensured by instinct?");

- The change from an omnivorous standard diet to a well-balanced, more natural diet results in better health and better performance;
- On the contrary, changing from a natural to more artificial diet leads to a progressive deterioration of health, that increases with time and from one generation to another. Depending on the degree of transformation and imbalance of the diet, various degenerative disorders appear, that, very fortunately, are for the most part reversible, if the person concerned then adopts a better diet.

It is therefore clear that, both theoretically and experimentally, the human species is perfectly adapted to its natural diet<sup>1</sup>.

# 6. A natural diet is not only possible for modern man but even advisable;

The foods that were available in our original natural environment were the best suited to our genetic origins. Like the great apes, man's use of other nutritional sources (processed foodstuffs) or sources of animal protein other than insects, such as meat or fish, as nutritional supplements is possible, but these are not the foods to which we are best adapted.

When a driver buys a car at a garage, he is careful to use the fuel recommended by the manufacturer. The analogy may seem superficial, but as the design of the human machine is genetic, coded by our DNA, the most suitable fuel for this machine is necessarily the one most adapted to our genetics. Knowing that our chromosomes were perfected in an environment where the ancestors of modern man ate raw food, we venture to assert that:

Eating better and naturally, is simply giving the human body the fuel adapted to it.

<sup>&</sup>lt;sup>1</sup> Alliesthesia, from the Greek, allos = other, and esthesia = sensation.

 $<sup>^2</sup>$  M. Fantino, Body Mass and Nutritional Behavior: An Experimental Study, Ph.D thesis, Université Claude-Bernard, Lyons, 217 pp., June 27, 1980.

Consequently, we can reasonably suggest that the best diet for preventive or therapeutic purposes should also be both natural and raw.

The man-ape theory uses the theory of evolution (Darwin), but emphasizes the fact that not only is man descended from the apes<sup>2</sup>, but, in addition, by his physiology, genetics, metabolism, digestive system, and by the fact that he is perfectly adapted to foods consumed in their natural form, he is no more than the equal of the apes, which does not deprive him of his intellectual and cultural superiority, on the contrary.

This man-ape theory (or theory of raw-food eating man) is perfectly compatible with modern knowledge in the fields of genetics, nutrition, primatology, and anthropology. We must simply remember that, from the metabolic point of view, man is no more than an ape and is likely to remain so for another few million years because of the slow genetic evolution of the species<sup>3</sup>.

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<sup>&</sup>lt;sup>1</sup> This seems quite evident, but one sometimes has to state the obvious.

<sup>&</sup>lt;sup>2</sup> Darwin's theory of evolution of the species is now accepted by all scientists and is only contested by a small minority, the creationists, who believe that God created man and the universe *ex-nihilo* a few thousand years ago.

<sup>&</sup>lt;sup>3</sup> It should be emphasized that this does not diminish in any way the admirable superiority of the human intellect over the other apes and animals in general. No animal is capable of perceiving the beauty of a work of art, building a satellite, or understanding the operation of a nuclear power plant. The difference between physiological evolution and psychic evolution lies in the fact that physiological reactions are genetically coded, whereas this is not the case of the intellect and thought which are fortunately able to flourish and evolve much more rapidly than genetics.

#### Second Part

#### A BETTER LIFE THROUGH BETTER FOOD

"Natural dietetic means are best suited to the physiological life of the tissues, to sustaining the vital forces, to reinforcing organic defences, and to man's evolution."

Dr. Paul Carton.

#### The environmental benefits of a raw diet

"The chief executive officer of the World Health Organization, Dr. Hiroshi Nakajima, is alarmed about the food situation on the planet: the diet of the inhabitants of rich countries is bad, and increasingly so. As bad as that of the inhabitants of poor countries. Not in quantity -they are stuffing themselves- but in quality, as they pounce upon certain foodstuffs (fats and sugars) and disregard whole sections of the dietetic spectrum."

Patrice Van Eersel (journalist).

A non-processed, natural diet, richer in raw food, is undoubtedly the most environmentalist that can be imagined on a planetary scale for numerous reasons: it would save energy as no cooking would be required, preserve the forests, reduce atmospheric pollution, diversify the food industry, also reduce the quantity of food wastes, lead to a non-polluting form of agriculture, encourage reforestation, and heighten the public's environmental awareness. Let us look at each of the above points in detail:

Saving energy through not cooking, preserving the forests, and reducing atmospheric pollution: On a planetary scale, the most widespread source of energy used for cooking is by very far wood¹. Each year, huge expanses of forest go up in smoke to enable humanity to cook its food. The disaster is threefold: for the forest, which is destroyed, for the atmosphere, which is polluted by the combustion gases (CO, CO₂, acid rain), and, undoubtedly the most serious, for our health. It is easy to calculate the quantity of energy represented by the cooking of food for the earth's five billion people: each person daily consumes on average one kilogram of food, soup, tea, coffee, etc., that has to be heated from about 20° C to 100° C, with a low energy efficiency of the order of 10 %²; the result of the calculation for the whole planet is:

<sup>&</sup>lt;sup>1</sup> Particularly in the poorest countries which are also the most densely populated: those of the Third World.

<sup>&</sup>lt;sup>2</sup> The energetic efficiency of cooking is rather poor, as the greater part of the combustion energy does not heat the food, but, by convection and radiation, uselessly heats the room and the atmosphere.

 $5.\ 10^9.\ 80.\ 1000.\ 4.18.\ 10 = 1.65.\ 10^{16}$  joules of energy consumed per day. This figure is huge. When we know that a 1 300 MWe nuclear power plant operating at full power supplies a quantity of energy equal to 86 400. 1300.  $10^6 = 1.12.\ 10^{14}$  joules per day, we can see that:

The quantity of energy used by humanity to cook its food represents the equivalent of the production of about one hundred and fifty 1 300 Megawatt nuclear power plants operating non-stop at full power. This daily energetic expenditure for cooking on our planet is practically equal to the totality of the annual nuclear power production in the world (1 738 billion kWh per year<sup>1</sup>).

This energy consumed for cooking, which seems negligible for a single person or even a family, becomes enormous when it is multiplied by the planet's five billion inhabitants. And it should be pointed out that wood, the principal energy source used for cooking, is not only a particularly inefficient energy source, but also a particularly polluting one<sup>2</sup>. Each year, Western governments encourage industry and the public to put in insulation and invest so as to promote energy saving and the protection of the environment on a national scale. A great deal of energy could be saved and the environment protected if we ate better by cooking less! The advantages for the person who adopts a more natural diet are fourfold: financial gain (a reduction in his electricity and gas bills), saving of time (and therefore more personal and company productivity), preservation of the environment (less pollution), and better health (less expenditure for insurance companies and Social Security).

In Africa and Third World countries, cooking food represents the greater part of energy consumption. Fire is used there for cooking and not for heating. The inhabitants do not need heating and, as the average revenue per person does not enable them to afford a car, they travel mainly on foot, by bicycle, or by public transport. As I have already said, the main source of energy used in developing countries for cooking is wood, and thus enormous expanses of forest go up in smoke each year to meet the pressing need to cook food.

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<sup>&</sup>lt;sup>1</sup> It should be specified here that we are not systematically hostile to the civilian use of nuclear energy to generate electricity, as, in my opinion, nuclear power plants are much less polluting and more respectful of the environment than wood fires or conventional coal-fired power plants. Obviously, the best solution is to save energy, as energy that is not produced is evidently non-polluting. The debate on the best sources of energy from the environmental point of view is a fascinating subject, but exceeds the scope of this book. We will address this issue in a forthcoming book.

<sup>&</sup>lt;sup>2</sup> The combustion of wood releases into the atmosphere: carbon monoxide (CO), a gas that is lethal for man, carbon dioxide (CO<sub>2</sub>), sulphur oxides (SO<sub>X</sub>), and polluting smoke.

In some areas, such as Amazonia, this is not catastrophic as the region is relatively sparsely populated and the forest grows again quite rapidly (provided that the wood is cut intelligently, in small surface areas, which is not always the case). In some, more densely populated regions, however, where wood is a rare commodity, as in the Sahel, the inhabitants use the little vegetation there is to cook their food. After a few months, there is no more wood as far as the eye can see, not even the smallest bush. Soon, the place becomes a desert and has to be abandoned by its inhabitants, who are obliged to do the same thing over again a little further away, before joining the stream of millions of peasants fleeing a now nearly sterile countryside, and cramming into over-populated cities.

With time, we thus find increasingly dense populations massed in towns with runaway demographics, in the middle of desert areas that continue to spread from year to year. Another example: the island of Haiti, whose human, agricultural, and nutritional situation is tragic. The island is over-populated, shaken by serious political crises, and the authorities realized too late that the population, obliged to cut wood for cooking lacking any other source of energy, had burnt a large part of the island's vegetation. The reduction of the forest areas led to the erosion of the soil by rain. The result is that the Haitians can no longer eat fruit from the forest, as there are less and less trees in Haiti, nor farm the soil leached by the rain. A whole population may die from hunger if nothing is done. Many other islands and countries of the Third World that are overpopulated or becoming so, are running the same risk.

Diversity of the food industry: The food industry packages and distributes food, often pre-cooks it, and sterilizes, seasons, cans, bottles it, etc. It is a relatively polluting industry and a great energy consumer. With a more natural diet, favoring fresh, seasonal produce rather than industrial products, this form of pollution would decrease, and we could encourage organic agriculture, market gardening, local produce, localized economies and small distribution networks of a more human scale. In the future, the food industry could play an important and useful role by focusing their efforts on the production and distribution of fresh produce of good quality. This is, in fact, what is happening to some degree: all over the world, large fruit and vegetable production and distribution companies, often subsidiaries of large, international food industry groups, are investing in organic agriculture.

Reduction of polluting waste: With more environmentalist nutrition, based on fresh fruit and vegetables, food wastes would be composed of peelings and the remains of biodegradable and recyclable food in the form of compost (natural fertilizer). Fresh produce is usually packed in recyclable wooden or plastic crates

which pose no problem from the environmentalist point of view. An adulterated diet based on prepacked food products and cans obviously produces much more polluting waste, cans and plastic containers that have to be thrown away, are difficult to recycle, and pile up in garbage dumps and thus contribute to degrading the environment.

Non-polluting agriculture and reforestation: The modern farming techniques that are needed to produce the massive quantities of cereals which we do not know what to do with (while whole populations continue to die of hunger), are highly polluting. The use of synthetic nitrate fertilizers produces, for example, an increase in the nitrate content of ground water to such a degree, that in many regions of Europe, the nitrate content of local springs has exceeded the admissible doses for drinking water. With a diet rich in fruit, but with less cereals, farming could give way to a multitude of small orchards, instead of the cereal single-crop farming we see everywhere today. If everyone ate more fruit, a large part of the countryside that has been uniformly covered by "industrial" agriculture could be reforested. Europe and North America used to be covered by vast forests which were cut down to make room for immense wheat fields destined to produce flour and bread. Wouldn't it be preferable and more picturesque to have a multitude of small family farms instead of the huge industrial lands we see today?

Savings in heating energy: An adulterated diet tends to make one sensitive to cold and weakens our defences against illness; many Westerners fear the cold and drafts, and tend to overheat their houses. A better diet strengthens one's resistance to cold and reduces the frequency and gravity of influenza and ear, nose, and throat infections. Without even noticing it or making any particular effort, one tends to heat one's house or apartment less, which saves energy. If an apartment is heated to 15 or 18° C instead of 20 or 22° C, this is often enough to reduce one's fuel bills by 50 %.

An increase in environmental awareness: In addition to the advantages that we have just listed, there is another, which is undoubtedly the most powerful effect of a better diet from the environmentalist point of view: by learning to eat better, we become more aware of the close links that tie us to the earth. We thus considerably increase our environmental awareness, which, indirectly but very efficiently is incentive to protect the environment. Each meal thus becomes a fascinating lesson in ecology. Specialists in dietary behavior and all those who have tried vegetarianism or a more natural diet, know to what degree our conception of food is related to our conception of life in general. Eating better, polluting less, using up

less energy are all practical environmental acts that contribute to preparing a better future for the planet. It is certainly useful to fight deforestation in Amazonia and the pollution of the oceans, but isn't it at least as important for each of us to take action in our own lives and save our own bodies through better nourishment?

Real environmentalism starts with oneself. Environmentalism must not remain an abstract idea or a political speech filled with good intentions: we must put it into practice in our everyday lives and it is up to us to do so at each meal.

Appreciating nature's products (fruit, insects, etc.), respecting one's health, feeling good, not over-altering what we eat, becoming aware of the importance of food quality and the superior taste of organically grown fruit and vegetables, all this can teach us to love and respect the environment even more.

# Considerable time-saving

"A large part of modern food is the result of food industry activities which assemble ingredients of various origins to produce elaborate products (...) the proportion of non-processed vegetables and fruit in our diet is therefore tending to decrease, which can lead to disequilibirum and deficiencies in vitamins, micro-nutrients, minerals, and food fiber."

Christian Remesy<sup>1</sup>.

Did you realize that on average a housewife spends three hours a day in her kitchen? Dietary environmentalism, by eliminating the tedious task of preparing meals, saves a great deal of time: about two hours a day. And one also saves time for a second, more unexpected reason: with a simpler diet, one's sleep is of better quality and shorter (a saving of about two hours a day). In all, a better diet enables one to save between one and five hours a day, depending on the person, which is far from negligible at a time when time is a precious commodity. This time saving is particularly appreciated by men and women in a hurry, as well as by single people, especially as it is accompanied by better health, greater efficiency at work, more pleasure and better performance at sports, with, as a bonus, the awareness that one is doing the right thing environmentally speaking...

 $<sup>^1</sup>$  C. Remésy, INRA director of research at the Laboratoire des Maladies Métaboliques, Clermont-Ferrand, "Food Which Protects Us," Le Monde, pp. 11-13, September 9, 1992.

Do you know a fast and efficient way of allowing all housewives to simplify their lives and save two hours of free time a day, while increasing the well-being and health of their families? Eat better, cook less, and go for raw food.

# Real liberty for women: no more cooking!

"The hundreds of carotenoids contained in colored fruit and vegetables can play an antiinfection role, stimulate our immune defences, and avert the appearance of certain forms of cancer"

Christian Remesy.

Millions of women as well as men (most professional cooks, for example, are men) strive day after day to prepare ever more complicated and elaborate meals. This formidable work force could surely be put to better use. Cooking is a highly time-consuming obligation which practically constitutes, in many families, a form of slavery: before every meal, the mother or the cook in the family has to prepare everything at least an hour in advance, then cook the food, heat it, serve it, etc. There are also many constraints: cooking times have to be planned so that everything is ready at the right time. If one forgets, one burns the cake. If the children's schedules are not the same as one's spouse or companion, the work has to be done twice.

To enable the head of the family to save time, food industry companies have now commercialized all kinds of "ready-to-eat" meals that just have to heated in the micro-wave oven. But these meals are expensive and their quality is not always very good. Wouldn't it be simpler to make more meals out of raw fruit and vegetables that require no preparation, not even heating in the microwave oven? Dietary environmentalism thus proposes an ideal solution for managers and students in a hurry who want to eat quickly and well: no cooking required, just more fruit and vegetables eaten raw.

This means a real liberation for the head of a family. There is no longer any need to prepare a meal as it is always ready. The food just has to be placed in plates and baskets of fruit put on the table. The total time required to prepare an environmental meal and set the table is therefore never more than five minutes. There is no longer any need to be a slave to cooking, late working hours, or the different tastes of the other members of the family. No more precious hours wasted every day in washing and scrubbing pans. If one's spouse or children have different schedules, which is likely, it doesn't matter, as the meal is served immediately.

In short, there is no need for someone to always be at the stove, everyone chooses and eats what they like.

A better diet therefore practically frees a full time workstation in each family, which could represent a formidable working capacity on a national scale. If the time thus saved from cooking is not used for working, it can be used instead for looking after one's children, planting woods, leisure, etc. The most complex operation in the framework of a diet based on raw and natural food is cracking nuts or cutting a slice of meat, which everyone can do very well by themselves. As the family structure and the utilization of time by the head of the family are completely changed, this means that he or she can do more interesting things than the tedious and repetitive daily cooking<sup>1</sup>.

These new activities will certainly be much more useful and enriching than the traditional chore of cooking. No more questions like "What on earth am I going to make tonight?" or the fear of burning a dish or spoiling a recipe. Everything is ready to eat at any time of the day or night (although it is advisable to eat during the day and not at night)!

## A diet that respects individual freedom

"Fruit and vegetables supply a set of indispensable minerals, oligo-elements, vitamins, and antioxidant substances, and these non-energetic substances play an essential role in preventing arteriosclerosis and other pathologies."

Christian Remesy.

A better diet also increases people's freedom. First with respect to mealtimes, since everyone can eat when he likes, according to his appetite, or depending on school or professional constraints, without disturbing anyone as fresh food will not go cold. More freedom also in the composition of each meal: as the menu is generally imposed, if someone does not like the main dish, he has a choice between fasting or to forcing himself to eat out of politeness, which is unpleasant and frustrating. With dietary environmentalism, everyone is free to choose what suits them best out of the foods laid on the table, according to taste and preference. This results in a very new kind of social interaction: Rather than impose a set menu on the diners, which has usually been the case up to now, this new approach consists in respecting the tastes of others, that can be different from ours, and in letting them eat what they prefer, thus giving preference to buffet-type meals or a self-service formula. One person will eat avocado while his neighbor will prefer meat. The main thing is that everyone feels satisfied and enjoys sharing a meal

<sup>&</sup>lt;sup>1</sup> Without taking into account the fact that raw food stains on clothes disappear much more easily with water than cooked oily stains that require washing with detergent.

together. It will also be the end of "a spoonful for Father" and "a spoonful for Mother" until the plate is empty. This freedom as to the choice of food changes the whole atmosphere of the family meal, which should above all be a reunion, a time for dialogue, freedom, and enjoyment, while respecting other people's differences. It is normal that some people prefer apples and others pears. Ideally, everyone should be free to eat what suits him best.

# A heavenly spread

"It is surprising that man has developed a highly sophisticated pharmacological tool but has not sufficiently investigated the complexity of the food he ingests (...) One should not, however, oppose pharmacology and nutrition. Nutrition plays an essentially preventive role, whereas modern pharmacology has an extremely localized and limited curative approach."

Christian Remesy.

Some people fear that an environmentalist meal may look aesthetically unappetizing, compared to decorative cooked dishes. Actually, it is exactly the contrary: a table well garnished with fruit, nuts, and natural food looks magnificent, a visual delight. Fruit cut into quarters or slices, and arranged harmoniously on a plate need only a few seconds of preparation for a great result. And if you really want to surprise your guests, add a few edible insects to the menu! Whether you are entomophagous or not, with a little fruit and highly colored food, a pineapple, mangoes, papaya, apples, melons, avocados, vegetables, lettuce, a few nuts and tomatoes, it is really easy to transform an empty table into a heavenly decor in no time at all.

## Greater eating pleasure

"Modern man is unfortunately no longer a reasonable being, as he has lost his wisdom. He is capable of walking on the moon, but no longer knows what he should eat."

Michel Montignac.

The pleasure of eating better is much greater than the pleasure usually provided by classic gastronomy. No one could follow a natural diet for long if he did not derive a sufficient amount of pleasure from it, unless he was a masochist, which is, fortunately, quite a rare characteristic. It is normal to attach importance to the pleasure of eating and to the taste of food. A more simple, less processed diet makes one's perception of taste much more intense. The flavor of even the most ordinary food -lettuce, raw fish, raw carrots- becomes increasingly pleasant when one adopts a natural diet, to such a degree that, when one tastes the cooked dishes one ate before,

they seem insipid in comparison. Have you ever eaten wild strawberries in the wild or cherries off the tree? They are delicious, aren't they? The pleasure of eating natural food is so great when it is eaten on a regular basis, that long-standing natural diet followers often talk about a "luminous phase" or "extraordinary tastes"; one feels something like actual explosions of pleasure in one's mouth while eating. One must not judge the quantity of pleasure to be felt when eating naturally from the raw food you eat now, that obviously seems insipid without seasoning. When one gets into the habit of eating carrots without vinaigrette, the perception of taste becomes much more acute, rather like when one stops smoking. It is amazing, but I guarantee (and I love food) that a well-organized natural diet will give you infinitely greater pleasure than a "standard" diet.

# The pleasure of eating better

The quantity of eating pleasure and gustative sensitivity are increased tenfold with a natural diet, just like when you stop smoking. After a transition period of a few weeks, the taste of natural food suddenly becomes acute, to such a point that eating "better" and eating "tastier" are one and the same, and the pleasure of eating naturally can be qualified as "fantastic" compared to the much lesser pleasure experienced with processed foodstuffs and uselessly elaborate cooking.

There is no longer any need to spend hours concocting new recipes, seeking out the best restaurant or spending money to please one's palate with spicy recipes: nature does things just as well and even better, naturally!

#### Slimming with a raw diet

"Tens of thousands of diet centers have appeared practically everywhere. Anyone can do anything he or she likes in the slimming business, as practically every system has failed. People are ready to sell their souls to just any charlatan or crank. With respect to diet, the Americans outdo each other in ideas each more ludicrous, contradictory, extremist, and dangerous than the next."

Michel Montignac.

# Calculate your ideal weight

The ideal weight of an individual as function of his height can be calculated by Lorentz's formula in which weight is expressed in kilograms and height in centimeters:

For men:

IDEAL WEIGHT = (HEIGHT - 100) - [(HEIGHT - 150)/4]

For women:

 $IDEAL\ WEIGHT = (HEIGHT - 100) - [(HEIGHT - 150)/2]$ 

Example: The ideal weight of a man measuring 1.78 meters is thus 78 - 7 = 71 kilograms.

This purely empirical formula works quite well in practice.

#### Another method of calculation:

The B.M.I. (Body Mass Index) = Weight (kg) / Height<sup>2</sup> (m) must be comprised between 20 and 25 for a man and 19 to 24 for a woman. Over these values and up to 30, there is excess weight. Over 30, it is considered that there is obesity.

No animal in the wild, eating the food adapted to its species, is obese. Excess weight is common in developed countries, with the United States as world champion. Statistics in this field reflect the deplorable nutritional habits of the Americans: 60 % of the population (twice as many as in Europe) carry excess weight, that is to say their weight is abnormally high. 18 % of Americans are obese, that is to say nearly one person in five, with an average weight of over 100 kg. The world record for obesity is 635 kilograms<sup>1</sup>. One just has to go to a beach in summer to see the sorry anatomical state of our fellow citizens and the frequency of the modern disorder that is obesity. Man today is intelligent enough to walk on the moon and build nuclear power plants, but has become a degenerate animal. The obesity that can be observed in all developed countries is solely the result of our nutritional errors. It is easy to see that obesity in domestic animals -dogs, cats, pigs- appears when they are fed food to which they are not adapted. Of course, all animals fed synthetic granules do not react in the same way, and do not become obese, at least not immediately. Some, on the contrary, grow excessively thin and become cachectic, no longer able to gain weight.

It takes time, and nutritional errors accumulated over several years, sometimes several successive generations, to upset a metabolism and gain or lose excessive weight. Overall, an over-abundant and adulterated diet results in excessive weight

<sup>&</sup>lt;sup>1</sup> In the Guiness Book of Records.

gains rather than losses. Pottenger observed that a considerable proportion of the cats fed cooked food became obese, while only a few of the others became cachectic.

In human beings, it is often after the age of thirty that excess weight begins to show to varying degrees, depending on the individual. This problem of excess weight is so frequent in our civilization that it has become a real social phenomenon and a significant economic market sector, hence the appearance of all sorts of slimming methods. Most slimming methods consist of creams or restrictive and frustrating "miracle-diets" with temporary effects, to lose a few kilograms before the vacation. Certain unbalanced diets can be dangerous<sup>1</sup> and should never, under any circumstances, be pursued for any length of time. A number of charlatans and marketing specialists boast the merits of slimming methods whose effects, unfortunately, are only temporary. As Michel Montignac<sup>2</sup> rightly points out, only a return to a better daily diet enables obtaining durable and real results as regards excess weight. Methods that do not put into question the consumption of processed foodstuffs to which we are not well-adapted, do not tackle the real cause of obesity; weight that is lost this way is soon regained<sup>3</sup>. Yet it is so simple to be slim with dietary environmentalism that one wonders how people can possibly follow some of these diets that are so restrictive that nearly everything is forbidden and everything has to be accurately measured, weighed, and counted, which is frustrating and often leads to nutrient deficiencies. Let's live simply, without depriving ourselves of the good things in life! With a more natural diet, weight loss occurs without one having even to limit one's choice of food, its quantity, or eating pleasure. One can very well lose weight while continuing to eat meat, avocado pears, honey, dates, or bananas, as we will now see.

Dunaevskii, a Russian researcher, studied the interest of a diet composed of raw food only as a slimming method for the obese<sup>4</sup>. His results confirm my observations in this field. It is extremely simple: all one has to do is eliminate the most processed foodstuffs, such as sugar, cooked oils, and most cooked food, and follow a better, less processed diet, based on fruit, raw vegetables, meat, and other raw food, to progressively lose, in most cases, those excess kilograms.

My own example confirms that people who are strongly predisposed to putting on weight can find and maintain their ideal weight, while eating everything you want with good appetite. Having spent the greater part of my childhood on the American continent, I ate both badly and too much when I was young, as I was then

<sup>&</sup>lt;sup>1</sup> The case is often cited of people who have died after having exclusively eaten impressive quantities of bean pods in order to lose weight.

<sup>&</sup>lt;sup>2</sup> Michel Montignac, researcher and author of "Slimming on Business Luches;" "Eat and Slim," and "Put a Turbo in Your Plate, " éditions Artulen.

<sup>&</sup>lt;sup>3</sup> N.W. Walker, Natural Weight Control, O'Sullivan Woodside & Co., Inc., Arizona, U.S.A., 1981.

<sup>&</sup>lt;sup>4</sup> G.A. Dunaevskii, Raw Eating as A Method for Treating Obesity, Vrachebnoe, Vol. 0, No. 10, pp. 88-91, 1982.

a great amateur of fried chicken, hamburgers, ketchup, chips, sodas, ice-cream, milk-shakes, and other American specialities. I suffered in two ways: first physically because of the excess weight I carried up to the age of 12 (with a really plump body, fat thighs, a round stomach, my face covered in acne, a nose constantly running, I weighed 70 to 72 kilograms, about 20 too many; I had difficulty running and doing sports); and second, mentally because of the jeers and "racism" of my American school fellows who had nicknamed me "the little fat Frenchy", which was hard to bear! For having faced, and intensely suffered from these events, I can understand the ordeal of a person who feels awful and judged because of his excess weight.

Today, these are just childhood memories. On returning to Europe, I left popcorn and American ice-cream behind and lost weight, perhaps because of more intensive sports. My present weight has not changed since I started following a natural diet. Despite a good appetite and a tendency to put on weight, I weigh a stable 69 kilograms (the ideal weight for a height of 1.76 m, according to the weight tables of American insurance companies, Lorentz's formula and the B.M.I.). Any variations in weight around this average weight never exceed ± 2 kilograms, whatever I eat. This example, like that of Michel Montignac and all former "fatties" who have adopted a more natural diet, shows that a better diet not only prevents obesity, but may also cure it when it already exists. Putting on weight between periods of dieting is not inevitable when one learns how to eat correctly.

Overweight persons lose their excess kilograms in just a few months with a more natural diet<sup>1</sup>. The average observed loss of weight for those overweight in the start, is 500 to 700 grams a day during the first 10 days of a 100% raw diet.

The slimming effect of a raw diet to get one's figure back to normal has been described by many precursors working in the field of raw diets: Dr. Edmond Bordeaux Szekely in the United States at the beginning of the century<sup>2</sup>, Dr. Ann Wigmore in the United States<sup>3</sup>, and Prof. Moeller in Germany<sup>4</sup>. They arrived to the same conclusion: a diet based on raw foods that excludes the most processed

 $<sup>^1</sup>$  These observations were made on about one thousand overweight individuals who had adopted a balanced diet based on raw foods and avoiding certain combinations. The only (very rare) exceptions were a few cases of women whose excess weight was related to psychological causes (poor self- image and/or psychological blocks preventing them from eating properly). These women lost weight once their psychological problems were solved. The number of these cases where slimming resists an entirely raw diet never exceeds 5 % of the female population. All the other overweight individuals soon slimmed down with a better diet.

 $<sup>^2</sup>$  E.B. Szekely, Biogenic Reducing: the Wonder Week: A Pound a Day, IBS International, San Diego, California, U.S.A., 1967.

<sup>&</sup>lt;sup>3</sup> A. Wigmore, Be Your Own Doctor: A Positive Guide to Natural Living, Avery Publishing, Garden City Park, New York, U.S.A., 1983.

<sup>&</sup>lt;sup>4</sup> Prof. Michael Lukas Moeller, Gesundheit ist essbar, Waldthausen, 160 pp., 1991

foodstuffs (particularly sugar and bread) and limits certain food combinations, enables the obese to lose on average one pound (0.5 kg) a day during the first two weeks. After the first fifteen days, weight loss continues at a slower rate and by stages, until a normal weight is reached after usually a few years of practise.

Contrary to common belief, meat, avocados, bananas, honey, dates, and calorierich foods do not make one fat if they are eaten in their natural form<sup>1</sup>. It was thought until very recently that obesity was simply the result of too great a supply of calories. According to the very popular "Calorie Theory", one just had to eat less calories in order to lose weight. Yet many obese persons eat relatively little, count their calories, and still do not lose weight, even when they restrict themselves to hypocaloric (or low-calorie) diets<sup>2</sup>. On the contrary, some very big eaters do not gain weight and stay slim despite a high calorie intake. Actually, the calorie theory is partly wrong as it is too simplistic. Obesity is above all the result of a metabolic disorder, itself the result of the ingestion of unadapted food and a badly balanced diet. In other words:

One puts on weight because one eats badly (i.e. unadapted artificial and cooked foods) and not because one eats too much.

According to my observations, weight loss occurs with a more "environmentalist" diet, whatever the type or quantity of food eaten, even if the calorie intake is twice as high as usual<sup>3</sup>, and even if the subjects eat great quantities of high-calorie food that reputedly makes one fat, such as meat, honey, animal fats, nuts, bananas, avocados, etc.<sup>4</sup>. A natural diet based on fruit and vegetables, that also included fish, meat, and other raw food seems to be, in my opinion, an ideal slimming diet.

Such a diet, as recommended by us below, is perfectly balanced nutritionally and may be pursued in the long term with no risk of deficiency. The weight loss that is

<sup>&</sup>lt;sup>1</sup> R. Mackarness, Eat Fat and Grow Slim, Doubleday & Co., Inc., New York, 1959.

<sup>&</sup>lt;sup>2</sup> According to certain studies, 15 % of overweight people really do eat too much (more than 2 800 calories a day), 35 % eat normally (2 000 to 2 700 calories a day), and 50 % eat little (less than 2 000 calories a day). The cause of the majority of obesity cases does not, therefore, lie in an excess of calories as the "Calorie Theory" would have us believe: this theory is therefore false or only half true (because it is nevertheless true that one loses weight if one eats nothing at all). the main cause of obesity in developed countries lies above all in a metabolic deficiency (the body is no longer able to eliminate) and not just in nutritional excesses.

<sup>&</sup>lt;sup>3</sup> The recommended calorie intake for an adult weighing 70 kilograms is about 2 200 calories a day.

<sup>&</sup>lt;sup>4</sup> It is true that these foods can make one fat in the framework of a traditional diet, but this is not due to their high calorie content, but to the fact that they are thermally altered (cooked meat) or mixed with other foods (bananas eaten at the end of a meal, honey on bread, avocados in salads, etc.), or heated before their commercialization (standard quality honey and nuts). These same "high-calorie" foods cannot make one fat in the framework of a natural diet, even if one eats great quantities of them. "Plump" people lose about 0.5 kilograms a day the first two weeks, even eating hypercalorific foods, provided they are of organic quality and eaten without alteration, and that certain food associations are avoided.

obtained is efficient and relatively rapid, even with no restriction in the food that is eaten. Finally, an important detail, eating naturally is not dull and one can lose weight while freely enjoying the best fruit, bananas, meat, etc. One just has to stop buying poor quality processed foodstuffs and altering them by excessive cooking. It is processed adulterated foodstuffs, denatured by multiple cooking and processing that generate excess weight. The body, lacking suitable enzymes to metabolize all the new molecules generated by cooking and food processing prefers to store these molecules in fat (toxins) when it cannot eliminate them. With a better diet, the body progressively eliminates these accumulated toxins. A three-week period of raw nutrition is enough in many cases of excess weight to lose five to eight kilograms. Those who wish to slim down before the summer are advised to follow our recommendations in the spring by going on a raw food treatment course at home. Another advantage of slimming with a raw diet is that, contrary to most slimming methods based on drastic restrictions, those who wish can avoid the "vo-yo" phenomenon of gaining weight again by continuing to eat a Stage I or Stage II diet in the long term, with no risk of deficiencies, while enjoying all kinds of raw foods without limitation.

## Beauty through raw foods

One's figure and the quality of one's skin (aspect, softness) depend closely on the quality of one's food. Like many adolescents, my face used to be dotted with spots, whiteheads and blackheads. As I had suffered from this since my childhood, I was used to it and was pleasantly surprised to see it all clear up when i improved my diet. At school, around the age of ten, some of my tactless school fellows not only nicknamed me "the fat little Frenchy", but also "sun" and "fountain" because of the acne that flowered all over my cheeks and my running nose all winter. I have never been very attached to my personal appearance, but one has to admit that this kind of compliment is nevertheless rather hurtful for a kid!

Since I changed my diet some fifteen years ago, all my acne and black spots have disappeared. The mycosis I had all over my body, arms, and legs¹, which showed in a multitude of small white patches on my skin after exposure to the sun, especially on my bck, also disappeared and has never reappeared, although it permanently covered 50 % of my body before. My change in diet was the only thing that produced this result: all the medical treatments, creams and ointments prescribed by the doctor had failed.

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 $<sup>^1</sup>$  *Pityriais versicolor*: About 30 % of the population suffers from this very widespread mycosis (this fungus lives in a humid environment and can easily be caught in swimming pools or at the seaside). It shows up in small, round, rather light patches on the skin, a few millimeters to one centimeter in diameter, that become more apparent in summer after exposure to the sun (as the affected areas tan less quickly and small lighter patches thus appear on the skin after exposure to the sun).

The skin is a living organ which constantly renews itself. A great number of the people who have improved their diet have observed that they now have a prettier complexion, as their skin is regenerated from within. An adequate supply of red fruit and vegetables improves the complexion and the skin becomes more supple and softer. White spots on the nails, likely related to calcium intake irregularities or calcium fixation disorders, disappear. Spots and acne fade away after a few weeks or a few months. It is easy to carry out the experiment oneself: after about three weeks of dietary environmentalism, one's complexion clears up and acne decreases. Three good classic meals, a few slices of bread and butter and cheese, some sweetened yoghurt, french fries, meat in sauce, or just a few biscuits, and the acne comes back in a few days, which permits easily verifying for oneself that the key to solving numerous skin and acne problems lies, most often, in our plates.

A better diet also gives a better resistance to sun: sunburn is rarer, one tans the first day in the sun, and people who are normally "allergic to sun" resist it better.

### Eat better, tan better

Some natural foods facilitate tanning and give a pretty color to the skin, particularly carrots, mangoes, tomatoes, egg yolks, peaches, and apricots. These foods are rich in vitamin A (retinol) which plays an important role with respect to the retina, as well as in skin pigmentation reactions in the sun. Be careful, though, not to make the following two mistakes:

- Cooking food decreases their vitamin A content and makes it less exploitable by the body;
  - Smoking perturbs the metabolism of vitamin A.

# More natural beauty

A pretty complexion, no more acne or spots, soft supple skin, easier tanning, less body and perspiration odors, a better figure thanks to the loss of excess weight -no more rolls of fat, chubbiness, thick skin, cellulite, fat thighs, or protruding belly; dietary environmentalism is an important factor of beauty and regeneration.

# Sports and raw nutrition

"As you take up this book, a world revolution is in progress. With no overthrown governments, declarations of war, bomb explosions, or even the firing of single shot. I am talking about the revolution in sports nutrition."

Dr. Robert Haas<sup>1</sup>.

The effect of nutrition on sports performances is now well known, which is why most professional athletes follow special diets and no longer travel without their dietician and "nutritional consultant". Here is what tennis world champion Martina Navratilova says: "I have discovered the secret of regular performances, both in training and competitions. The practically unlimited stamina and resistance which have made my last seasons so easy I owe to my adherence to a revolutionary dietary program". Diet is the key to the sports and even professional performances of an individual. With dietary environmentalism, numerous and varied improvements can be noted: a slower heart rate with the same training², less fatigue and breathlessness, better resistance to effort, more flexibility, faster warming up, less stress, better recovery after an effort, and fewer cramps.

A marathon runner told me recently that since he had adopted our diet, he no longer suffers as before, either during or after an effort. His stride is more precise and he recovers faster after an effort, feeling nearly as fit at the end of the marathon as at the start. Personally, on a more modest level, when windsurfing or skiing, my two favorite sports, I have noticed several improvements: more flexibility, increased concentration, greater precision in my movements, better reflexes and more resistance to extreme conditions (cold, humidity, sun, fatigue). One is also "warm" straightaway with maximum efficiency, the warming up period is therefore shorter, and cramps are less frequent, even after several hours of windsurfing in cold water (I often used to have to stop because of cramps in my forearms). In fact, with a better diet, it is as though all the wheels of the human machine were better oiled: movement is more enjoyable, easier, more precise, exactly adapted to the itinerary that is sought, and one feels so much better!

By improving the body's general functioning, dietary environmentalism also benefits sports performances.

Eating better and cheaper: a source of savings for the family budget, Social Security, health insurance companies and businesses

<sup>&</sup>lt;sup>1</sup> In the introduction to Dr. Robert Haas's book, Eat to Win, preface by Martina Navratilova.

 $<sup>^2</sup>$  An effect that can be observed both in athletes and non-athletes. The slowing of the heart rate results in increased sports capacity, less risk of cardiovascular accidents, and is generally associated with a longer life expectancy.

- The most harmful foods to eliminate in priority are expensive foods: processed foodstuffs, industrial cold cuts, alcohol, cheese, sweet desserts, ready-to-eat, prepacked, pre-cooked food, canned foods, etc. All these elaborate foods cost a great deal per kilogram, as in addition to the price of the food, one has to pay for its processing, handling, cooking energy, fabrication and distribution, as well as for all the surplus costs with which various intermediaries and the food industry make their fortune;
- The natural food that is the most enjoyable and the most useful for our health is not the most expensive, on the contrary. A diet based on seasonal and local fruit and vegetables (green salads, carrots, apples, pears, plums, apricots, etc.), cheap fish (sardines, mackerel, herring) and cereals (inexpensive) to grow at home with a little water, is extremely healthy and costs very little indeed;
- Gas and electricity bills are considerably lower because raw foods no longer have to be cooked, and the apartment or house needs less heating because one is less often ill and less sensitive to cold;
- One feels satisfied and full although one eats less, as a body in good health works better and requires less calories than before (a possible decrease in food quantities in many cases, particularly for former big eaters);
- The time you save is money: less time cooking, better quality shorter sleep, increased efficiency at work, all this allows you to save several hours a day.

# Does organically-grown food cost more than industrially produced food?

Fruit and vegetables of organic quality apparently cost a bit more per kilogram (about 25%), which is why many people think they save money by buying industrially produced food. This is a trap to be avoided. Industrially-grown produce, forced with chemical fertilizers, contains less vital elements and especially much more water (that may be polluted, in addition), which you buy at the same price as the fruit or vegetable! The nutritive value of organically grown food is greater. The value of a food should not be estimated as a function of its price to weight ratio, but as a function of its price to nutritive value ratio. Despite appearances, badlygrown produce, forced with fertilizer, therefore costs the consumer more, even if its price per kilogram is lower, because one has to buy more to meet the same needs. Always prefer organically-grown produce and non-denatured products to food industry products of industrial origin.

A better diet is also represents savings for businesses, for medical care, and therefore for the nation:

- A great many illnesses and medical consultations could be avoided if an efficient preventive policy were implemented against smoking and alcoholism, and if the public were taught to eat better. The chronic deficit of medical insurance companies could thus be immediately absorbed. The Social Security budget could be reduced to a great extent, treatment could then be given to those who still needed it entirely free of charge, the mandatory deductions that weigh heavily on all business companies could then be decreased;
- Absenteeism because of illness would decrease if employees lived more healthily. This would increase company competitiveness. Productivity would then also increase because the employees would be fitter, and therefore more positive and more efficient.

From any standpoint -personal, business, or public health- we have all to gain by eating better, including financially.

This concludes the second part of the book which has presented the advantages of dietary environmentalism and of a raw diet from various points of view: pleasure, money, time-saving, vitality, performance, beauty, freedom, and the environment.

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# Third part

#### STAIRWAY TO A BETTER HEALTH: RAW FOODS

"I will prescribe the diet that suits my patients with as much knowledge and judgement as I possess."

Hippocratic oath.

Nutrition is an important health factor. It is the food in our plates that, once integrated into our bodies by the strange and complex achelmy of life, entirely determines our appearance (beauty, figure, weight), our well-being, our actions (behavior, performance), and, of course, our health. A better diet, more suited to our needs, contributes to making us happy, whereas processed foodstuffs, both quantitatively and qualitatively unadapted, contribute to generating numerous health problems. Dietary environmentalism plays a role that is both preventive, reinforcing one's health and preserving it, and curative, treating certain illnesses and favoring their spontaneous cure. It should be recalled, as we pointed out at the beginning of this book, that the application of a better diet cannot replace a medical consultation. On the contrary, a healthier way of living complements classic, sometimes indispensable treatments, by reinforcing the overall health of a patient¹.

Nutrition is no doubt the most important of all health factors. As early as 500 BC, Hippocrates was already asserting "Your food should be your only remedy".

On this subject, Gandhi, another of the world's greatest men, said: "To eliminate disease, one must eliminate the use of fire in the preparation of food". Experience has shown that it is possible to improve or cure a great number of illnesses with a better diet.

<sup>&</sup>lt;sup>1</sup> There is no intention of developing an anti-medical discussion in this book, which occurs all too frequently in the natural medicine milieu. Surgery can effect miracles when repairing a mutilated human body. In addition, thousands of human lives are saved every day thanks to judiciously prescribed medical treatments. Refusing medical care in serious cases that require them would be a mistake. On the other hand, continuing to neglect one's health by smoking and eating just anyhow when one is ill would be a biological aberration. Better health and medical care are not opposites, but complement each other.

Whether one simply wants to live better or prevent or cure illness, the diet is the same: the same type of nutrition, perfectly suited to human requirements, enables healthy people to stay that way, and helps those who are unwell to get better.

Prevention, however, is always preferable to cure. All too often, people wait to be seriously ill before starting to change their diet. This is a pity, it is always better to correct one's diet before being ill rather than after.

# Raw foods can prevent illness

"Health is not all; but without health, all is nothing."

Schopenhauer.

During recent population surveys in a number of developed countries, health was judged by the persons questioned to be the most precious thing one can possess, well before money. Today, most individuals live quite absurdly: they spend the first part of their lives working to earn money, while smoking and eating indiscriminately, regardless of their health, and then spend the second half of their lives spending the money they have earned on attempting to regain the health they have lost. But health is not for sale, it is patiently constructed by a suitable way of life.

Our health today is the result of the health that was given us by our parents (our genetic capital at birth) and the way we have lived since our childhood (our way of life)<sup>1</sup>.

Numerous epidemiological surveys have clearly established that nutrition is the main factor in the prevention of illness, particularly for the first two causes of mortality in developed countries: cancer and heart disease. The list of illnesses and health disorders directly or indirectly related to nutrition: diabetes, high blood

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 $<sup>^1</sup>$  This, in mathematical terms, can be formulated as follows: H(t) = H(0) + O way of life (t).dt where H(t) is our health at the instant t, H(0) is our genetic capital (health at birth). Even with a poor basis (deficient H(0) expressed by a low, but positive value), one can, according to this model, live (so long as H remains positive), or even improve one's health by one's way of life. As a result of the symbiotic relationship between the mother and the foetus, one can reasonably suppose that H(0) (health of the baby at birth) is equal to the mother's health at the time of delivery. Thus, one can see that health is transmitted by filiation and can therefore improve from one generation to the next with a better way of life, or, on the contrary, increasingly deteriorate with an unsuitable way of life. This is, in fact, a concept that farmers apply to their cattle, but which is disregarded by humans: the way of life and the nutrition of the mother is much more important than that of the male, since the mother's health entirely conditions that of her descendants.

pressure, cholesterol, tiredness, obesity, allergies, insomnia, migraine, ulcers, digestive problems, cancer, rheumatism, etc., becomes longer every day as nutritionists pursue their research.

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# A better diet: what results can one expect?

"It's nature that cures disease. It finds suitable ways all by itself, without having to be directed by our intelligence."

Hippocrates.

Eating better can change many aspects of our life: physical, sports, psychic, behavioral, etc. When one changes one's nutrition, there are numerous results: development of physical performance (sports, stamina, resistance to stress, etc.), psychic improvements (memory, concentration, better perception, etc.), and elimination of disorders and illnesses of varying degrees of seriousness with nutritional origins. Cited below, and classified into three distinct categories, are some of the domains in which I have observed improvements in patients. The result of these observations is that a very great number of health disorders encountered in our society are due to nutritional errors. However, this does not mean that just eating better can improve everything. Some disorders are not of nutritional origin, while yet others are incurable or irreversible<sup>159</sup>. In the most serious cases, medical treatment is always indispensable; a better diet will then make it easier to bear the side effects of the treatments that are prescribed, and improve the patient's overall state of health.

The improvements obtained by a change of diet depend on numerous criteria: the age of the person, his degree of nutritional intoxication, his past, his present state of health, and what he eats (quality and variety of the foods he consumes, their nutritional balance, whether there are physical reactions or not, possible mixtures of foods during the same meal, etc.). This is why I must recommend having a medical follow-up when diet is used therapeutically, at the same time as learning to eat better, which implies reading, learning, and serious training in this field, since adopting new nutritional habits is an important subject and should not taken lightly <sup>160</sup>.

When one improves one's diet, the benefits of the dietary change spread progressively to three spheres: the inside of the digestive tube (it takes about three days to renew the intestines' content), then the blood and the lymph (it takes about three weeks to renew the greater part of the body's circulating liquids), then all the rest of the organism (the tissues, the organs, the cells, the skin, etc.). The results and improvements of dietary environmentalism can thus be classed into three categories:

<sup>&</sup>lt;sup>159</sup> Genetic illnesses, accidents; occupational intoxication due to asbestos, lead, etc.

<sup>&</sup>lt;sup>160</sup> See the addresses provided at the end of the book for the organization of conferences and training seminars.

- *Digestive improvements* (half a day to three days): these are due to the renewal and cleaning of the content of the digestive tube. Digestive improvements are obtained after the time required to empty the digestive tube, during the very first days, that is to say from half a day to about three days after the change to a better diet. In practice, the experience of persons adopting a better diet shows that the following improvements are obtained during the first few days: a better digestion, a feeling of lightness after meals, a regular intestinal transit, and an improvement in the quality of their sleep, while gases, flatulence, constipation, stomach or gastric pains, certain forms of migraine, a bloated feeling after meals, etc. all disappear. People who are overweight already begin to lose their excess pounds.
- Humoral improvements (three days to two months): these are due to the renewal and cleansing of the blood and lymph. Every day, about one liter of food and liquids nourish the blood and the same quantity of waste is eliminated. Knowing that there are six liters of blood in the body and about ten liters of lymph, it is easy to predict that humoral improvements will become apparent in about twenty days, a period of time that allows the greater part of the blood and lymph to be renewed. In practice, results are observed in the following domains, after periods ranging from a few days to two months (after three weeks on average): the arterial blood pressure of those suffering from high blood pressure becomes normal (three weeks), cholesterol and triglycerides levels decrease (three weeks), the complexion is clearer and acne decreases (about one month), less sleep is required (about one month), anaemia improves and haemoglobin and red blood cells increase (one to two months), there is less or no pain (inflammatory rheumatism, cancer pain, or other inflammatory pains after about three weeks), the growth of tumours or benign or sometimes cancerous cysts is halted (they can sometimes stabilize rapidly, in just a few weeks, but the regression of installed tumours or cysts, when this is possible, requires more time, about a year), and loss of weight continues for those with excess pounds.
- Cell improvements (three or more months): these result from the renewal and cleansing of the body's cells. Knowing that each day about 1 kg of food and liquid nourish the 70 kg of an average organism, and that the same amount of waste is eliminated, it is easy to understand and mathematically calculate that cell improvements cannot be obtained in less than three months. In practice, results are often observed in the following domains after varying periods of 3 to 18 months (after 6 to 12 months on average): cysts and certain possibly cancerous tumours regress, overweight subjects find their ideal weight, those who were too thin gain weight and also find their ideal weight, allergies disappear, there is less abundant and painful menstrual flow, gynaecological problems disappear, all the blood parameters are normalized, sports performances improve, etc.

## Digestive disorders and dietary environmentalism

"Illnesses are the result of various alterations of the humours which are due to food, drink, tiredness..."

Hippocrates.

Most digestive disorders are the consequence of nutritional errors, and can therefore be remedied by a better diet. The digestion of natural foods is always easy, all the more if they are of organic quality, consumed in moderate quantities, according to the needs of the body, and if mixtures of food are limited<sup>161</sup>.

With a well-balanced better diet, intestinal gases and flatulence disappear, digestion becomes easier and feelings of tiredness and heaviness after meals are just bad memories. The feeling of abnormal torpor that frequently occurs after meals that are too heavy is called post-prandial fatigue; I myself suffered from this for many years<sup>62</sup>. Digestion is normal when one feels as light and as fit as before the meal, except that, as one no longer feels hungry, one is no longer attracted by food. If one has eaten correctly, one should easily be able to run or do sports immediately after a meal, feeling light and perfectly at ease.

In most cases, a more natural diet, with not too many mixtures, is enough to completely regularize one's digestion. Constipation is one of the most frequent digestive disorders in our civilization. It is now well known that the deficiency of fiber in our diet is one of the causes of constipation. Many dieticians therefore recommend consuming greater quantities of fruit and vegetables, fiber-rich foods which improve the intestinal transit. With a natural diet based on good quality fruit and vegetables, constipation disappears spontaneously<sup>163</sup>. Just adopting a more natural diet was enough to re-establish a normal intestinal transit in the cases I was able to observe. The intestinal transit time is generally slower in persons whose diet is refined and synthesized, and a little faster in persons who eat more healthily. The average intestinal transit time for humans, like for other primates, is about 18 hours with a raw diet, whereas the average in our society is about 36 hours. Among the people I have seen adopt a natural lifestyle, those who suffered from constipation rapidly solved this problem, in most cases in just a few days.

In more difficult cases, and to facilitate the cleansing of the organism, there is a delicious fruit which is a mild and natural laxative. This fruit, called cassia, from the Latin; tastes like chocolate cream, is found in all tropical countries, and looks

Yonkers, New York, U.S.A.

<sup>161</sup> Generally speaking, it is better to eat one food or a maximum of two or three at each meal, in greater quantity than a great variety of foods mixed together during the same meal.

163 A. Ehret, The Definitive Cure for Chronic Constipation, Ehret Literature Publishing Co., 19 Babcock Place,

like brown sticks about 50 centimeters in length. Only the inside pulp should be eaten -with prudence and moderation.

When one changes to a more natural diet, diarrhoea may occur, sometimes phlegmy with an unusual smell and color. These reactions disappear spontaneously after a while 164 and are simply the effects of the body's cleansing. This diarrhoea can be considered useful since the body thus eliminates its toxins or superfluous molecules via the intestinal tract.

## Raw foods lower your stress

"Real happiness costs little. If it is expensive, it is not the right sort."

Chateaubriand.

One of the main effects of a more natural diet is its action on the nervous system and psychology. After several weeks of a better diet, one really feels better, calm and serene, and the inevitable annoyances of everyday life are much easier to put up with. This effect can also be observed in animals (cats become less nervous and mew less, dogs no longer bark at the slightest thing, etc.) as well as in children. When they are fed a better diet, they are calmer, whine less and are less grumpy. They are still as playful and artful, but no longer cry over nothing, as they did before. I suppose you find it difficult to believe that diet can thus affect the behavior of children, but why not simply carry out the following experiment: after eight days on a natural diet, give them a cup of coffee, a few pieces of chocolate or just one more adulterated meal, and, in just a few hours, they will start screaming, crying, stamping their feet and fighting over nothing, like before.

Several scientific papers have established links between food and nervous disorders (particularly insomnia and schizophrenia - see the bibliography). The first incriminated foodstuffs are those commonly consumed today: wheat gluten, processed cereals, and bread<sup>165</sup>. It has been well known for a long time now that the consumption of drugs, coffee, cigarettes, certain medicines for the nervous system, tea, or too much cooked meat, rightly condemned by vegetarians, can affect the nervous system. However, the fact that more ordinary foodstuffs such as bread, cooked cereals, or dairy products also modify our behavior or nervous condition is less well known.

I have worked for several years since 1988 on scientific research focused on the links between nervousness and the consumption of processed foodstuffs. The first condition of any study in this field is obviously to be able to measure the

<sup>165</sup> F.C. Dohan, Neuro-Active Peptides From Food, The Lancet, p. 1031, May 12, 1979.

<sup>&</sup>lt;sup>164</sup> After a period of time varying from a few days to a few months, depending on the individual.

nervousness of any individual. As no such measurement equipment existed, I designed a special machine, the "stressometer", which, by a new electronic process, accurately measures nervous tremor. This tremor is so slight when the subject is at rest (a few microns in amplitude) that it is imperceptible to the naked eye. But this tremor is nevertheless detectable by means of a high sensitivity piezoelectric sensor that enables the measuring of a person's degree of nervousness.

After having perfected this process, I first measured the tremor of mice fed on different foods<sup>166</sup>, using a series of prototypes. The nervous tremor at rest of mice fed thermally processed cereals (bread or wheat heated to different temperatures) was three times higher on average than that of the mice fed non-heated foods (raw cereals or a variety of other raw foods). I then adapted the machine and sensor so as to measure human nervous tremor. The interpretation of measurement results for humans was more tricky because factors other than food can have a considerable effect on nervous tremor: smoking or just psychological stress.

After extensive research, development, and adjustment of a new electronic circuit and ergonomic sensor, and after numerous experiments in collaboration with several teams of hospital doctors, I managed to adapt the machine to man, dubbed it the "stressometer", and patented it<sup>167</sup>. There is no other simple means of measuring nervous tremor. What was originally only a laboratory instrument has therefore become a small scientific, industrial, and commercial venture. The device is in the process of being commercialized, and in principle, in a few years it should sell in large numbers, as there are numerous applications of tremor measurement: measurements taken during medical check-ups (before or after the prescription of tranquilizers), measurement of stress at home (for the general public), or at work, measurement of pathological nervous tremor (Parkinson's disease, trembling in older people), and measurement of smoker's tremor (to observe the benefits for the nervous system of stopping smoking).

But, to come back to the experiments on dietary stress, several tens of thousands of measurements on mice and men showed that nervous tremor is on average two to five times higher in subjects who eat processed foodstuffs than in those who eat natural foods, both in humans and mice<sup>168</sup>. This is the scientific demonstration that a better diet reduces stress and makes one calmer, whereas a diet based on flour and bread (a standard diet), or cooked cereals (a cereal or macrobiotic diet) can perturb the nervous system and generate stress and unease (expressed in measurable form

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 $<sup>^{166}</sup>$  The mice in some cages were fed raw cereals, others were fed heated cereals. All the cages were otherwise identical and contained the same number of mice. All the mice were of the same species and age.

<sup>&</sup>lt;sup>167</sup> B. Comby, New Method for the Measurement of Tremor at Rest, Archives Internationales de Physiologie, Biochimie et Biophysique, Vol. 99, 6 pp., 1991.

<sup>&</sup>lt;sup>168</sup> B. Comby, Multi-Parameter Analysis of Tremor, available from the Bruno Comby Institute, 55 rue Victor Hugo, 78800 Houilles, France, 25 pp., 1989.

by a nervous micro-tremor a few microns in amplitude in frequencies of 3 to 20 Hz). The time required to reduce stress via a natural diet (stress being measured with the stressometer) is about twelve days. After two days without processed foodstuffs, the tremor rate already significantly decreases (by about 35 %). Three weeks after the beginning of a natural diet, tremor stabilizes to the basic normal value of the calm subject. In a way, this tremor expresses the degree of inner nervousness or physiological stress of the organism. Just one exception to the diet, a piece of bread, a cigarette, a cup of coffee, or a cooked meal, is enough to raise the level of stress to the previous abnormal values in either a few minutes (the nicotine of cigarettes passes from the lungs to the blood in a few seconds) or a few hours (the time required to digest stimulants). By eating naturally for at least 15 days, one can discover a very pleasant feeling of serenity and calm that can change one's life in many ways. The relationship between processed foodstuff and stress have also been observed by Pottenger in the thirties, who noticed abnormally aggressive behavior in those of his cats who ate cooked meat. Human aggressivity, activism, violence, war, growing criminality, sexual obsessions and deviations in the modern world, are due in large part to the abuse of alcohol, the use of drugs, tobacco, and coffee, of course, but also, in my opinion, to our dietary habits (bread- and flour-based diets that also, to a lesser degree, are stimulants for the nervous system). Can one possibly dream of a world in which men and women are calm, happy, non-violent, feel good, and are free from stress?

#### Nutrition and heart disease

"The paradox of our time is the contrast between an efficient and often dangerous medicine and powerlessness or excessive indifference to prediction or prevention."

Dr. Jacques Ménétrier.

Heart disease is the first cause of mortality in developed countries. A great number of people suffer from obesity and high cholesterol levels, two important risk factors in heart disease. With a better nutrition, such as the one I recommend, high cholesterol and triglyceride levels decreased and became normal in all the cases I was able to observe to date, even in certain cases of long-established hypercholesterolemia for which medical treatment had proved ineffective<sup>169</sup>.

<sup>&</sup>lt;sup>169</sup> The normalization of cholesterol and triglyceride levels was observed in subjects who followed a raw-food based diet that excluded dairy products, even in cases of consumption of large quantities of raw meat and eggs, although the latter are rich in cholesterol. We know that there exist several forms of cholesterol that can be metabolized with various degrees of facility, which is why they are either called "good cholesterol" or "bad cholesterol. Maybe the cholesterol in raw meat is "better" and easier to metabolize than cholesterol altered by cooking. Above all, it would seem that too high a level of cholesterol is due to a metabolic dysfunction itself due to a deficient diet.

High blood pressure, another factor promoting heart disease, is actually very widespread since it is estimated that about 15 % of the world's population is affected. This disorder, previously found only in Europe and the United States (champions in standards of living, but also in dietary absurdities), has now spread to all the Third World countries as they discover the western way of life. It has now been firmly established that high blood pressure, in addition to genetic predisposition, is due to an excessive consumption of salt, and overeating in general. Even if it is of long duration and has resisted medical treatment, high blood pressure can be improved and often totally resolved with a better diet. In practice, one can observe that when subjects with high blood pressure change their diet, it takes about one month for their blood pressure to decrease, then reach normal values.

By its role in the prevention of heart disease, dietary environmentalism is an important asset for public health. If only because of this, it is urgent to promote, as not only would it obviously contribute to improving our health, but would also help relieve the chronic deficit of social security and health insurance funds.

## Less cholesterol with raw foods: an easy challenge

Cholesterol has become a real problem in our society. A large part of the adult population (nearly half) has too high a cholesterol level, over two grams a liter. An accumulation of "bad cholesterol" is an important risk factor that compromises our health and can cause fatal heart disease.

Numerous studies have shown that American vegetarians have on average a lower cholesterol level than the rest of the population (a survey of several thousand Seventh Day Adventists who practice vegetarianism for religious reasons<sup>170</sup>). A vegetarian diet and the consumption of non-heated virgin oils often, but not always, helps decrease cholesterol levels. A 100 % natural diet, whether followed over a long period or in the form of a cure, decreases excessive cholesterolemia in a matter of about three weeks to one month, even if the subject eats considerable quantities of meat and animal proteins in their natural form<sup>171</sup>.

<sup>170</sup> R.L. Philips, F.R. Lemon, and C. Hammond, Coronary Heart Disease Among Seventh-Day Adventists with Differing Dietary Habits, American Public Health Association Meeting, pp. 16-20, Chicago, U.S.A., November 1975.

<sup>171</sup> Hypercholesterolemia is not only, as was believed for a long time, the result of too great a consumption of cholesterol in food. There are many great meat eaters who have a very low cholesterol level. Some people who are very careful about their diet and systematically avoid cholesterol-rich foods such as meat and eggs, have a very high cholesterol level.

The consumption of foods rich in pectin (apples) and fiber (fruit, vegetables, and cereal seed sprouts) apparently also help limit cholesterol levels<sup>172</sup>.

#### Where does cholesterol come from?

The cholesterol in the body comes from two sources:

- -70% of cholesterol is synthesized by the liver, as it is a useful molecule that plays a role in cell mechanisms (blood contains about one gram per liter, even in athletes in excellent health on an ideal diet);
- Only 30 % of cholesterol comes from food. The foods richest in cholesterol are eggs, meat, and dairy products.

Cholesterol, like glucose, is indispensable to health; it is only too much cholesterol that can be dangerous, just as too much glucose produces diabetes.

A cholesterol level is considered to be abnormally high when it exceeds  $2 \, g/l$ . Nearly one in two people are above this limit in Europe and developed countries. The risk of heart disease is considered high above  $2.5 \, g/l$ . With a natural diet, the normal cholesterol level of an adult ranges from 0.8 to  $1.5 \, g/l$  (considerably lower values than current standards, similar to those of the great apes and primitive tribes living in the forest, and ancient chinese rural populations).

IMPORTANT: Contraceptive pills and smoking considerably increase the risk of hypercholesterolemia.

#### The medical and metabolic cholesterol theories

The most widely accepted medical theory claims that the cholesterol present in the body is the result of excessive cholesterol consumed in food. It should just be enough, therefore, to avoid eating cholesterol-rich foods in order to reduce one's cholesterol level and this level should rise if one eats more of them. This theory is false or at least incomplete, as there are many examples of people who, contrary to this theory, have a high cholesterol level, but do not however eat cholesterol-rich foods (meat, animal fats, eggs, dairy products). Others, on the contrary, have an excellent cholesterol level (lower than 1.5 g/l) although they eat considerable quantities of meat and animal fats. This medical theory is inexact, as it is based on the assumption that cholesterol in food is the only or main source of cholesterol. It

 $<sup>^{172}</sup>$  A. Keys, F. Grande, and J.T. Anderson, Fiber and Pectin in Diet and Cholesterol Concentration in Man, Proc. Soc. Exp. Biol. Med., Vol. 106, pp. 555-558, 1961.

represents, however, only 30 % of the cholesterol present in the body, 70 % of which is synthesized by the liver.

In fact, cholesterol is not an enemy to health: it is even indispensable to the proper functioning of the body. As long as the metabolism functions correctly, cholesterol levels are perfectly well regulated. However, a deficiency in the metabolism, resulting from an unsuitable diet, eventually generates a disorder of the cholesterol mechanisms, which then leads to a metabolically increased cholesterol level, whereas food cholesterol only plays a secondary role. According to this new theory, which we can call "metabolic cholesterol theory", too high a cholesterol level is not the result of an excessive consumption of animal fats and cholesterol-rich foods, but of a metabolic deficiency due to an unsuitable diet.

The metabolic cholesterol theory has been confirmed by practical experience: just changing to a more natural diet composed of raw foods is enough to improve the functioning of the metabolism and lower excessively high cholesterol levels (in about three weeks to a month), even if the subject continues to consume large quantities of raw animal fats and egg yolks. There is therefore no need to follow a strict and frustrating diet with no animal products to decrease one's cholesterol level. It is better to review one's diet as a whole and eat more raw foods, including meat and eggs if one wishes (in their natural, non-processed form, that is to say uncooked). These nutritional remedies enables winning on all counts, as they not only reduce the level of total cholesterol, but also, and especially that of "bad cholesterol" by improving the GOOD/BAD cholesterol ratio.

## Cholesterol in various populations

In the United States, the average cholesterol level ranges from 1.55 to  $2.74 \, \mathrm{g/l}$  depending on the region. Cholesterol levels in Western countries often exceed the value of  $2.5 \, \mathrm{g/l}$  which marks the lower limit (as defined at present) of an increased risk of heart disease. These figures increase with time: today, a growing proportion of the population exceeds this threshold, whereas, just twenty years ago, a level of  $2.5 \, \mathrm{g/l}$  was rare and considered very high. The cholesterol level of traditional Eskimos, who ate practically nothing but raw meat and fish, was very low, between 1 and  $1.5 \, \mathrm{g/l}$ , but their cholesterol level has increased since they have started eating like Westerners: it is now nearly identical to that of "civilized" peoples.

The cholesterol level of the Chinese, who, until recent years, ate very few dairy products, few animal proteins, and few industrially processed foods (a diet based on fruit, vegetables, and rice), ranges from 0.88 to 1.65 g/l (that is to say less than the lowest levels measured in Americans) and this level is rising as they change to the

Western way of life<sup>173</sup>. The cholesterol levels of subjects practising the raw nutrition ranges from 1 g/l to 1.5 g/l. It takes about one month after the change in diet for an excessively high cholesterol level (> 2.5 g/l) to drop to a value considered medically acceptable (2 g/l), and about one year for it to reach basic values of 1 to 1.5 g/l.

# Two examples of a drop in cholesterol level resulting from a 100 % raw food

EXAMPLE No. 1: Jacques R. lives in the south of France near the town of Montpellier. In 1986, after a blood count, he noted that his cholesterol level was too high, nearly 3 g/l. On the advice of his doctor, in 1991 and the beginning of 1992, he took very strict dietary measures, eliminating animal fats and eggs (a 95 % vegetarian diet), replacing refined oils by cold-pressed virgin oils (although in small quantities), excluding frying (replaced by boiling or steaming), consuming very few dairy products (a moderate ration of cheese at just one meal), replacing white bread by wholemeal bread, and, in addition, drinking anti-cholesterol herb teas. But all in vain: despite all his efforts, his cholesterol level continued to rise throughout 1991, exceeding the threshold of 3 g/l and reaching 3.13 g/l on April 9, 1992.

From April 25, 1992, Jacques R. changed his strategy, abandoned his vegetarian diet based on cooked cereals and herb teas, and adopted a totally natural diet (based on fruit and a variety of foods all eaten raw, including meat, fish, and eggs, but excluding dairy products). On May 21, 1992, that is to say not even one month later, his cholesterol level had dropped to 2.07 g/l, a result judged satisfactory by his doctor, which had never happened to him since his first cholesterol measurement in March 1986. In his case, 25 days of a natural diet were enough to normalize a hypercholesterolemia that had resisted all the treatments and diets he had tried. In addition, Jacques R. noted the following unexpected improvements: a better digestion (no more yawning after meals, none of the flatulence and eructation that had characterized his digestion previously), better sleep (reduced by two hours), no more headaches (previously frequent in the morning), and the loss, in one month, of eight kg of excess weight.

EXAMPLE No. 2: The cholesterol level of the author of this book (B. Comby), was about 2 g/l at the age of 20 before any dietary change, and is now, since the change to a natural diet (over ten years ago), regularly measured as being on average

<sup>&</sup>lt;sup>173</sup> Contemporary Nutrition, Vol. 14:5, 1989, and Bob Leroy Sibrava, Vegetarian Voice, 1990.

between 1.0 and 1.3 g/l, with an excellent total cholesterol/HDL cholesterol ratio ranging from 2.3 to 3.2 (a ration considered normal below 4.8).

Contrary to popular belief, it is not the consumption of animal fats that increases cholesterol levels, but rather an unsuitable diet that upsets the metabolism (metabolic cholesterol theory). This is confirmed in three ways: 1) The Eskimos who eat large quantities of raw animal fats have perfectly satisfactory cholesterol levels, lower than those of Westerners who eat less animal fats, but eat them cooked. This result could be explained by a possible genetic difference between the Eskimos and Westerners, but: 2) When the Eskimos left their traditional way of life for an American-style way of life and diet, their cholesterol levels increased, and finally: 3): Westerners with high cholesterol levels who start eating uncooked animal fats like the Eskimos, see their cholesterol levels drop and become normal again.

Observations 2) and 3) oblige us to conclude that the main factor in cholesterol is not genetics, but dietary denaturation. This leads to the possibility of "anticholesterol" cures consisting in freely eating what one wants, including meat, fish, and eggs, but always raw, for a limited period of time (one month, for example, once or several times a year). A blood count at the beginning and end of each cure enables measuring progress. This drop in cholesterol level is one of the positive effects of eating raw food that is easily verified scientifically, thus confirming the usefulness of a natural diet and the soundness of the metabolic cholesterol theory. On average, it takes three weeks for an improvement in blood pressure and a drop in cholesterol level to become apparent. The practice of such natural food cures, at home or in specialized centers, could help check the wave of heart disease that has stricken the West.

## Cancer and raw food therapy

"Among the causes of cancer, nutrition ranks high, since it may be directly or indirectly responsible in 30 to 40 % of cases. Very precise statistical and epidemiological surveys have enabled scientists to propose ways of life oriented towards preventing various types of cancer and towards a better personal equilibrium."

Prof. Henri Joyeux. 174

For Leon Schwarzenberg, famous cancerologist: "cancer is certainly not inevitable". The main causes of cancer are, in fact, avoidable. First of all, nutrition, which, according to the statistics, plays a role in the development of about one cancer case in two, particularly cancer of the colon, the liver, and the breast, to cite

 $<sup>^{174}</sup>$  Professor of medicine in cancerology at the Faculty of Medicine at Montpellier.

just a few. The second cause of cancer, also avoidable, is smoking, responsible for one cancer case in three, particularly cancer of the lungs, the throat, the bladder, and the oesophagus (combination of tobacco and alcohol).

A better diet can not only prevent cancer, but also, in some cases, help cure it. Many cases of cancer cured by raw-food diets have been described. The most famous case is that of Johanna Brandt, a woman with cancer of the stomach who completely cured this illness by eating nothing but fresh grapes for several months. After the disappearance of the tumor, she continued to follow a vegetarian diet based on raw fruit and vegetables. Her tumor had definitively disappeared as there was no relapse. Several years later, Johanna Brandt wrote her book "The Grape Cure" 175, a best-seller in which she proposes grapes as a means of treating cancer.

In the "European Recommendations for the Prevention of Cancer", advice given by European cancerologists under the direction of Professor Tubiana, director of the main anti-cancer center in Europe (Institut Gustave-Roussy in Villejuif), there are several very precise nutritional recommendations that propose increasing the proportion of fiber-rich foods (that is to say, fruit, vegetables, and cereals). These recommendations are considered medically as being preventive rather than curative measures.

In certain cases, a 100 % natural diet can promote the remission of cancer when it is applied early enough, before the cancer has evolved too much, and I personally have known and followed up several cases of this type where perfect health was regained with a better diet. Many other cases of cancer remission obtained or promoted by better nutrition exist (including certain cases of metastased cancer). In the middle of the 20th century, Dr. Max Gerson observed hundreds of cases of remission or improvement of advanced cancer with the application of his diet, that was rich in raw fruit and vegetables and excluded salt and cooking<sup>176</sup>. In Geneva, Dr. Schaller has followed numerous patients on the "Sun diet" and has also observed several cases of spectacular remission. Karl-Otto Aly, for his part, recounts cases of spontaneous regression of tumors after the adoption of a frugal, practically raw diet<sup>177</sup>. Ann Wigmore in the United States also claims to have obtained results on cancer and AIDS with a vegetarian diet based on fruit and vegetables, raw salads and freshly crushed cereal sprouts, all of organic quality. Guy-Claude Burger, had developed a serious form of cancer (lymphoblastic sarcoma of the pharynx) that gave him little hope of survival. Urged by his physician, Dr. Kousmine, to adopt a raw diet, he practised the instinctive diet, which seems to have been beneficial, as,

<sup>&</sup>lt;sup>175</sup> Johanna Brandt, La cure de raisin, éditions Dunant, Geneva, Switzerland (in French).

<sup>176</sup> M. Gerson, The Cure of Advanced Cancer by Diet Therapy, and A Cancer Therapy: Results of Fifty Cases, Gerson Institute, P.O. Box 430, Bonita, California, 92 002, U.S.A., 420 pp., 1958.

<sup>&</sup>lt;sup>177</sup> Karl-Otto Aly, Cancer Defeated by the Body's Own Defenses, Tjidskrift fur Halso, September 9, 1965.

some thirty years after the beginning of his illness, he is still alive and apparently in good health. However, eating raw food is not always enough to prevent or cure cancer, and psychological and emotional work is also recommended and necessary for good health and a happy life. Burger's wife, Nicole, for example, developed a cancer after practising a raw diet for over 25 years, but she was confronted regularly by strong psychological pressure... that being another story. This just to illustrate the fact that diet, even raw, is certainly useful, but not enough to ensure eternity. It does strongly contribute, however, to health and happiness, and is one of the major pathways to a better life.

Good health requires a global approach that includes not only food, but also all other dimensions of life:

- good food (health of the body)
- good sleep (see "Power-sleep")
- good thoughts (health of the mind)
- harmony and friendly people around you (healthy relationships).

With this global approach, I have known and followed up cases of people with leukaemia or cancer whose condition was improved or sometimes completely cured by following a totally natural raw diet. In fact, all frugal diets or diets rich in raw foods, including fasting, seem to have results on certain forms of cancer in the medium term. However, only well-balanced and sufficiently varied diets can be pursued in the long term. It is not recommended to fast or follow an exclusive diet of fruit for more than a few weeks! Johanna Brandt's grape cure, for example, is nutritionally deficient and should only be used for a few weeks. Fortunately, a more varied and well-balanced natural diet can be followed in the long term. That is what I propose. If very impressive accounts of cancer cures do exist, there are not yet, to my knowledge, any serious statistics on dietary cancer cures, as such statistics would require years of research with an entire team and considerable financial means: one has to wait at least five years after a treatment to be able to affirm that the cancer is cured or that there is remission. Knowing that cancer is the second cause of mortality in developed countries, a serious statistical survey studying the impact on cancer of a natural diet should be made as soon as possible, under the aegis of leading specialists<sup>178</sup>.

 $<sup>^{178}</sup>$  Such a study has been done by the Comby Institute on AIDS cases (see bibliography). A census and study of published cases of "spontaneous cancer remissions", are currently in progress in the United States under the direction of the Noetic Institute of Sciences, a private foundation financed by the Rockefeller Foundation, however, this study does not particularly explore the effect of a raw nutrition.

# **Progression of cancer in history**

No traces of cancerous bone tumors lesions have been found on skeletons from before the Neolithic era, when man's nutritional habits changed from natural food to food altered by fire. Today one cancer out of three leaves lesions from bone metastasis on the skeleton. During the 19th century, cancer affected about one in five people. Today it kills about one person in three and this figure continues to increase despite all the efforts of modern medicine (early detection campaigns, surgery, chemotherapy, radiotherapy). The statistics forecast that half the children born today will one day be affected by cancer. Is this really inevitable? Modern medicine cannot, for the moment, check the scourge of cancer as it acts too late, when the illness is already firmly established. An efficient and inexpensive anticancer strategy should consist in taking action first, especially for prevention, by improving our habits and way of life (tobacco, alcohol, diet).

An effective anti-cancer strategy should, prior to any treatment, eliminate the causes of the illness: tobacco, alcohol, and dietary errors. One takes no chances if one follows a frugal diet composed of natural foods, excluding adulterated or processed substances and dairy products<sup>179</sup>. A priori, one can obtain results on cancer just as well with a grape cure as with a pineapple, banana, apple, or hazelnut cure, or even, like Medieval healers, a raw meat cure<sup>180</sup>. For long-lasting results, one has to strictly follow this type of diet long enough for the tumor to regress totally. According to available information, this means one to two years. As this period is quite long, it is obvious that, to avoid nutritional deficiencies in a patient already weakened by his illness, it is infinitely preferable to adopt a natural raw food diet (to benefit from its therapeutic effects) that is, in addition, correctly balanced. The proportions, as proposed in this book, -about 50 % fruit and sweet foods (Category A), 30 % vegetables (Category B), and 20 % foods rich in proteins or lipids (Category C), with a sufficient supply of calories (about two kg of food a day)- enable the long-term adoption of a natural diet with no risk of any particular deficiency, unlike a grape cure, for example, which will produce good results to begin with, but should only be followed in cures, occasionally, for fear of nutritional shortages and progressive weakening of the organism.

 $<sup>^{179}</sup>$  Milk contains cell growth elements that are no longer necessary for adults, but may favor the growth of tumors.

<sup>&</sup>lt;sup>180</sup> Imposing a "miracle cure" on all patients would not always produce good results. The best results would be obtained by preferring, among all the natural foods, the one that the subject finds the most delicious and appealling, among a wide choice of natural foods, not distorted by mixtures and seasonings.

In addition to the effect of diet on tumors, it should also be noted that in many cases, cancer is accompanied by inflammatory pains, that can reach an unbearable level of intensity during the most advanced stages of the illness. The patient is then often given pain-killers (analgesic and anti-inflammatory drugs) and, in certain cases, even morphine is not strong enough to calm the intolerable pain. Raw food therapy, in cases of well-advanced cancer, at least produces a beneficial effect by totally or partially calming the inflammatory pain, if not total remission.

#### Natural anti-cancer substances

To conclude this section relative to cancer, it should be noted that several molecules with anti-cancer qualities are supplied by a natural diet:

- The chlorophyll contained in green vegetables. Fresh green vegetables (green salad) thus play a role in the prevention and treatment of cancer<sup>181</sup>;
  - Cabbage in all its forms (cauliflower, green cabbage, red cabbage, broccoli)<sup>182</sup>;
  - The vitamin C in citrus fruits (oranges, lemons, grapefruit)<sup>183</sup>;
  - Garlic and onions<sup>184</sup>;
  - Kiwi fruit<sup>185</sup>;
  - Chitin, a protein found in the skin of insects and crustaceans<sup>186</sup>.

In addition to the interesting properties of these few foods, resting the metabolism by means of a better diet relieves the immune system and facilitates recovery. In the cases observed, it seems however, that it is not only the consumption of a particular food that brings about a cure<sup>187</sup>, but also and above all, the adoption of a varied and well-balanced natural diet that excludes most adulterated foods that poison the organism.

# Infectious diseases and raw food therapy<sup>188</sup>

<sup>184</sup> Idem.

 $<sup>^{181}</sup>$  Chiu-Nan Lai, Antimutagenic Activities of Common Vegetables and their Chlorophyll Content, Mutation Research, Vol. 77, pp. 245-250, 1980.

<sup>&</sup>lt;sup>182</sup> Prof. Henri Joyeux, Nutrition and Cancer: Change Your Diet, OEIL, Paris, 246 pp., 1990.

<sup>&</sup>lt;sup>183</sup> Idem.

 $<sup>^{185}</sup>$  H. Joyeux and M.C. Gouttebel, The Kiwifruit in Nutrition and Cancer, Entretiens de Bichat Thérapeutique, October 23, 1991.

<sup>&</sup>lt;sup>186</sup> There is even cancer chemotherapy based on chitosan, a by-product of chitin obtained by immersing the chitin in an acid bath. The chitosan molecule is injected into the bloodstream of cancer patients. Wouldn't it be simpler, for both prevention and cure, to eat insects whose chitin is submitted to the acidity of the gastric juices before being assimilated by the intestines?

 $<sup>^{187}</sup>$  Depending on the case, some people obtain results with grape cures, others with lemon juice, potatoes, a rice-based diet, fasting, or various raw-food diets.

 $<sup>^{188}</sup>$  To learn more on the subject, the work Renforcez votre immunité et vivez mieux, by the same author details the relationship between natural food and the immune system.

"Because we have lost the instinct that used to enable us to choose the most suitable diet for our vital needs, we no longer know how to defend ourselves against the world, against toxic and infectious elements. Modern deficiencies lead to an immune disequilibrium that promotes the development of degenerative diseases, from the most benign to cancer and AIDS."

Dr. Catherine Kousmine.

Since the discovery of microbes by Pasteur, medicine has considerably developed the use of antibiotics and vaccination. Previously mortal diseases, such as smallpox, tetanus, and poliomyelitis, can now be avoided or treated, whereas in the past they could only be treated by little-known natural methods - Hippocrates, more than 2 500 years ago, recommended putting "patients on a diet" in the event of fever. Hygiene, and increasingly numerous and sophisticated vaccinations and antibiotics, have rapidly become the three pillars of modern medicine. But the problem of infectious disease has not been entirely solved for all that: AIDS still cannot be cured, no more than 'flu that kills millions of old people throughout the world each year<sup>189</sup>.

In Third World countries, leprosy and malaria continue their ravages. Even in countries where vaccination campaigns are obligatory, in each hospital there is an infectious disease service where there is a regular influx of new patients. These services are currently trying to cope with the spread of the AIDS epidemic, seeking antibiotic and antiviral treatments such as AZT and DDI, which are not enough to check the disease.

The relationship between immunity and nutrition has only been tested by a few researchers, generally isolated, without the financial support of the pharmaceutical industry or government organizations. Government subsidies are generally granted in state-of-the-art technologies such as genetics or molecular biology. The more advanced this avant-garde very expensive research, the more sophisticated the treatments become, and one then realizes that the most important thing was not only quite simple but free: the prevention of illness by means of a better way of life. The links between nutrition and immunity constitute a new, rapidly developing research orientation, which seems particularly promising for the future. But such research is very difficult to finance, because it does not lead to a profit-making drug or vaccine (see, on this subject, the book « Maximize immuity », by the same author).

The function of the immune system is to ensure the cleansing of the inner environment. It identifies, neutralizes, and eliminates any abnormal cells or

<sup>&</sup>lt;sup>189</sup> Vaccines against 'flu have only a very relative effectiveness, as the viruses mutate unceasingly. Yearly vaccination campaigns are thus protection against last year's viruses but not against the new viruses that appear each year. Vaccines are specific to each virus. Only a reinforcement of each person's general immune system can prevent illnesses due to these new viruses.

abnormal molecules. Certain foreign substances (antigens) penetrate into the organism via the lungs or a wound, but most of the foreign substances and molecules in the body come, quite simply, from our food! This is why food is the main factor in ensuring our immunity. A better fed organism reinforces its immunity to such a degree that it can defend itself quite adequately against common microbes even without vaccinations and without taking antibiotics. With a healthier diet, seasonal 'flu, a runny nose in winter, and childhood illnesses spontaneously disappear, but reappear immediately after resuming a processed or unbalanced diet.

The presence of microbes, apparently is not enough to induce an infectious disease: the presence of the microbes as well as an ill-nourished organism are required for the symptoms to appear. The old, very simple equation: "Microbes illness" (proposition No. 1) must therefore be replaced by "Microbes illness" (proposition No. 2). In a group of people whose diet is systematically denatured, proposition No. 2 is reduced to proposition No. 1, and the only way of avoiding disease without changing their diet is to fight microbes by means of hygiene, vaccinations, or antimicrobial treatments, as is currently the case. With a better diet, things are different: microbes can be present in the organism without causing the slightest symptom, as they are well controlled by the immune system. It is therefore possible to live in good health in an environment full of microbes, with no need of either vaccinations or antibiotics. In other words; the same microbes would be less dangerous if one eats better. Numerous cases of patients with infectious diseases of varying seriousness who have improved when put on a natural diet, have been noted in several countries (United States, Germany, Switzerland, France)<sup>190</sup>. We all know, that in the case of 'flu, a lighter diet, a cure of vegetables or oranges (citrus fruits) makes recovery easier. This effect is not just pure coincidence and it can be used systematically to improve the health of patients. In the past, when someone was ill, their first reflex was to go on a diet, as Hippocrates used to recommend, which, in his own words, "was often enough to bring about a cure". One just has to observe a cat or a dog to see that, as soon as they are ill, these animals fast instinctively.

Statistics show that there is an increase in illness and pharyngitis in January, just after the excesses of the Christmas holidays. The rigors of winter were often given as an explanation, but the cold should, on the contrary, kill microbes, as most of them need heat to multiply. A number of researchers, particularly in Japan, have thought up the concept of "biological rhythm" to explain the sudden increase in 'flu

 $<sup>^{190}</sup>$  See on this subject the works of the pioneers of hygienism and raw food diets: those of Hippocrates, and more recently, those of Doctors Shelton, Carton, Schaller, Moeller, Wigmore, Bircher-Benner, Gerson, and Coley, as well as the work of the Hippocrates Institute, etc.

epidemics each January: a mysterious "biological clock" apparently promotes the breeding of microbes during the month of January. As the links between nutrition and the immune system become better known, it seems to be increasingly obvious that the increase of disease in January could simply be due to the nutritional excesses of the Christmas holidays.

In subjects who practice a raw diet, experience has shown that the development of infection does not really depend very much on contamination by microbes, or the time of year, or even the climate, but more on a balanced diet. As soon as an exception is made to the diet, or it is unbalanced, the infection takes over, the subject begins to cough and may even have a temperature during the next few days. This enables verifying experimentally proposition No. 3, which goes as illness" (which, it should be noted, can only be verified follows: "Unsuitable diet experimentally by observing a sufficient number of subjects alternating between a suitable and unsuitable diet). As, in practice, microbes are present everywhere<sup>191</sup>, but do not produce symptoms so long as one is well nourished, one can see that the health equation (proposition No. 2) can in fact be summed up as follows: "Suitable good health and no illness" (proposition No. 3) or else, which amounts to diet the same thing: "Unsuitable diet presence of infectious disease" (proposition No. 4). In the framework of an unsuitable diet, which is the case today, for different reasons, in both Third World countries and developed countries, infectious disease can be limited by hygiene, vaccinations, and antibiotics, but at what price for social security funds? And can one call this real health?

Does AIDS, a particularly fearsome illness, follow the same logic that we have just described? This disease is not always fatal (AIDS "survivors" do exist, although they are very few), and it is possible, in certain cases, to reverse the evolution of the disease by a change in diet and to subsequently live with the virus without the slightest symptom, so long as the food is natural and well-balanced.

I have had the opportunity of conducting one of the first scientific studies in this field, by regularly monitoring, since 1986, about sixty HIV positive patients who changed their diet to a totally natural one for periods varying from 15 days to up to eight years in some cases. The evolution of their general state of health (clinical state) and their medical analysis results were monitored in relation to their diet. The two oldest cases, monitored since 1986, were HIV positive patients: they are still alive and in perfect health. Their accounts, written in 1988 and 1989, were published in one of my previous books on immunity<sup>192</sup>. Both, initially affected seriously by the

<sup>&</sup>lt;sup>191</sup> Total hygiene is impossible, as microbes are present in their thousands in water, in the air, in food, in animals, and in humans. It is impossible to sterilize everything, microbes are everywhere, they form part of the natural equilibrium between the various living species. If we want to live a long time in good health, we therefore have no alternative but to eat better, so as to maintain our immune system in good working order.

<sup>&</sup>lt;sup>192</sup> Renforcez votre immunité, first edition by Editions Vivez Soleil, Geneva.

illness, have resumed a normal life thanks to their change in diet. They are working again, their medical analysis results have improved, and the latest news is that they are in good health. A detailed study of the results for all the subjects who participated in the survey shows a statistically significant improvement in their health 193: on average the health of 70.4 % improved, 18.5 % stabilized, and 11.1 % continued to deteriorate or the subjects died. In all, 14.8 % of the cases, that is to say all those who followed a natural diet for at least two years, were completely cured (we define cure as the disappearance of all the symptoms of the disease, the subjects remaining HIV positive) and were able to resume a normal life.

The results of this statistical study on AIDS, obtained by a change in diet, should, if all goes well, soon be confirmed: several foreign laboratories and universities (particularly in Germany and the United States) are in the process of setting up research agreements in order to reproduce and check the results of this decisive experiment by feeding patients a natural primate diet.

More than 50 % of the green monkeys in the tropical forests are protected from the monkey AIDS virus<sup>194</sup> and live in perfect health, with no sign of the illness, eating the food they find in the wild. On the other hand, the virus is fatal for monkeys fed in synthetic granulates in captivity. This can be explained either by the altered character of the captive monkeys' food, or by the stress and conditions of life in captivity. A final observation may however help us decide which of the two assumptions is the right one: caged chimpanzees fed raw foods, and infected by the AIDS virus, do not show the slightest symptom. It is therefore food that logically explains the appearance of infection symptoms in both man and apes. There is also an illness similar to human AIDS that occurs in domestic cats fed industrial products, "feline AIDS". Cases of this illness have never been observed in wild felines.

Nutrition is an essential factor in reinforcing natural immunity and helping the organism to deal with the omnipresent aggressions of our environment. When the life of the patient is not in danger, improving his way of life and his diet is always preferable to taking medicine and antibiotics, which should, however, be used in the most urgent cases, when the doctor judges necessary<sup>195</sup>.

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 $<sup>^{193}</sup>$  B. Comby, Study of the Effect of the Diet Factor on the Evolution of Health of HIV Patients, a study published by the IBC Laboratory.

 $<sup>^{194}</sup>$  The human AIDS virus is called HIV for "Human immune-deficiency virus." The monkey AIDS virus is another virus, that causes an illness similar to human AIDS in monkeys. This virus is called SIV for "Simian immune-deficiency virus."

<sup>&</sup>lt;sup>195</sup> Infectious diseases sometimes evolve rapidly and are fatal, and one must take them very seriously when they occur in a weakened organism. A healthier diet can help prevent or treat infections and infectious disease better, but above all it plays a role in prevention: when an infection has developed, it is sometimes too late to hope to control it by

# A diet that weakens humanity (by Professor Henri Joyeux<sup>196</sup>)

#### You eat too much:

- Ham, bacon, sausage, fat,
- Cooked fat, fried food,
- Animal protein,
- Fatty cheese.

## You don't eat enough:

- Vegetables,
- Raw vegetables,
- Fruit,
- Almonds, walnuts, sprouts.

## You cook too much, with too much fat, and you eat too quickly:

- Eat more raw foods,
- Only cook at low temperature,
- Discard your frying pan, barbecue, and pressure cooker.

#### You drink too much:

- Coffee,
- Strong alcohol (whiskey, gin, cognac, etc.)
- Aperitifs.

## You don't drink enough:

- Water (between meals).

# Rheumatism and raw food therapy

"Food governs life. A number of things ascribed to heredity should be attributed to a deficient diet."

Kataso, Japanese writer.

Numerous researchers and doctors mention the beneficial effect of diet on the evolution of inflammatory rheumatism<sup>197</sup>. We can quote Dr. Seignalet on the

means of diet. A weakened immune system cannot be reconstructed in just a few hours. One must always, when the state of the patient requires it, use antibiotics and other treatments according to the doctor's recommendations. A frugal diet, based on natural foods, particularly fruit rich in vitamin C (citrus fruits: oranges, grapefruit, tangerines, etc.) will, however, still be useful, as a complement to medical treatment, to help the patient make a rapid recovery.

 $<sup>^{196}</sup>$  H. Joyeux, Change Your Diet, Editions OEIL, new revised edition, 1992.

<sup>197</sup> H. Rouxin, "Essay of Diet Change for Rheumatoid Arthritis," Ph.D. thesis at the Faculty of Medicine of Montpellier, France, June 1989; J. Seignalet, "Associations between HLA and Rheumatoid Arthritis, A Theory on the Pathogenesis of Rheumatoid Arthritis," Revue "R", 1989; R.S. Panush, R.L. Carter, P. Ka, B. Kawsari, S. Longley, and S. Finnies, Diet Therapy for Rheumatoid Arthritis, Arthritis Rheumatology, Vol. 26, pp. 462-471; D.C. Hare, A Therapeutic Trial of a Raw Vegetable Diet in Chronic Rheumatoid Conditions, Proceedings of the Royal Society of Medicine, Vol. XXX, I, October 13, 1936.

subject: "Dr. Kjeldsen-Kragh and his collaborators describe a favorable effect of fasting and a vegetarian diet on patients with rheumatoid polyarthritis. In our laboratory we have obtained positive results with a diet rich in raw foods and excluding cereals and dairy products. This diet is based on the hypothesis that the digestive enzymes are not adapted to modern nutrition. This point of view is supported by the fact that rheumatoid arthritis did not exist in prehistory and by the frequency of intestinal complications in this illness. The main differences between nutrition in prehistory and nutrition today is the ingestion of cereals and animal milk and the prolonged cooking of foods. We recommend that these elements be avoided. The data collected by Hicklin<sup>198</sup>, Darlington<sup>199</sup>, Beri<sup>200</sup> and their collaborators confirm these results: about 75 % of the patients who adopted a diet excluding the most dangerous foodstuffs improved. Very often, the harmful substances were milk and cereals. Out of the 56 patients suffering from rheumatoid arthritis, followed up by Dr. Seignalet, and who changed their diet for at least one year, 46 significantly improved (that is to say 82.1 %) and 24 were completely cured.

I was able, for my part, to observe about fifty patients with rheumatism and articular pain (myself included), who have practically all improved and, in certain cases (including mine) have been completely cured by nutrition. It is obvious that serious and deforming rheumatism cannot be entirely resorbed by just a change in diet, but a better adapted diet enables calming inflammatory pain in a great many cases, and often checking the degradation of the joints. The simple elimination of pain is already enormous, as rheumatic pains cannot always be calmed by the antiinflammatory medicine usually prescribed in these cases. I know something about that, having spent whole nights turning in my bed because of the pains in my knees, hips, and shoulders. This was the rheumatism I suffered from since the age of 13 that I have already mentioned and which led to my interest in nutrition. My nutritional excesses in childhood and adolescence<sup>201</sup> were certainly the cause of this rheumatism witnessed by the fact that as soon as I changed my diet, the pains totally and definitively disappeared<sup>202</sup>. My case is far from being the only one (see the scientific bibliography), and I strongly recommend that all those who suffer from rheumatism adopt a better diet.

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<sup>&</sup>lt;sup>198</sup> J.A. Hicklin, L.M. McEwen, and J.E. Morang, The Effect of Diet on Rheumatoid Arthritis, Clinical Allergy, Vol. 10, pp. 463-470, 1980.

<sup>&</sup>lt;sup>199</sup> L.G. Darlington, Diet Therapy for Arthritis, Rheum. Dis. Clin. North America, Vol. 17, pp. 273-285, 1991.

<sup>&</sup>lt;sup>200</sup> D. Beri, A.N. Malaviya, R. Shandilya, et al., Effect of Dietary Restrictions on Disease Activity in Rheumatoid Arthritis, Ann. Rheum., Vol. 47, pp. 69-72, 1988.

<sup>&</sup>lt;sup>201</sup> I spent the greater part of my childhood in the States and during that time, I greedily consumed vast quantities of hormone-filled battery chicken, fried foods, chips, sodas, hamburgers, ketchup, hot dogs, candy, etc.

 $<sup>^{202}</sup>$  This is confirmed by the fact that the rheumatic pains immediately returned at every lapse in my diet after my change of nutrition

# Allergies and diet

"The stomach takes in all kinds of food, but some foods are better than others."

The Bible (Ecclesiasticus, 36-18).

Millions of people in developed countries are affected by allergies. Many forms of nutritional allergies have been described and the allergy/nutrition relationship is now medically quite well known. An allergy occurs when there is contact with a foreign substance (allergen). The body, in order to defend itself, triggers off a reaction to the allergen. This phenomenon in itself is useful, but, instead of remaining within bounds, it inordinately amplifies, generating symptoms, such as rashes, inflammation, pruritus, etc. There are allergies to a very great number of substances: grasses (hay fever), dairy products (inability to tolerate milk), wheat gluten, feathers, cat fur, tobacco smoke, certain medicine, etc. With a raw natural diet, many allergic reactions disappear, not always immediately, but generally after a few months<sup>203</sup>. Allergic reactions can continue to occur during the first few months of natural nutrition, while the organism is not sufficiently disintoxicated, after which the allergies disappear definitively, at least in the cases I was able to observe.

# Inflammation, inflammatory pains, and nutrition

"Tell me what you eat, I'll tell you who you are."

Anthelme Brillat-Savarin (famous French cook).

Most pains, particularly rheumatic or cancer pain, but also certain forms of migraine, are of inflammatory origin. Medically, it is known that inflammation is a large mobilization of the white corpuscles in an area of the body. This local reaction can involve different parts of the body, such as the articulations (arthritis), the nose (rhinitis), or any other part of the body, and has three symptoms: redness, pain, and heat. Doctors specialized in these phenomena do not think of toxins of nutritional origin as the possible cause of these disorders and do not exactly know why the white corpuscles mobilize in this manner in a given area of the body. They usually try to interrupt the inflammatory reaction with anti-inflammatory drugs, for fear that it spreads.

Our hypothesis is that the white corpuscles work in an area of the body to cleanse it of abnormal molecules or "toxins" of nutritional origin. According to this mechanism (which we can call NTI for nutritional theory of inflammation),

<sup>203</sup> Some allergic symptoms do not disappear immediately (particularly allergies to cow's milk, wheat, etc.) or can temporarily reappear (in the case of old allergies which, had apparently disappeared). Their presence expresses the efforts of the organism to eliminate the abnormal substances that had accumulated over the years in the tissues.

inflammation is a useful cleansing reaction, a reaction that is generally intended and controlled by the organism. If this theory is right, one can predict that with a better diet, inflammatory reactions should be milder and better controlled, since there are less toxins to eliminate if the diet is right, and therefore fewer inflammatory phenomena. This is what is observed in practice when one starts eating better: a decrease in the intensity of the inflammatory pain, fewer infections and allergies; in particular, migraines, rheumatism, rashes and hay fever disappear after a while. The observation of subjects who start eating better shows that: less inflammation (experimental data). The contrary is also easy to check experimentally (poorer diet aggravation of inflammation). If a subject whose diet has been natural for at least six months inadvertently cuts his finger with a knife, the wound closes and heals immediately with none of the classic reactions of redness and pain. In the presence of toxins to be eliminated (poorer diet than usual or a badly-balanced diet), an inflammatory reaction appears then amplifies, with redness, pain, and heat in a first stage, then possible swelling, suppuration and risk of additional infection. The nutrition inflammation relationship thus appears to be a two way relationship.

There are evidently other factors (psychological, medicinal, etc.) that can affect inflammation, but nutrition is an important factor insofar as: with a better diet, inflammation and inflammatory pains do not exist or are well controlled, according to my observation of several thousand subjects. When a person suffering from very old inflammatory pain adopts a totally natural diet, the pains decrease and sometimes disappear after about three to four weeks. This anti-inflammatory phenomenon of natural nutrition seems, however, to be very sensitive to the presence of toxins. This is why an entirely natural diet (cures of exclusively raw food, taking into account the body's reactions) followed for several consecutive weeks, with good quality foods, is necessary to control inflammatory reactions. Simply a partial improvement in diet is not always sufficient to control inflammation, which is why the use of antiseptics and medical treatment is still to be recommended in most cases.

Colitis is a case of inflammation that is particularly delicate to manage from the nutritional aspect. This is an inflammation of the intestines that produces abdominal pain and/or diarrhoea. Persons with colitis often avoid eating raw foods on the advice of their doctor to avoid uselessly irritating their intestines. It is beneficial and even indispensable to watch and improve one's diet when one suffers from colitis, but not just any way. Experience shows that natural foods of good quality can be assimilated by persons with colitis, provided their menu is not composed haphazardly, but takes into account individual needs in the choice of foods. A person suffering from colitis can thus eat certain fruit and vegetables, but

not just any fruit or vegetables, and the pains linked to colitis decrease in most cases in a few days (three to four days). One must therefore be very careful: a change of diet in the case of colitis is indispensable but tricky, a little like trying to repair an automobile with faulty brakes while one is still driving it. Learning to eat better and trying to progressively regain a correct nutritional balance while remaining under medical care seems to be the most sensible solution in this case.

# Serious illnesses and raw food therapy

"Genetic illnesses can only be aggravated by the inherent deficiencies of our modern diet. They can be effectively treated through nutrition, contrary to what is generally believed."

Dr. Catherine Kousmine.

Genetic illnesses (haemophilia, for example), auto-immune illnesses (rheumatoid arthritis and myopathia) and degenerative diseases (Parkinson's disease and Alzheimer's disease, for example) are very serious illnesses, for which there is no known treatment. Genetic predisposition plays a role for certain of these illnesses which occur only (in the case of myopathia or haemophilia) or preferentially (in the case of rheumatoid arthritis, multiple sclerosis, and degenerative diseases) in certain families with specific genes. Medically, the exact causes and mechanisms of these illnesses are not well understood. However, it would appear that nutrition plays a decisive role in the development or evolution of certain auto-immune, genetic, and degenerative illnesses, yet relatively little is known at the present time. I have observed positive results with a better diet in the following cases<sup>204</sup>:

- Muscular dystrophy, which generally affects young boys. It is a terrible illness (an auto-immune illness of genetic origin) for which the medical prognosis is quite hopeless: the muscles progressively melt away until death occurs, often because of the weakening of the heart muscle. I observed three cases of muscular dystrophy patients who adopted a raw isntinctive diet; these were patients with Duchenne myopathy (one of the most serious forms of the illness) who all reacted positively to the change in diet; after a few months, the muscle atrophy process had stopped and the patients had regained weight. They were subsequently able to maintain their normal weight so long as they continued eating better. In both cases, they lost weight when they wanted to resume a processed diet, which strongly suggests the existence of a relationship of cause and effect between the illness and nutrition, the latter playing a major role;

 $<sup>^{204}</sup>$  These results were not obtained by chance: the diet followed by these subjects consisted in an entirely raw and well-balanced diet, composed of high quality foods.

- About fifteen patients suffering from multiple sclerosis, a serious illness whose exact cause and mechanism are still unknown<sup>205</sup>. Their health either stabilized or was slightly improved (after a few months on a better diet), but I have not observed a long-lasting rapid and spectacular remission. On the other hand, their health clearly and rapidly worsened when they resumed a traditional diet. It therefore seems that the presence of unsuitable foodstuffs aggravates the illness. But the contrary is always true: a totally natural diet can prevent possible relapses and stabilize the state of health of patients (when the subject changes his way of life early enough, at the appearance of the first symptoms), but is not enough to induce a cure when the illness has become well-established (paralyzed subjects no longer able to move without assistance).

Doctor Kousmine, in Switzerland, claims to have observed about fifty patients with multiple sclerosis clearly improve when they followed her diet of raw foods and vitamin F rich non-heated oils. She has written a book on the subject, entitled: "Multiple sclerosis can be cured." It is certain that a better diet helps patients suffering from multiple sclerosis to live better and sometimes enables them to improve certain symptoms, but, in my opinion, based on my own observations, it would be exaggerated to say that multiple sclerosis can be easily cured: a healthy diet can, however, help prevent possible relapses or promote a cure when a cure is possible;

- Two patients with haemophilia who noted an improvement in their general health. They were able to significantly decrease the frequency of haemorrhages and that of the transfusion of coagulation substances, without, however, being able to eliminate them altogether. These children were able to play football once more without haemorrhaging, which was impossible before;

- One patient with erythemic lupus, an auto-immune illness that attacks the kidneys and the skin. The kidneys of the patient no longer functioned; the young boy had been under complete dialysis for over a year. After a few months of totally natural nutrition, his general health improved and his kidneys started partially working again: dialysis was still necessary, but less frequently (decrease of the urea content) and he could again urinate a little, which he not been able to do for several years.

The illnesses we have cited are serious illnesses that cannot be cured by conventional means; there is no entirely effective medical treatment for them. There is no point in asserting that one can easily cure them through nutrition.

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 $<sup>^{205}</sup>$  Multiple sclerosis is an illness of the nervous system characterized by the alteration of the myelin sheaths, a substance that protects the axon of the nerve cells. This illness is characterized by disorders of speech, movement, and vision, and generally progresses in successive stages until the patient is bedridden. The most plausible hypothesis is that it is an auto-immune illness.

However, it seems that the nutrition factor plays a role in the prevention and start of these illnesses, which could, according to my observations, be avoided or made milder by a better balanced diet used in a preventive or curative way immediately or shortly after the first symptoms appear. There undoubtedly remains much research to be performed in order to understand the detail of the mechanisms involved, but, meanwhile patients have all to gain by rapidly improving their diet. In the cases cited above, a 100 % natural diet for a period of several months was required for the improvements to be observed.

# Precautions for the therapeutic application of raw food therapy

Therapeutic uses of a raw diet do exist with sometimes amazing results. I would advise you however to train properly and only use good quality organic foods for therapeutic applications. It is obviously indispensable to continue to be treated medically if necessary.

#### Fourth Part

# HOW TO PRACTISE A RAW DIET IN THE MODERN WORLD

"It is up to each of us to investigate little by little new ways of eating, based on the real requirements of the body rather than on social conditioning and the pressures of the food industry."

Dr. Christian Schaller.

## The two stages of a better diet

Each of us must choose for himself how he prefers to eat. One cannot and should not impose on others one's own nutritional concepts. Each individual must freely choose his way of life and diet:

- Stage 0: This is the starting point, before any dietary reform. Many are those who remain in stage 0 all their lives. This is a respectable choice that no one should criticize, as it is perfectly understandable that certain people have other preoccupations. A traditional diet, however, can always be improved, as it nearly always includes bad habits (food combinations, eating in front of the television, disorganized meal times, etc.) and a good proportion of processed, treated, and adulterated foodstuffs. Make up a list of all the food you eat at present to see what you usually eat at each meal, in the morning, at midday, in the evening, and between meals. Then make a list of all the things you would like to improve;
- Stage 1 (recommended for those who have a very time-consuming social and professional life and are seeking to improve their diet without the slightest constraint): This is a partial approach to a natural diet, that preserves a maximum of conviviality and the possibility of making "exceptions" when invited by friends or eating business lunches at the restaurant. This guarantees great flexibility which makes the method adaptable to all family, social, and professional circumstances, while interesting results are obtained thanks to the corrections that are made. There is nothing to prevent one from eating a Stage 1 diet all the year and occasionally going on a Stage II cure during a week end, a few weeks of vacation, or when one is ill (do not forget to consult your doctor if necessary);
- Stage II (recommended for those who do not want to do things by halves, those who want to do better in sports, or who want therapeutic results): This means following a  $100\,\%$  natural diet to optimize one's well-being, performances and health. A natural Stage II diet can be followed regularly (all year round at home

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and/or when traveling), or in cures (for several weeks at home or on vacation or in a specialized center).

The most important thing is to clearly determine your objective (Stage 0, I, or II), the duration of the experiment (a few days, a few weeks, a few months, or longer) and then to stick to it. Write down the results and note down straight away in your diary what dietary improvements you want to make, from what day onwards and for how long.

# The different ways of practising dietary environmentalism

There are several approaches to dietary environmentalism and raw food therapy: The intermediate stage (Stage I) consists in aiming at the objective without being too much of a perfectionist. In this initial period, one can, for example: follow a standard diet that simply includes more raw foods, cook at low temperature, take a cure of natural foods one week per season, a three-week cure of natural foods once a year, have an environmentalist day once a week, one raw meal a day, a breakfast composed of fruit, eat raw food occasionally or all the time, adopt vegetarianism, dissociated nutrition, rules of food combinations, try veganism or fasting, or just selectively exclude certain particularly harmful foods.

Going a little further, one can progressively eat an increasingly natural diet, such as a primitive or "Neopaleolithic" diet (Stage II). Personally, I was born in Stage 0 (classic family way of life) where I remained until I was 20. Wishing to improve my diet (Stage I), I then tested several dietary environmentalist methods for five years. Having noted positive results, I then decided on a 100 % raw and natural diet, which I have followed since 1985 (Stage II with no exceptions). None of these methods is good or bad in itself; everyone must choose freely what suits them best. In addition to physiological needs that vary from one individual to another (Mrs. X may need to eat more or differently from Mr. Y), one's social, family, and occupational environment may induce one to choose one type of diet rather than another. No two human beings are identical. It would therefore be a mistake to want to impose one's way of life on others. It is up to each individual to determine a way of living and eating that is best-suited to himself. Above all, whatever your diet, be happy, open, radiant, eat in good spirits, and be tolerant towards other people's diets. Nothing is sadder than a sanctimonious neighbor who wants to impose his point of view, and stops you eating what you want to eat. Do not try to impose your way of life and your views on anyone either: everyone is free to lead their lives as they want, and eat what they like. Remember that other people usually appreciate what they have on their plates, and avoid preaching at them even if you think it is not good for them. It is up to them to decide, not you, nor me. There is not just one way of living, but an infinity. We are free to choose and guide our own life, but that also implies respecting the freedom of others.

Above all, do not worry if one day you make an exception to your diet, no one is perfect, no one will hold it against you, and, rather than making you feel guilty, each break should be considered as a scientific experiment investigating the benefits and disadvantages of various approaches. You do not have to undertake a dietary change as though you were taking vows! Here are various ways of eating more naturally, among which you can take for yourself those most adapted to your life, giving consideration to your work, family, and environment.

## Low temperature cooking

A great many people, after having become aware of the damaging effects of an adulterated diet, have decided to reduce cooking temperatures so that their food is less altered. This is an excellent decision. The longer and hotter food is cooked, the more its natural form is altered, and, on a molecular scale, the more cooking residues appear, which can pose digestive and metabolic problems. Food cooked at low temperature is already easier to digest. This type of diet is quite easily compatible with professional activities. One should avoid industrial oils (refined at a temperature of over 200° C), grilled foods (several hundred degrees Celsius), cooked oils, oily sauces, and fried foods (approximately 180° C depending on the oils, and prefer raw vegetables, green vegetables, and cereals such as rice, cooked in water rather than grilled (a cooking temperature of no more than 100° C). Your digestion will be better, and your sleep, more natural, of better quality. Reducing cooking temperatures is a step in the right direction.

In practice: avoid meat with sauce, cooking with oil, complicated dishes cooked for a long time; beware of grilled foods, barbecues, oven dishes (except for low temperature dishes), and toast; prefer salads, fruit, nuts, etc. And why not try fish Japanese-style or marinated in lemon juice, steak tartare, or cereal sprouts? Keep away from standard commercial oils as much as possible, and use "cold" first press oils and olive oil (you should know that first press oils are preferable to other oils, as they are extracted at a lower temperature, about 70 to 100° C, but this nevertheless implies thermal denaturation that can modify their chemical composition. There are no oils on the market that are really pressed "cold", that is to say at ambient temperature<sup>206</sup> and even if one could find them, pressing is, in any case, a mechanical denaturation. Whenever possible, therefore, always give priority to

 $<sup>^{206}</sup>$  This is standard food industry marketing, for which  $90^{\circ}$  C or  $100^{\circ}$  C is evidently minimal compared to the usual 200° C. But, unfortunately,  $90^{\circ}$  C is well above natural temperatures, and at this heat, the fatty acids in the oil have already changed.

natural products; for instance, eating fresh sunflower seeds is always better than using sunflower oil). Prefer lemon juice to vinegar in salad seasoning. From time to time, just have fruit for a meal. Avoid sauces, ketchup, mayonnaise. Go easy on bread, milk, and dairy foods, whose consumption is not really natural for man. Taste the difference between organic quality foods and standard foodstuffs. Orient yourself progressively to a diet richer in raw foods, fruit, and vegetables. This is a flexible approach, that allows breaks in your diet, and is perfectly compatible with professional obligations or business lunches. By directing your choices differently, you will soon feel its benefits, you will take pleasure in eating delicious natural foods, and this will make you want to go further, either by totally eliminating adulterated foodstuffs, or by going on a more intensive natural food cure once or twice a year during a few weeks of vacation.

## The selective exclusion of certain particularly harmful foodstuffs

Certain particularly harmful foodstuffs can be voluntarily excluded either for a limited time or definitively, for example, chocolate, coffee, alcohol, sugar. This type of diet will be "WITHOUT" THIS OR THAT: SUGAR-FREE, SALT-FREE, ADDITIVE-FREE, or WITHOUT ALCOHOL OR MEAT (vegetarianism), Foodstuffs whose consumption is not natural and which are the most frequently consumed are: industrial sugar, thermally processed cereals (particularly cooked wheat in all its forms: bread, pasta, flour, cakes), cow's milk, and its by-products (cheese, yoghurt, creams, desserts). These foodstuffs were never consumed by humans before the Neolithic era and can generate various disorders, especially if they are consumed regularly by certain particularly sensitive subjects. To determine to what degree you may be allergic to bread or milk without being aware of it, try totally and selectively excluding either wheat or milk for two months. On the sixtyfirst day, have a good helping of the previously excluded food in the morning for breakfast (for example, a few slices of whole-wheat bread or a big glass of milk). If nothing happens, then the consumption of this food does not apparently do you too much harm. If you felt better during the exclusion period and you don't feel so good after eating the excluded food again, which is often the case, then you should be careful of this Category of food. According to my observations, selective exclusion often has good results on the following disorders (conversely, the symptoms described can occur when these foods are consumed):

- Exclusion of cooked cereals, flour, wheat, and bread (avoid grilled cereals and whole-wheat bread in particular): sleeping problems, stress, insomnia, depression, tics, distress, tiredness, aggressivity, allergies, asthma, cramps, loss of memory, abnormal trembling, nightmares, and, generally speaking, all nervous disorders;

- Selective exclusion of animal milk and its by-products (cheese, yoghurt, creams, butter, deserts): migraine, infection, inflammation, cysts, immune, hormonal, and menstrual problems, acne, cancer, (inflammatory) pains, juvenile diabetes.

To be effective, the elimination of a category of food must be total for a while. It is no use, for example, eliminating milk and replacing it by yoghurt, as the two products are very similar. The suspect category of food must be eliminated *entirely* for the duration of the test. With what can one replace the excluded food? Quite simply, by more raw foods, fruit, vegetables, nuts and fish. To know which of the two, milk or wheat, is better eliminated, is simple: it is probably the one you eat most frequently. Because if the one you have eaten more of is unsuitable, it will have intoxicated you more. For example, if your companion snacks on cakes and bread all day, and you find him or her very nervous, suggest that he or she reduce his or her consumption of bread and cakes and replace them by fruit. If your children are constantly suffering from infections, colds, and earaches, while eating a large quantity of yoghurts and ice-cream, stop them from eating sugar and dairy products for a while, replace them by a variety of raw foods, green salads, nuts, meat, or fish, and you have a good chance of seeing their infections disappear or decrease in a matter of weeks.

The selective exclusion of dairy products often works wonders. There is, of course, no miracle involved: it is simply because as cow's milk is sometimes not well assimilated by humans, it can generate chronic disorders. The elimination of the cause therefore obviously eliminates the symptoms. The purpose of selective exclusions is to temporarily exclude a specific non-natural food. Milk and wheat are the exclusions which produce the best results, but one can also exclude other foodstuffs, such as chocolate, coffee, fried foods, cold meats, cooked meats, certain food additives, sauces, ice-cream, cakes, sugar, salt, spices, etc. The food whose exclusion gives the best results is generally the food most frequently consumed by the subject<sup>207</sup>.

## One week's natural raw food cure per season

So as not to complicate one's life with a diet all year round, one can periodically cleanse one's organism by going on a natural food cure for one week every three months, during vacation for example. For one week, you only eat fresh foods in their natural state: fruit, vegetables, fish, nuts, etc., letting your body orient you towards the foods you need most, whose taste seems to be particularly attractive.

<sup>207</sup> This often coincides with the person's favorite food, which then poses a problem of motivation: the person must be motivated enough to try the total exclusion of his favorite food for a certain time. It is not always easy, but it seems that the best results are obtained at this price.

One week is enough to clean out the digestive tract, purify part of the blood, and face the next few months in better shape, both physically and mentally.

# A three weeks' natural raw food cure per year

In three weeks of natural nutrition, the digestive tract is cleaned out, the intestinal flora has renewed itself, the blood and the circulatory system are partly cleaned. A period of three weeks is generally enough to regain a better digestion, reduce one's cholesterol level, lose a few pounds, and re-establish normal blood pressure. You can go on this three-week cure in a specialized center or at home. A better nutrition for three weeks, during vacation time or in the spring to slim down for summer, always does one the greatest good.

# The weekly raw day

One way of practising a raw diet more regularly without going straight into Stage II consists in eating raw meals one whole day a week or on the weekend. If it is a day in the week, choose a day when no business lunch is scheduled, Friday, for example. It then becomes a habit: Stage II "Nature Friday."

## R-DAY: the weekly raw day - how to do it

Do your shopping the day before, fill baskets with an abundance of fruit, vegetables, and nuts, and the refrigerator with meat and fish (except for vegetarians). You can also prepare sprouts two or three days in advance. In the morning of the chosen day, arrange multicolored plates filled with fresh fruit and vegetables on the table, and abandon cooking, seasoning, and other dietary devices for the day. Thus R-day (the RAW-DAY) will not be dull, but an abundant and colorful feast.

Eating completely naturally (Stage II) for one day a week can be combined with other ways of practising a raw diet: for example, one can eat "raw" (Stage II) every Tuesday, and the rest of the time eat salads and foods cooked at low temperature (Stage I), but without fanaticism, and if need be, making a few breaks in one's diet (Stage I). One can then take advantage of a vacation to cleanse the organism with a three-week Stage II natural food cure.

# The two-speed daily meal

Many businessmen, representatives, and employees would like to eat better, but find it difficult because, for professional reasons, they have to eat lunch in the restaurant. In this case, one can adopt a mixed solution: one eats raw vegetables and fruit at home in the evening (Stage II), which saves time and simplifies household chores, and, on the other hand, one eats freely at midday at the restaurant or in the company restaurant (Stage 0 or I). The improved evening meal then enables one to fill up on vitamins and nutrients and partly compensates lunch time excesses.

#### The fruit breakfast

Breakfast is a meal one has at home and so one can compose it as one likes. Usually, one has to plan to get up early so as to have time to cook breakfast. One can save a quarter of an hour's sleep and gain more vitality for the day by replacing the traditional cup of white coffee and buttered toast (not really natural!) by fruit. The new morning schedule is simplified: all you have to do is go to the kitchen, choose the fruit you want, sit down to eat it or take it with you to eat on the way; it is much easier and much faster<sup>208</sup>! In the framework of an entirely natural diet, breakfast should progressively become as light as possible, as, contrary to popular belief, it is not really indispensable.

#### **Occasional diets**

One does not have eat natural foods in a strict way (Stage I), except for therapeutic reasons or if you have chosen to do so (which we do recommend). You can practise a raw diet intermittently by alternating Stage 0 (no particular restrictions) and Stages I and II. When you feel like it or when you have to, eat a traditional diet. This is one way of discovering the benefits of a natural diet that, by its nature, prevents any frustration and guarantees maximum freedom of action.

#### Raw food diets

To improve their performance in sports, enjoy better health, and discover the extraordinary taste of "natural" foods, some people choose a partial or total raw diet for varying periods of time. People who adopt a raw diet often start by eating better occasionally and then, seeing that they feel better during these periods, turn increasingly towards a raw food diet. Personally, I first ate 90 % raw food while I was vegetarian, and continued to eat cooked cereals and bread for several years (Stage I), then, feeling increasingly better as time went by, I finally opted for an integral raw food diet (Stage II). Since 1986 until now, I have not eaten any cooked or processed foodstuff (no bread, coffee, alcohol, industrial sugar, or cooked dish), not by masochism or deprival, but because I feel better this way and because industrial

 $<sup>^{208}</sup>$  No more pans of milk boiling over, spoons full of jam and cups and greasy knives to wash or put in the dishwasher.

and/or cooked foodstuffs no longer attract me. About one month of a raw food diet is needed before the taste of natural food suddenly becomes markedly better (increase in the degree of enjoyment). An integral raw food diet (Stage II), when it is practised properly, without fanaticism, is much more effective and more satisfactory than a part-time raw food diet (Stage I) for both one's health and well-being, but it is a choice that each can freely envisage making, as he wishes, in the near or long term.

## Vegetarianism

Vegetarianism is the most widespread nutrition movement in the world; it is a dietary approach that can be classed as Stage I (a partial approach to nutrition as it concerns meat only) and is practised by nearly one billion Hindus and several dozen million Europeans and Americans. Vegetarianism consists in simply eliminating meat of any other animal flesh from one's diet. Most vegetarians adopt a more general dietary reform, oriented towards a less processed diet and organic foods, associated with occasional fasts or food combination rules.

Personally, although I was a vegetarian for several years, I now occasionally eat meat, fish, or eggs (raw), and especially insects, which I adore. The position of vegetarians with respect to insects is not clear, some include them while eliminating meat, while others show strong disgust at the idea of touching or eating a grasshopper. There is the same mitigated position with respect to dairy products: some vegetarians think that consuming raw milk and yoghurt, in addition to fruit and vegetables, is beneficial, while others, on the contrary, the Vegans, think that cow's milk should not form part of the human diet and recommend discarding it. To each his idea and choice. My own experience has led me to eliminate dairy products (which, besides, are not available in the wild, except for maternal milk), to keep raw fish and meat (but not too often), and reintroduce insects, a system which seems to me the most logical, natural, and enjoyable in practice.

#### Monomeals

The mixture of several foods in the same meal complicates its digestion. The food mixed in the intestinal tract react together and can thus give rise to a great number of new chemical combinations, such as, for example, Maillard's molecules<sup>209</sup>, long molecular chains resulting from the polymerization of carbohydrates with proteins. By dissociating one's nutrition, that is to say by adopting the "monomeal" technique and eating just one type of food per meal,

 $<sup>^{209}</sup>$  Maillard: the name of the French chemist who discovered the molecules that carry his name, at the beginning of the 20th century. These molecules, whose chemical structure is particularly complex, sometimes toxic, appear during the cooking and/or mixture of foods containing sugar and foods containing proteins.

one can avoid these chemical reactions between different foods and thus simplify one's digestion.

On the other hand, one can eat a greater quantity of this one food, the nutritional balance between the various categories of food, A, B, and C, (see the definition of these categories below), being ensured over several meals and not at each meal. If, for example, one chooses to eat peaches, the meal should be composed of this fruit alone, but one can eat four, five, or six peaches, or even more if one particularly appreciates this fruit. As each meal is simpler and more digestible in a dissociated diet, one can also increase the number of meals per day to a maximum of three or four. These meals should not be too close to each other: snacking is never good in the long term. One should wait for the previous meal to be digested before eating again. The content of the previous meal should have left the stomach, which one can feel quite clearly with a little practice. With a dissociated diet, the nutritional balance is not ensured at each meal, but, on average, over a whole day or even a week. One can, for example, eat a meal of fruit at midday, a good portion of raw meat in the afternoon and one or two salads in the evening. This type of diet is particularly recommended in the form of cures for people suffering from flatulence or gas, or postprandial fatigue. A meal made up of just one food will always be easier to digest than a meal composed of several foods in succession or mixed in salads. It is therefore beneficial to mix one's foods less or to go on a dissociated food diet for a few days or weeks.

However, I do not recommend going on a dissociated food diet for a long time as it can prove frustrating and it is difficult to balance one's diet in the long term when one only eats one food per meal. In addition, some foods can only be correctly assimilated in the presence of other foods (for example, vitamin A in the presence of fatty substances). The proportion to respect between fruit or sweet foods, vegetables, and protein-rich foods or lipids is the same in a dissociated food diet as in other natural diets: about 50 %<sup>210</sup> fruit and carbohydrates (Category A), about 30 % vegetables (Category B), and about 20 % protein- or lipid-rich foods (Category C).

## Food combination rules

Meals composed in accordance with food combination rules are similar to dissociated meals, but are less restrictive, as food combinations are not forbidden, but controlled: some combinations are to be avoided, others, on the contrary, are recommended. The food combinations to be avoided as much as possible are the following<sup>211</sup>: The mixture of two or several protein- or lipid-rich foods (just one

<sup>211</sup> A detailed table of authorized and forbidden food combinations is given a little further on.

<sup>&</sup>lt;sup>210</sup> The percentages are given in mass.

food maximum from this category per meal); and the mixture of protein- or lipid-rich food, such as fish, meat, insects, nuts, sprouts, avocado, coconut, etc., with fruit or sweet foods such as dates or honey. For example, eating meat and fish, eggs and honey, fish and bananas, avocados and oranges, or dates and nuts during the same meal is not recommended. We will discuss these food combination rules again later.

# The American hamburger and the traditional French steak with french fries: nutritional heresies

The traditional steak and french fries and the modern hamburger and ketchup should go out of fashion. These menus are difficult to digest, rich in harmful cooked fats (frying oils and meat fat), and, to cap it all, they associate the proteins of the meat with the starch of the potatoes and bread, a particularly indigestible mixture if ever there was one. The standard steak, and the American hamburger and french fries should be considered as survival rations at a pinch, but certainly not as basic meals. These dishes, symbols of popular cooking, do not deserve their place in our modern gastronomic culture. A better symbol of our gastronomy would be a carrot or a bunch of grapes. The whole world gets drunk on French wine and champagne and consumes American hotdogs and hamburgers. What has been exported is the worst part of modern culture...

To compete with foreign wines and the over-production of wheat, meat, and dairy foods that are cheaper every day and whose quality is increasingly poorer, why couldn't we develop labels of quality for natural products (grapes, apples, figs, etc., of organic quality)?

#### The fruit diet

"Our physical capital (or what's left of it) is the result of our past diet. Our health and our life expectancy are the consequence of what we eat. The stamina, efficiency, energy, even the will to succeed and conquer of our managers depend closely on their diet."

Michel Montignac<sup>212</sup>.

Fruit is one of the basic foods of man, who is in great part a fruit eater. However, foods other than fruit have a role to play in our nutritional balance. An integral fruit diet consists in eating nothing but fruit. This practice is beneficial in the form of short cures of one week maximum. But be careful, this type of diet is unbalanced and should not be continued for a long time. One can live in perfect health with

<sup>&</sup>lt;sup>212</sup> M. Montignac, Put a Turbo in Your Plate, Edition Artulen, Paris, 1992.

50 % fruit in one's diet, but this does not mean that one will live twice as well by eating twice as much fruit. As in all things, a certain balance is necessary.

Having made this comment, it is true that fruit is of paramount importance in our dietary balance. In Dr. Shelton's words of praise: "Fruit is among the most beautiful and best of foods. Nothing is more delectable than to savor a lovely mouth-watering apple, a succulent ripe banana, a carefully selected creamy tender avocado, or refreshing, sweet, and salutary grapes. Peaches, too, when perfectly ripe, are a real gustative pleasure. In short, fruit is a real enchantment for the palate, a treasure of nutritional enjoyment, a true delight, in fact. By the rich components of its rare savors, delicious aromas, and attractive colors, fruit continuously invites us to partake of the pleasure of eating."

Some fruit, such as passion fruit, pineapple, apples and cherries, have existed in the wild for millions of years, with no help from man, whereas other sorts have been produced by man (artificial selection) and are therefore not of natural origin. All fruit, however, is delicious and edible. In practice, eating selected or grafted fruit does not seem to pose any particular problem. In any case, grafting and genetic selection techniques have less harmful effects on the consumer's health than cooking (thermal denaturation), or the use of chemical fertilizers or post-harvest treatments. Experience has shown that it is much better to eat selected fruit of organic quality in their natural form than fruit from old stock that is cooked.

#### How to eat fruit

Generally speaking, fruit does not harmonize with any other food, with other carbohydrates (other fruit, dates, honey, cereals), or with proteins or lipids, but a large quantity can be eaten in one meal. The biggest mistake that one can make is to eat fruit at the end of a meal. The correct way of eating fruit is make a meal composed only of fruit. If one wants to eat fruit with other foods at the same meal, the fruit should be eaten first, at the beginning of the meal. This observation is not gratuitous, but is based on the fundamental principles of digestion. Fruit does not stay long in the stomach, but is rapidly digested due to the effect of the enzymes in the saliva and in the intestines, whereas lipids and proteins remain for an hour or two in an acid medium so as to be correctly digested. When one eats fruit and protein at the same meal, especially if the fruit is eaten at the end of the meal, the fruit remains blocked in the stomach with the proteins, which leads to fermentation and the formation of Maillard's molecules, hence a difficult digestion, gas, flatulence, etc. It is better to eat fruit before the meal rather than after, but ideally, one should make a meal exclusively composed of fruit (at midday, for example: only fruit, with a large selection and in quantity).

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# Veganism

If one adds a selection of vegetables, nuts, and sprouts to a fruit diet in approximate proportions of 50 % fruit, 30 % vegetables, and 20 % nuts and sprouts, the result is a diet that can be qualified as vegan, and that can be continued much longer than a strict fruit diet, for several months, for example, with the aim of purifying the organism. This diet is, however, reserved for adults in the form of cures, as children need a greater variety in protein sources, whenever possible<sup>213</sup>. Be sure that the nuts and sprouts are of organic quality and not heated (gather them yourself, go directly to the producers, or buy them from a distributor who guarantees that they are not thermally denatured, as most of the nuts and seeds on the market are heat-dried at about 90° C). The vegan diet is an extraordinarily regenerating diet if it is followed for a limited period. I do not recommend it in the long term, unless it is supplemented occasionally by insects or animal proteins. A certain amount of meat, fish, insects, or eggs is advisable, at least occasionally, especially for the growth of children and the remission of illness.

#### **Instinctive nutrition**

Instinctive nutrition adds the notion of instinct to the raw food diet. An instinctive diet is raw. But not all raw diets are instinctive. Instead of choosing foods, as previously was the case, according to an idea, a pre-established menu, dietary rules, or habit, one questions one's body, through the senses of smell and taste, taking into account the reactions of the body to determine the food one is going to eat. When one knows how to listen to his own senses in the proper way, the body provides precious indications about our dietary needs. Natural food, that is pleasing to the taste and smell, is food that will meet a metabolic need, and will be better digested than neutral or bad-smelling food, or acid, tart, or floury-tasting food.

The quantity of food that one eats is no longer determined by habit or dietary reason, but by the reactions of the body during its ingestion: a feeling of repleteness or less flavor, which means the body has had enough of that particular food. These reactions, that can be called "nutritional instinct", as they are automatic, apparently innate reactions, are the remains of our human instinct that functions better when the available food is raw, in its natural form. This approach enables a better adaptation of the food one eats to the real needs of the body. In addition, the use of this instinct, by definition, provides a maximum of pleasure, as one eats what and only what one finds pleasing. One should always take into account one's reactions

<sup>&</sup>lt;sup>213</sup> Unfortunately, this is not always possible, for example, in third-world countries.

of taste or smell with natural, non-processed food. Be careful, however: sensory reactions are unreliable, non-existent or even deceptive, if poor quality, mixed, seasoned, chemically grown foods, or foodstuffs processed by heat or frozen are consumed. Instinctive nutrition therefore implies that one eats one type of food at a time only (no mixing or seasoning), one after the other, and that the food be eaten raw, as in nature, preferably of organic quality, and not thermally denatured (uncooked).

# The primitive or "Palaeolithic" diet

The term "primitive diet" was introduced for the first time by Dr. Weston Price in the forties. According to him, the aim was, as far as possible, to follow the diet of the primitive hunter-gatherers as they enjoyed much better health than us. Dr. Price recommended eating raw food, or, even better, wild food (because of the importance of food quality), and disregarding dairy foods. On the whole, this diet is a form of a total raw food diet. In order to be perfectly "Neopaleolithic", however, Dr. Price's diet should have questioned food mixtures and seasoning; it also lacks the notion of dietary instinct for the choice of food and insects as a possible source of protein. In the framework of such a "primitive" diet, one can eat raw meat and raw fish, but nutrients are generally supplied mainly by plants: fruit, vegetables, nuts, and sprouts.

"Primitive" or "paleolithic" nutrition is both a diet of the past, as our ancestors ate this way in the wild, and the diet of the future, as it is perfectly adapted to our genetic structure. In order to be balanced, this diet should comprise, as we have already pointed out, about 50 % Category A food<sup>215</sup>, 30 % of Category B food, and 20 % Category C food; These various types of food should be eaten one after the other, and chosen according to their smell and taste. Each meal consists in choosing and eating one type of food, and possibly a second or third, according to one's appetite. This manner of eating can be advantageously complemented by the rules of food combinations described below. In the wild, our ancestors could not eat many foods at the same meal because of the dispersion and relative scarcity of nutritional resources: not all combinations were possible. Since man began to alter his food, he has also tended to mix them, whereas primitive man, before the mastery of fire, only ate one food at a time. They did not choose to do so, but they were perhaps right. The process of civilization and the artificial abundance of nutritional resources has led man to mix a great number of foods during the same meal and to use a great number of different ingredients in the same recipe.

215	See	the	classi	fication	n of	food	below.
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# Summer: A privileged time to start a raw diet

"To command nature, one must obey her."

Sir Francis Bacon.

One can eat better at any time of the year. Summer, however, lends itself particularly well to the discovery of dietary environmentalism, as a greater variety of fruit, vegetables, and raw foods is available at this time of the year. In addition, the summer vacation is the perfect time to discover a more natural diet and way of life. Although summer is a privileged season, nothing prevents one from starting at any other time, depending on other criteria. If your aim is to lose weight, the best time is probably now (why wait?) or in spring: you can then get your ideal figure back before the vacation. If your aim is comfort, or if you have a therapeutic objective, you might as well begin straightaway, whatever the season, to save time. If your aim is simply to follow a "nature cure" to disintoxicate your organism, then the best perhaps is to make your Stage II cure coincide with your summer vacation, unless you prefer to do it immediately, during your working period. Whatever your motivation, choose the most suitable moment; there is no risk in improving your diet, it will always do you good!

# The importance of a large choice of foods

If you are lucky enough to live in a region with a temperate climate that has not been too devastated by intensive industrial agriculture, you probably have at hand a large choice of environmental food: fruit in abundance, such as plums, apricots, cherries, vegetables such as salads, carrots, root vegetables, etc., seafood, fish, shellfish, etc., and you can therefore eat "raw", contenting yourself with local produce. If, by ill luck, you live in a country or region that is less well provided for, such as Canada, Finland, or the Sahara, you can use delicious local products as your nutritional basis (for example, lobster, game, fish, and carrots in Finland, or dates and beetles in the Sahara desert). However, the inhabitants of these regions will have great difficulty in balancing their diet properly in the long term if they only use local products. As in most developed countries (northern Europe, Japan, the United States), one can content oneself with local produce in summer, but imported foods are useful in winter, when local produce is scarce and a six-month fast would be a bit long!

Wherever your place of residence, balancing your diet should pose no problem, provided that there are several sorts of fruit (Category A), vegetables (Category B), and proteins (Category C) available each day.

Generally speaking, it is advisable to always have the greatest variety possible of fruit, vegetables, and nitrogenous foods (animal proteins, seeds, nuts, etc.) on one's table, so as to balance one's diet and select the food most suited to the body's needs at each meal. In the two following cases, be sure that you have as large a choice as possible of food:

- If you are seeking therapeutic results, as the organism sometimes needs specific foods to cure itself; or
- If you are a beginner with respect to healthy nutrition, so as to discover a sufficient degree of pleasure in your very first meals (visual and gustative pleasure).

## The marvels of nature: an infinity of delicious flavors

So as to simplify the continuation of the exposé and formulate simple rules for the composition of environmentalist meals and the way in which one should balance one's diet, we have classified food into three large food categories: *Fruit and sugar-rich foods* (*CATEGORY A*) that comprise ordinary fruit (apples, bananas, etc.) and concentrated sugars (honey, dates, dried fruit), *vegetables* (*CATEGORY B*), among which we can distinguish root vegetables (carrots, radishes, turnips, etc.), leaf vegetables (green salads, spinach, parsley, etc.), and aerial vegetables (cucumber, tomatoes, etc.), and finally, *lipid- or protein-rich foods* (*CATEGORY C*), of vegetable origin (nuts, sprouts, avocados, etc.), or animal origin (meat, fish, shellfish, other seafood, eggs, insects).

Below, for each food category, there is a non-exhaustive list of about 150 products that are in the human nutrition range. We have only cited the main products, those that can usually be bought in markets. There are hundreds of others: reindeer meat, wild plants, rare seafood, etc., but the list would be too long and is therefore restricted to the main foods that are commercialized. There exist several, sometimes dozens or hundreds of varieties of each product, with different characteristics and tastes. For example, there are ordinary yellow bananas (the most consumed in developed countries), but also plantain bananas (generally eaten on the spot, they represent over 70 % of the world's banana production), fig-bananas (smaller), apple-bananas, pink bananas, etc. There are also a great number of varieties of apple: golden delicious, pippins, starking, russets, crab apples, etc. If there were only just four distinct varieties per product, the list of foods edible by man, although far from exhaustive, comprises a total of about 600 foods. How many of these foods have you already tasted? Probably less than half. You therefore probably have some happy gastronomic surprises in store, as you discover little by little the marvellous tastes of nature, according to the seasons and countries.

In addition, the taste of each product varies according to its farm of origin (the tomatoes grown in one field do not have the same taste as those grown in

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another) and its degree of ripeness (very green, just ripe, ripe very ripe or overripe). There is no danger of gustative monotony with a natural diet. If we assume that each of the 600 products listed below have only  $4 \times 4 = 16$  different tastes according to their degree of ripeness and origin, this means, even for the limited list of natural foods we cite here, a total of some  $10\,000$  different tastes, which is still far from the real number. Try to count the number of different tastes and dishes you know of with your present standard diet and you will understand that a natural diet is far from being monotonous with respect to the pleasures of the palate. By way of example, here is a list of foods that can be eaten by man:

### List of fruit and sugar-rich foods (Category A)

*Fruit*: Apples, apricots, blackcurrants, cherries, figs, gooseberries, grapefruit, grapes, jujube, kakis, kiwis, lemons, medlars, melons, nectarines, oranges, peaches, pears, plums, pomegranates, quince, raspberries, strawberries, tangerines, watermelon, etc.

*Exotic fruit*: Bananas, carambola, cherimoya, cinnamon apples, durian<sup>216</sup>, guava, jackfruit, litchis, mangoes, mangosteen, papaya, passion fruit, pineapple, rambutan, salakfruit, tamarillo, etc.

Concentrated sugars: Honey, dates. They are rich in carbohydrate energy, vitamins, and minerals. Honey has always been considered a particularly attractive food. The Spanish writer Federico Garcia Lorca wrote: "Honey is the canticle of love, the substance of the infinite, the soul and plaintive blood of flowers."

*Dried fruit* (obtained by drying at room-temperature<40°C): Apricots, bananas, figs, raisins, etc.

### **List of vegetables (Category B)**

*Root vegetables*: Beetroot, celeriac, garlic, kohlrabi, onions, parsnip, potato, radishes, rutabaga, shallots, sweet potato, turnips, etc.

*Leaf vegetables*: Basilic, batavia (salad), broccoli, celery, chicory, dandelion, endive, green cabbage, lamb's lettuce, leeks, lettuce, parsley, red cabbage, romaine lettuce, spinach, etc.

Aerial vegetables: Beans, cauliflower, cucumber, fennel, green beans, green peppers, mushrooms, peas, red peppers, tomatoes, zucchini, etc.

Aromatic plants: Chervil, chives, mint, savory, thyme, etc.

<sup>&</sup>lt;sup>216</sup> The durian, although little known in the west, is common in south-east Asia. It is called the king of fruit in Thailand. It is a tropical fruit weighing one to ten kilograms, whose skin contains a beige or yellow creamy flesh and whose indescribable taste bowls you over with pleasure. The durian is the author's favorite fruit and that of ... the orang-utans which live in the Indonesian forest!

# List of protein and lipid-rich foods (Category C)

*Vegetable proteins - nuts*: Almonds, Brazil nuts, coconuts, hazelnuts, macadamia nuts, pecan nuts, pistachio nuts, walnuts, etc.

*Vegetable protein - seeds*: Barley, buckwheat, chick peas, corn, flax, lentils, mustard, oats, rice, rye, sesame, soybean, sunflower, wheat<sup>217</sup>, etc. These seeds should be eaten as sprouts, except for corn, to be eaten when very tender, and sesame, buckwheat, and sunflower seeds which can simply be shelled.

*Vegetable protein and fats - other*: Avocado, carob, chestnuts, olives, peanuts, pinenuts, tamarind, etc.

Animal proteins - poultry: Chicken, duck, guinea-fowl, goose, partridge, pheasant, pigeon, quail, turkey, etc.

Animal protein - game and other meat: boar, hare, frogs, snails, venison, etc.

Animal protein - eggs: All eggs: chicken, duck, goose, guinea-fowl, quail, etc.

*Animal protein - offal*: All the trimmings from the meat-animals and poultry cited above: brains, heart, kidneys, liver, tongue.

*Animal protein - insects*: Certain orthoptera (crickets, grasshoppers, etc.), certain hymenoptera (ants, termites, etc.), certain butterflies which have three stages of development (caterpillar, chrysalis, and adult), certain larvae (maybugs, etc.), certain coleoptera (desert scarab, etc.<sup>218</sup>).

Animal protein - fish: Anchovy, angler fish, cod, haddock, herring, mackerel, mullet, rayfish, salmon, sardine, sea-bream, shark, sole, sturgeon, swordfish, trout, tuna, whiting, etc.

*Animal protein - shellfish*: clams, cockles, mussels, oysters, razor-shells, scallops, Venus clams, whelk, etc.

Other marine protein: crab, crayfish, cuttlefish, fish roe, lobster, sea fig, seaurchins, seaweed, shrimp, squid, etc.

Dairy foods are not included in this list because, as we shall see below, from the anthropological point of view, the consumption of cow's milk and its by-products (cheese, yoghurt, butter, cream, cakes, desserts, etc.) is not natural for the human species. Therefore, apart breastmilk for the children, absolutely necessary, of course,

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<sup>&</sup>lt;sup>217</sup> A cereal obtained by artificial selection for the first time by the Egyptians, wheat is, with rice, one of the main species grown in the world. The very widespread use of wheat in human nutrition (bread and wheat flour are the staple foods of many peoples) does not meet unanimous approval: a growing number of scientists now attribute it a role in the appearance of certain allergies, inflammatory and nervous disorders (particularly schizophrenia) and immune troubles (auto-immune illnesses and rheumatoid arthritis). Wheat as we know it today, obtained through successive genetic selections, did not exist in the wild in the past. Is it a godsend, allowing humanity to be fed, or, as Professor Abrams suggests, a nutritional error at the origin of the weakening of our health.

<sup>&</sup>lt;sup>218</sup> Be careful, however, of non-edible insects: Adult bees, adult wasps, bugs, cockroaches, and ladybirds, for example. The fact that these insects represent a huge nutritional potential does not mean that one can eat any insect one encounters. Most species of insects are edible, however.

dairy products from another species' milk and for adults are strictly excluded from a natural diet.

## Is the calcium in dairy foods indispensable?

Man is the only animal that drinks the milk of another animal species. This habit began with the domestication of the first goats, about 10 000 years ago, during the Neolithic era.

Babies should, of course, be fed with maternal milk, which is necessary for their development, but, after weaning, we really no longer need milk. Cow's milk is not an indispensable food. Its consumption can even have deplorable effects for a certain number of subjects. Calcium, on the other hand, can be found in practically all foods, whether vegetable (almonds, hazelnuts, salads, green vegetables, fruit, etc.), or animal (meat, fish, etc.), as it is essential to the functioning of all living cells. The cow obtains calcium in the fodder which is its basic food. From the moment you have a sufficient variety of food, you will not run much risk of suffering from a calcium deficiency. A well-balanced natural diet<sup>219</sup> such as we recommend, supplies a perfect ratio of calcium of 1 gram per day with no dairy products, which represents exactly the supply recommended by nutritionists. There is therefore no risk of calcium deficiency with this diet.

### Calcium content of various foods in decreasing order (in mg/100 g):

Sesame seeds: 1300			
Cabbage leaves: 429	Beetroot leaves: 150	Dried apricots: 80	
Sardines: 380	Chick peas: 149	Green salad: 80	
Shellfish: 30 to 300	Broad beans: 148	Leeks: 60	
Soybean: 280	Egg yolk: 140	Cereals: 50	
Almonds: 254	Beans: 137	Salsify	
Parsley: 200	Cow's milk: 125	Carrots: 39	
Cress: 200	Mackerel: 120	Fresh figs: 38	
Hazelnuts: 200	Herring: 120	Blackberries: 36	
Shrimp: 200	Broccoli: 100	Human milk: 30	
Shellfish: 50 to 200	Green olives: 100	Papaya: 20	
Brazil nuts: 176	Oysters: 95	Fresh apricots: 15	
Dried figs: 170	Spinach: 95	Tomatoes: 11	

 $<sup>^{219}</sup>$  A diet respecting the proportions of 50 %, 30 %, and 20 % for food categories A, B, and C respectively (fruit, vegetables, and protein- or lipid-rich foods).

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Dandelion: 150	Mussels: 90	Meat: 10
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This list clearly shows that numerous foods are richer in calcium than cow's milk, which also contains much more than human milk.

# What are the calcium sources in the framework of a natural diet without dairy foods?

Seafood (fish, shellfish, crustaceans, etc.), nuts (almonds, hazelnuts, etc.), and green vegetables (salads, dandelions, etc.) are the main sources of calcium and perfectly meet daily calcium requirements when consumed in the proportions that we recommend.

Below are two reports by doctors who assert like many others that cow's milk is absolutely not indispensable as is commonly believed. If, after reading these reports, you still hesitate, I would advise you to experiment with the selective exclusion of dairy foods yourself: eliminate them temporarily from your diet for three weeks, then reintroduce them and see how you feel. A conclusive personal experience is always more convincing than a long speech.

# Report by Dr. Christian Pauthe, general practitioner at the Faculty of Medicine at Montpellier, specialized in hygiene, sports medicine, and preventive medicine:

« A characteristic feature of the nutrition of mammals is the consumption of maternal milk by their offspring<sup>220</sup>. We know that the composition of this milk is very different from one species to another and that it is adapted to the specific needs of each of these species. Curiously enough, man is the only mammal to give his young milk from other animal species. He is also the only mammal that continues to drink milk in adulthood<sup>221</sup>. This habit of consuming milk has become so customary that it is now part of our culture and seems inevitable. Cow's milk has been approved by an overwhelming majority and is now one of the pillars of our diet. Yet this was not the case a few thousand years ago. Even today, numerous ethnic groups consume little or no dairy foods. Their health does not seem to pose any problems related to this exclusion.

In the framework of research work on an environmental diet genetically suited to our physiology, it is advisable to question the dogma of cow's milk considered as

<sup>&</sup>lt;sup>220</sup> The word "mammal" comes from the Latin "mamma," meaning teat.

<sup>&</sup>lt;sup>221</sup> This is not logical as in adulthood, his digestive system lacks practically any lactase, an indispensable enzyme for the assimilation of lactose, a milk sugar.

an indispensable food. My experience as a general practitioner has enabled me to verify on site as it were, that cow's milk is not, in reality, suited to the human physiology. One can easily show that many pathological states can be induced by the consumption of dairy foods and inversely, that numerous cases of long-established pathologies can be improved by eliminating diary foods. »

### « Only maternal milk is indispensable to man's offspring. »

« My observations concern pathologies induced by cow's milk and its by-products, in children as well as in adults. It would appear that a number of infants pay a heavy price for this dietary custom. Consumed in its natural form, cow's milk poses numerous problems of allergy and infection. It therefore has to be treated before it can be given to infants, as the composition of human milk is very different from that of cow's milk. Purified, iron-enriched milk, whose chemical composition is corrected so as to better meet the needs of human babies, has fewer disadvantages than whole milk, but does not ideally solve the problem of a baby's nutrition: many disorders may persist. A quantitative balance of the various carbohydrate, protein, and lipid fractions is possible, but there remains a close similitude to bovine milk, which is different from human milk.

Repetitive infectious pathologies, so frequent in children (otitis, angina, bronchitis, rhinitis, throat infections), very often become rarer or even sometimes disappear altogether, when one manages to persuade the children's parents, always worried about doing the right thing, to try avoiding milk completely for a few months. It is quite possible to balance children's nutrition differently without any protein, calcium, or vitamin deficiencies.

Other pathologies can also be much improved by eliminating dairy foods: infants' atopic eczema, certain forms of anaemia due to an iron deficiency, and certain intestinal absorption disorders can be correlated with the consumption of cow's milk proteins. High level medical literature even cites reports of dairy foods being accused in very diversified and sometimes surprising pathologies, for example the development of the allergic terrain, young children's insomnia, juvenile diabetes, certain cases of cot death, and even some cases of young children's malignant lymphoma.

Adults are also concerned by the harmful effects of consuming dairy foods. My experience has enabled me to observe cases of persistent migraine, recurring sinusitis, and other throat and nose infectious pathologies disappear as soon as the consumption of milk was stopped, as in the case of young children. Certain forms of

rheumatism were much improved, even cured by the elimination of dairy foods<sup>222</sup>. Studies on the subject were performed in Montpellier (France), with a high percentage of success, of the order of 80 %. We can also cite the pathologies of the type hypercholesterolemia, with their train of heart diseases, as well as the very common calcic urinary lithiasis. Several publications point out a positive correlation between the consumption of cow's milk and the appearance of Crohn's disease.

It therefore seems that authentic pathologies are induced by dairy foods. Some, very luckily, are rare but unfortunately very serious, such as rheumatoid arthritis and juvenile diabetes<sup>223</sup>. Others are more banal, but terribly frequent, for example, eye, nose and ear infections and certain forms of migraine. It would do a great number of our fellow citizens a lot of good to reduce or stop their consumption of dairy foods. The average state of health of the population would probably improve, as would the management of social security funds.

By proposing a varied, high quality, natural diet, with a wide choice of foods, and eliminating cow's milk and the main dietary artifices to which we are not adapted, the diet proposed by Bruno Comby could well be a solution to the problem of human nutrition, in a way that, in my opinion, is scientifically sound. »

# Report on the inadaptation to milk products by Dr. Nicolas Le Berre<sup>224</sup>:

« First of all, here are two cases encountered among my patients:

The young Julian, three, was regularly taken to consult doctors of all kinds for a hopelessly chronic nasal discharge and recurring otitis. Each day, he drank on average three quarters of a liter of milk, consumed two or three fruit-flavored yoghurts and ate cheese at one or even two meals. The complete elimination of dairy products enabled him to go through the winter for the first time without any respiratory disorder and without taking antibiotics.

Alice, sixty, took tablets regularly to keep her cholesterol level within tolerable limits. She suffered from bad haemorrhoids, persistent constipation, and eczema. The total elimination of dairy foods enabled her cholesterol level to drop from 3.59 to  $1.57 \, \text{g/l}$  in just six months. It also made her constipation disappear, reabsorbed her haemorrhoids and clearly improved her eczema. In addition, a weight loss of four kilograms was a pleasant plus for a coquettish sixty-year-old.

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<sup>&</sup>lt;sup>222</sup> Notably rheumatoid arthritis. See the bibliography: Hélène Rouxin, Essay of Diet Change for Rheumatoid Arthritis, 1989; Panush, Diet Therapy for Rheumatoid Arthritis, and Dr. Jean Seignalet, Theory on the Pathogenesis of Rheumatoid Arthritis, 1989.

<sup>&</sup>lt;sup>223</sup> E. Deviel, Diabetes: Hypothesis of the Responsibility of Cow's Milk, Le Quotidien du Médecin, No. 5012, p. 5, 1992

<sup>&</sup>lt;sup>224</sup> These pages are taken from an article by Dr. Le Berre published in the Nov./Dec. 1990 issue, No. 65, of Les Quatre Saisons du Jardinage. This text is reproduced here by permission of the magazine, whom we would like to thank. Dr. Le Berre is also the author of the book, "Milk, What a Rip-Off" Editions Equilibres Aujourd'hui, 1991.

These are two typical observations, among hundreds of others, that enable seriously posing the question: is milk really the marvellous food so often depicted to us? What if the current white wave (milk and its by-products sell well) were a black tide for our organisms? A simple observation of nature gives us part of the answer: milk, for the first part of a little mammal's life, from its birth to its weaning, is its single, necessary, and sufficient food, suckled directly from teat to mouth. This milk is specific to each species of mammal. Later, no animal drinks milk, as its natural cycle and biological programming forbid it: the maternal source dries up and another diet is established which, despite the total absence of dairy foods, will not lead to a calcium deficiency, whether the animals are herbivores, carnivores, insectivores, or eat plankton. Calcium, sacrosanct calcium, which preoccupies us so much, is thus supplied quite satisfactorily by all types of natural diet. This is not a working hypothesis, even less a philosophical a priori, but simply the result of observing the living world. Look around you: no animal takes calcium supplements and yet all of them have a skeleton, sometimes a very imposing one. Calcium is universally widespread, even in grass, the sole food of the cow.

It is important to be aware that, although all milk is white, it actually differs considerably from one species to another. Bovine milk is three times richer in proteins than human milk and a detailed analysis of these proteins shows that, in addition, they are very different. Generally speaking, the shorter the growth period of the small mammal, the greater the protein content of the milk. Thus, dog milk is even richer than cow's milk, as puppies grow particularly fast. Milk fat contents are more or less the same from one species to the other, but here again, a detailed analysis shows major differences. The quality of lipids has a significant effect on the development of the nervous structures and the cell membranes. There is four times more calcium in cow's milk than in human milk, which is in relation to the specific development of a calf. Finally, milk normally contains multiple defence substances that enable the young mammal to defend itself against microbes. Here again, these defences are different for each species. Everything happens as though each milk were adapted to a biological development project, that is both physical and mental. So why continue giving humans the milk designed for calves?

Finally, one must realize that the cow's milk we have today is generally very different from the milk obtained under natural conditions, that is to say from animals that are not stressed and that peacefully crop grass grown without chemical assistance. In addition, milk is submitted to numerous modifications to preserve and transform it. Just make the following experiment: buy one liter of organic, non-transformed milk and one liter of U.H.T. milk, put a bowl of each next to each other and leave them 72 hours at ambient temperature. Smell them, watch them...

You will be convinced, after this experiment, that these two products have nothing in common except their name.

The problems posed by the consumption of milk are numerous and can be envisaged from four essential points of view. The digestion of milk sugars requires the presence of an enzyme called lactase. This enzyme, present in young children, disappears little by little with age, thus reducing assimilation possibilities. Certain tests enable measuring lactase activity, which can be relayed in part by intestinal microbes if the intestinal flora is of good quality, which is rare today. Milk can be at the origin of allergies. The main milk allergen is cow's milk beta-lactaglobulin, but other milk proteins can be allergenic. All kinds of symptoms have been described: eczema, rhinitis, coughs, vomiting, intestinal pain, headaches, troubled sleep, etc.

Milk lipids are essentially saturated fats, that generate hypercholesterolemia with all its well-known complications, particularly cardiovascular. The Finns hold the record for coronary mortality and have the greatest consumption of non-fermented milk.

In addition, the various transformations undergone by milk (U.H.T. in particular) considerably change the size of the milk fat globules, which allows them to pass directly through the intestinal barrier, all the easier as it is already fragile, to the dismay of the liver, which then has to work much harder.

All the main components of milk therefore pose problems: its carbohydrates with lactase, its proteins with allergies, its lipids with cholesterol and the general clogging up of our organisms. The milk industry is well aware of these problems since they propose increasingly modified milks: vitamin D is added, certain proteins are removed (hypo-allergic milk), bad fats are replaced by lipids of vegetable origin, butter fat is removed, etc. This all goes to prove that the original product is not marvellous! It is certain that technological progress enables very sophisticated and admirable manipulations to be made from the technical point of view, but ... we do not know what our cells think about it. There are so many delicious natural products, why be so attached to such a dubious product as milk?

Finally, for our physiology, the last point to be considered is excess. Milk should never be regarded as a drink, but as a food, a very rich food that is ill-suited to our organisms and even harmful after weaning. This richness is an additional source of harm in our already plethoric diet. Excess in itself is a cause of disorder and illness, and our present consumption of dairy products often aggravates, without our realizing it, the overloading of our organisms.

The consumption of milk is justified, apart from gustative pleasure, by the fear of a calcium deficiency. It is usually recommended to absorb one gram, or even one gram and a half of calcium per day, which represents about one liter of cow's milk or four liters of human milk. In reality, no survey has shown any calcium

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deficiency with a supply of 300 to 400 mg per day: entire populations have lived this way for centuries.

I hope that you are now motivated enough to undertake a cure of dairy product elimination! There is nothing better if one wants a serious and personal opinion on the question. The elimination of milk and all its by-products, whether sweet (yoghurt, fat or non-fat cream cheese, creams, ice-cream, etc.) or savory (cheese in particular), must be total. It should last at least three months. It is obvious that this cure is only of interest if you currently consume several milk products daily. During numerous years of medical practice, I have noted results relative to many disorders or illnesses involving all parts of the organism (mucous discharges, cysts, tumors, allergies, articular pains, etc.). Whatever your illness, if you consume a considerable amount of dairy foods, I advise you to try this cure. After the cure, one can reintroduce certain dairy products little by little. In the case of excess, the disorders will reappear, which thus clearly proves the harmful character of dairy products. One can actually manage to dose one's disorders, in fact! Let us finish on a greedy note that will delight quite a few people: if you do not have the courage to eliminate milk, then dare to double or triple the quantity of dairy products you consume, and you will see your disorders get worse for sure, then get better again when you resume your previous level of consumption. That little trip to the country of ills may incite you to change direction! »

### Mealtimes adapted to each specific case

"We are made of when we eat."

Prof. Reinberg.

One not only should eat well, but at the right time. There are nutritional rhythms<sup>225</sup> as there are rhythms of sleep<sup>226</sup>. A perfect food is only well digested if it is consumed at the right moment, that is to say when the organism needs it. There are no universal meal schedules suited to the whole of humanity: everything depends on the way one eats. Classic diets recommend three meals a day in adulthood, with a substantial breakfast. In reality, the number of meals depends on the type of diet one follows, one's physical activity and one's age. As children have a faster metabolism than adults, they should eat more often during the day. A baby suckles its mother at the beginning of its life about every three hours, then the meals progressively become less frequent. A child of ten will still need to eat in the

<sup>&</sup>lt;sup>225</sup> P.R. Cannon, C.H. Steffee, L.J. Frazier, Rowly and R.C. Stepto, The Influence of Time of Ingestion of Essential Amino Acids upon Utilization in Tissue Synthesis, Federation Proceedings, Vol. 6, p. 390, 1947.

<sup>&</sup>lt;sup>226</sup> See on the subject: Siesta, by Bruno Comby, Editions OEIL/Guibert; German edition: Mosaik Verlag; Portuguese edition: Livros do Brasil.

morning, at midday and in the evening, with, in addition, a snack in the afternoon, and perhaps a mid-morning snack too. From about the age of 15 onwards, three small meals or two large meals a day are sufficient. The main meals of the day are at midday and in the evening. The size of breakfast depends on the region<sup>227</sup>. Usually, breakfast is thought to be indispensable, it is even said to be the most important meal of the day, as, if one skips breakfast, the feeling of hunger can turn into dizziness, nausea, tiredness, and even stomach cramps. After a few days of a better diet, this morning "hunger" disappears. A real desire for food, expressed by the fact that one's mouth waters at the smell and taste of food, only comes towards the end of the morning, around about 11 a.m.

In the framework of a more natural diet, two meals a day are amply sufficient for an adult: one at midday and one in the evening. There are other possibilities: some people prefer to continue having breakfast or a mid-morning snack, others only have one large meal a day, and yet others prefer, on the contrary, to have a series of small meals composed of just one type of food. After a while, most raw food eaters adopt a rhythm of two meals a day, at midday and in the evening, with possibly a snack during the day. They find that they really do not need breakfast. In the framework of a natural diet practised intermittently, one can simply have a lighter breakfast, replacing the coffee, butter, sugar, and bread with fruit.

It is not good to eat too late in the evening either, otherwise one's digestion and sleep will be troubled. One should therefore mainly eat in the midday to 8 p.m. time frame. One should also wait until one meal has been digested before beginning the next meal. However one tackles the problem, there is not much possibility of eating two, or a maximum of three meals during the day: a breakfast of fruit for children (optional for adults), a meal around midday, a meal around 6 or 7 p.m., and possibly a snack around 4 p.m., especially for children.

### The breakfast myth

Many people feel unwell and faint during the morning if they have not eaten anything in the morning. This is what created the "breakfast myth". According to this myth, breakfast is supposedly the most important meal of the day. Actually, breakfast is not as indispensable as is commonly thought. One person in three eats nothing or practically nothing in the morning and feels perfectly well. When one follows a more natural diet based on raw foods that excludes the most harmful

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<sup>&</sup>lt;sup>227</sup> In Europe, breakfast is often eaten in a hurry and is just a cup of coffee with sugar and milk, and some bread and butter. In the United States, and more generally in Anglo-Saxon countries, breakfast is generally more abundant, comprises more fatty foods (bacon and eggs, cereals, milk, fruit, etc.), and is considered a real meal, while for certain primitive societies that have remained closer to nature, breakfast is non-existent: it is customary to eat only towards the end of the morning.

mixtures, one feels even better when one does not have breakfast. The morning feelings of emptiness and faintness do not occur when one's whole diet is natural and well-balanced. The faintness felt in the morning is due to the hypoglycemia<sup>228</sup> observed in subjects whose glucose metabolism is upset (prediabetic) because of a diet that is too rich and/or unsuitable. This does not happen in the framework of a natural diet: on the contrary, one feels better when one does not eat breakfast in the morning. Hypoglycemia, which is very frequent in our society (most people feel its effects at some time during the morning, is actually just the result and reflection of our bad nutritional habits.

In the wild, most primates other than man only start to eat towards the end of the morning, around 11 a.m. If our genetics and nutritional needs are still similar to those of the primates, therefore, the ideal natural breakfast consists in drinking half a liter of water, and above all, as far as possible, in not eating (except for children). For those following a Stage 1 diet and who fear hypoglycemia and have physical work to do in the morning, breakfast can be replaced with a light meal of fruit or possibly herb tea (be careful of sugar; prefer honey) for a transition period (until they become accustomed to natural nutritional rhythms again). In a Stage I diet, one can also take some fruit to one's place of work, in case of sudden tiredness. The author has not eaten breakfast since 1985 and is perfectly well without. Socrates, with all his wisdom, said "those who eat more than twice a day are barbarians". It seems that the indispensable necessity of breakfast is just a myth.

The best breakfast: a glass of water and perhaps some fruit during the morning.

## Two approaches to breakfast

CLASSIC DIET (STAGE 0) METABOLIC DYSFUNCTION MORNING HYPOGLYCEMIA MORNING FAINTNESS IF NO BREAKFAST MYTH OF IMPORTANCE OF BREAKFAST (this point of view is dominant when the greater part of the population eats poorly and therefore experiences metabolic dysfunction, which is currently the case).

NATURAL RAW NUTRITION BETTER METABOLIC FUNCTION FEELING OF WELL-BEING IN THE MORNING EVEN WITHOUT BREAKFAST, NO MORNING HUNGER, NO MORNING FAINTNESS EVEN IN THE CASE OF PHYSICAL EFFORT ON AN EMPTY STOMACH BREAKFAST UNNECESSARY.

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 $<sup>^{228}</sup>$  A drop in the glucose level in the blood, which often occurs during the morning.

IN FACT, IN THE CONTEXT OF A NATURAL DIET, BREAKFAST GENERATES A FEELING OF TIREDNESS, INSTEAD OF GREATER ENERGY (to feel really fit in the morning it is better to have an empty stomach: this point of view prevails in populations whose diet is more natural for example groups of raw food eaters, such as Australian aborigines and certain hygienists or vegetarians).

In the framework of a natural diet, we therefore propose the following nutritional rhythm for adults: one meal around midday and another around 6 p.m., breakfast being optional and as light as possible. These rhythms can be interpreted with a certain flexibility: one can choose the schedule that is most suitable according to one's work, obligations, and appetite. It is nevertheless preferable, as far as possible, to eat, sleep, and work at regular times, as the digestion and the alternate rhythms of sleep and wakefulness are governed by biological cycles whose periodicity is 24 hours, and which automatically function every day at certain hours. The recommended schedules are therefore: lunch around midday (beginning of the meal between 11 a.m. and 1 p.m.), and dinner around 6 p.m. (beginning of the meal between 5 and 7 p.m.). The better health and easier digestion enjoyed by those who follow a raw nutrition enables them, however, to benefit from a certain flexibility, and vary their mealtimes with no major problem, which is very useful for businessmen, commercial representatives, and all those who travel and spend time in airports and train stations, rushing from one appointment to the next.

### How much raw food should one eat?

"The greatest secret of happiness, is to feel in harmony with oneself."

Fontenelle.

Dietary balance means ensuring that the organism is supplied with nutrients in specific proportions, in order to meet all its needs with respect to calories, proteins, carbohydrates, lipids, vitamins, etc. It is obvious that a certain amount of fruit, vegetables, and protein-rich foods is essential. The average amount absorbed should be, as we shall now see, about two kilograms of fresh food per day per adult (which supply enough calorific energy for a 70 kg adult), divided, as defined previously, into a well-balanced 50 % A Category food, 30 % B Category food, and 20 % C Category food on average over one week.

The body's requirements can, however, vary around these average values from day to day depending on physical activity, temperature, age, weight, energy expenditure, etc.: An athlete performing an intense energetic effort will obviously

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need to eat more than someone who is sedentary. As one's real metabolic needs vary each day around the average of one's usual needs, one should take into account all the signals from the organism: appetite, smell of the food, its taste, a feeling of repletion, all these are signs that punctuate our meals and tell us whether we should continue eating a particular food or not. Positively, this means that if a piece of fruit seems very, very appetizing, go-ahead, eat it! Your body probably needs it. On the contrary, if a piece of fruit or other food does not appeal to you, or makes your stomach turn, then, even if your plate is still half full, stop! It is bad to force yourself to eat something with an unpleasant taste, bad for your health, and also frustrating psychologically. Although it is contrary to the upbringing we have received, it is better to not finish your portion if you no longer feel like it. Some will object that it is wicked to not finish one's meal when millions of people are starving to death on the other side of the planet. But eating more than one needs will not help those who are under-nourished in any case. The signs of attraction or repulsion with respect to food only correspond to the real needs of the organism when good quality, non-processed foods are concerned, eaten one by one, without seasoning.

This is why, in the framework of a raw diet, pre-determined, standard quantities of food, as in a classic diet, no longer exist. Smell and taste allow the possibility of the most attractive foods to be chosen among several others, and to follow the body's needs, rather than imposing certain foods. The amount consumed can vary from one person to another, from one day to the next, or from one type of food to another. For example, leeks, garlic, or onion are foods that are generally consumed in small quantities. A normal person like you or me is incapable of eating great quantities of raw leek or onion. Yet I knew a man, a priest, who discovered one day that he loved the taste of raw leek and onion. He started to eat them every day, and eventually ate over one kilogram a day. They made up most of his meals, and he found them delicious and sweet just as they were. He perhaps had a particular need for leeks and onions? After one year of this diet, he was perfectly fit; some hair had even grown back on his previously bald head, and the intestinal and prostate problems that had led him to change his diet had considerably improved. This example shows that nutritional needs can vary from one person to another, and that the body gives indications enabling us to orient our nutritional choices by means of taste and smell. The following year, this man no longer ate leeks, as he had begun to find them too pungent. The body's needs also vary from one day to the other for the same person.

### **Mealtimes**

An environmentalist meal should always comprise the same phases, whether you are in your living room in New York, on vacation by the sea, travelling on business to Paris, or in the jungle of Borneo:

- *Preparing the food*: Arrange the food, fruit, vegetables, and nuts in pretty baskets, the meat, fish, and seafood in dishes or plates. Visual pleasure plays a major role at this stage: it opens the appetite. Aesthetically, the vision of all sorts of multicolored, well-presented raw foods is particularly enjoyable;
- Choosing the food: This stage consists in choosing the food you are going to eat: you can choose a food you like or one that you think will do you good, but, above all, if possible, choose the one that has the best smell, as experience has shown that it is the sense of smell that corresponds best to the needs of the organism. The sense of touch when picking up the food, and the sense of smell play an essential role in the food selection stage. You can, for example, choose the fruit whose smell is the most attractive (not necessarily the strongest smell, but the smell that is the most pleasant, even if slight; it is the quality of the smell that must be taken into account, not its intensity);
- *Tasting the food*: When a natural food has been chosen according to its smell, its taste is usually pleasant and confirms one's olfactory choice. If, by chance, the food does not have a good taste, then above all do not force yourself<sup>229</sup>: If it is not good, it is probably because this food does not suit you and you should choose another, unless you have already eaten enough? One can thus successively eat one or several foods;
- *Chewing*: Mastication is the first stage of the digestive process which is accompanied by the impregnation of the food with saliva<sup>230</sup>. Insufficient chewing can cause digestive disorders. By dint of consuming industrial foods in powders, pastes, and soups, we have lost the habit of chewing and we do not impregnate our food with enough saliva before swallowing. Fortunately, nature does things right, and the consistency of natural foods obliges one to masticate sufficiently. Swallowing occurs automatically when the consistence of the chewed food permits;
- *Quantity*: Stop when you think you have eaten enough (in the framework of a Stage 0 or Stage I diet, the quantity to be consumed is predetermined by dietetic considerations). Stop if a negative unpleasant reaction occurs while you are eating: the food tastes less good, stings your lips, or your stomach tightens (feeling of repletion). Never continue eating a food after a refusal reaction from your body and

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 $<sup>^{229}</sup>$  One can even spit out the test mouthful, which is neither disgusting or impolite: Professional tasters, wine-tasters, for example, always spit out what they have tested.

<sup>&</sup>lt;sup>230</sup> A great part of the digestion of fruit carbohydrates, sweet foods, and cereal starch (bread, sprouts, etc.) is performed in the mouth under the effect of salivary enzymes, hence the interest of chewing well, especially in the case of sweet foods.

do not try eating this food again until your next meal: you will do yourself no good by eating more than your body can take and requires;

- Repeating the process: By choosing a second food. The number of various foods to be eaten successively during the same meal can vary from nothing (if nothing seems good), to one (this is then a "monomeal") or several. If you are very hungry, you can perhaps eat three, four, or five successive foods during the same meal. If you are not very hungry, if you are tired, or if nothing tempts you, you can then just eat one sort of food per meal, or even nothing; skipping a meal from time to time if one is not hungry is excellent for the health;

- Washing the dishes at the end of the meal: This stage would obviously not exist if we lived in the wild, but it is essential in a civilized context. Fortunately, a raw diet considerably simplifies household chores: washing the dishes and putting things away both take no time at all, five minutes maximum after a family meal. As regards putting things away, the baskets of fruit and vegetables can either stay on the table until the next meal (nothing to put away), or be stored in the kitchen, the cellar, or the refrigerator (which only takes the time required to move the baskets). As regards washing the dishes, the dishes and plates just need rinsing (no greasy pans to scrub), and that can be done quickly and easily. You will notice that, after an environmentalist meal, the cutlery and dishes are easily rinsed with water and need little or no detergent<sup>231</sup>. This phenomenon is easy to understand: It is cooked fats (from frying, cooking in butter, etc.) above all that dirty pans and dishes. As a raw diet does not comprise any cooked fats, it simplifies dish washing. Check this yourself by carrying out the following experiment: rub two plates, one with a piece of raw meat, the other with a piece of the same meat, but cooked. Rinse the two plates under faucet water and rub them with a sponge and warm water, and you will see that natural animal fats dissolve easily in water, whereas cooked animal fats stick to the plate. This is why washing dishes after a classic Stage 0 meal requires using detergent that is aggressive to the environment, whereas this is not necessary with a more environmentalist, Stage I or II diet. The same phenomenon is also true for our arteries: Cooked animal fats deposit in our arteries, a little like in our plates during our little experiment, blocking the blood vessels and hindering the circulation of the blood<sup>232</sup>.

<sup>&</sup>lt;sup>231</sup> This is another, unexpected, environmentalist aspect: the preservation of the environment through dietary environmentalism; there is practically no longer any need for detergent to wash dishes. It should be noted that one liter of dish-washing detergent diluted into river and sea water makes several thousand of cubic meters of water unfit for life

 $<sup>^{232}</sup>$  This reasoning may appear a little simplistic, but it is medically exact that the consumption of saturated fats favours vascular sclerosis. Cardiovascular disease is the first cause of mortality in developed countries.

# Balancing nutritional needs: the difference between dietetic balance and nutritional balance

The usual ideal dietetic balance is scientifically described in terms of a distribution of the nutritional supply in carbohydrates, proteins, and lipids. Everyone should, in order to be in good health, consume on average a certain quantity of proteins, carbohydrates, and lipids each day. This notion is unfortunately difficult to apply in practice as all foods contain proteins, carbohydrates, and lipids, in proportions which vary according to the type of food. It would be much too tedious to go around with a computer to calculate the composition of each food at each meal. For nutritional balance to be applicable in everyday life, one has to call an apple an apple and talk about food as it is found in the market and in our plates: the distribution of foods should be made in terms of categories of food: fruit, vegetables, meat, fish, nuts, and seed, rather than in terms of carbohydrates, lipids, and proteins, that do not correspond to anything concrete in everyday life. This is why the notion of nutritional balance has to be introduced in replacement of dietetic balance, which has proved to be inefficient. Meat, fish, nuts, and seeds having similar properties (richness in proteins), we can group them into a single category (Category C: lipid- and protein-rich foods). Nutritional balancing proposes dividing nutritional supplies into fruit, vegetables, fish, meat, nuts, and seed, which is easy to put into practice, whereas classic dietetic balancing of proteins, carbohydrates, and lipids is a purely abstract notion that should be reserved for scientists.

Nutritional balancing as we have previously described (50 % Category A food, 30 % Category B food, and 20 % Category C food), satisfies the nutritional needs of the human species perfectly, as we shall now verify with the calculations below. Once this verification has been carried out once and for all, there is no need to recalculate it at each meal: it is enough to respect -on average- the given proportions. For a balanced diet, the following main parameters should be checked: the supply of calories (for energy), the supply of proteins (for the construction of the tissues), the supply of calcium (for the skeleton and the cells), and the supply of vitamin C (for vitality). The nutritional balance we recommend provides the human organism will all these health-giving substances and many others besides, in the necessary proportions. To check this, one should first look up the composition of each category of food in scientific tables (figures given for 100 grams of food edible in its natural form):

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- Average composition of fruit (average of oranges, bananas, mangoes, and cherries): 68 calories; 1.0 g of protein; 18.5 mg of calcium,; 33.5 mg of vitamin C;
- Average composition of vegetables (average of leaf vegetables, root vegetables, and aerial vegetables): 37 calories; 1.8 g of protein; 67 mg of calcium; 43 mg of vitamin C:
- •Leaf vegetables (average of lettuce, parsley, and dandelion): 40 calories; 2.5 g of protein; 137 mg of calcium; 77 mg of vitamin C;
- *Root vegetables* (average of carrots, kohlrabi, potatoes, and radishes): 47 calories; 1.4 g of protein; 38 mg of calcium; 29 mg of vitamin C;
- Aerial vegetables (average of cucumber, green beans, and tomato<sup>233</sup>): 24 calories; 1.4 g of protein; 25 mg of calcium; 22 mg of vitamin C;
- Average composition of protein (2/3 of vegetable protein being divided equally between seed sprouts and nuts and 1/3 of animal protein being divided equally between meat, fish, and eggs): 332 calories; 10.7 g of protein; 65.9 mg of calcium; 1.06 mg of vitamin C;
- Seed sprouts (75 % water and 25 % dry seed, average of rye, oats, and rice): 85 calories; 2.5 g of protein: 19 mg of calcium; 0 mg of vitamin C;
- •*Nuts* (average of walnuts, hazelnuts, Brazil nuts, and coconuts): 655 calories; 13 g of protein; 124 mg of calcium; 2 mg of vitamin C;
- •Meat (average of beef, mutton, and pork): 263 calories; 17 g of protein; 10 mg of calcium; 1 mg of vitamin C;
- Fish (average of herring, sardine, and mackerel): 141 calories; 17 g of protein; 15 mg of calcium; 2.6 mg of vitamin C;
- Egg (value of the yolk, as egg white in its natural form, rich in albumin, is less appreciated than the yolk. Raw egg white is sometimes, however, eaten by people who find it has a delicious sweet taste similar to that of meringue. Egg white can meet a specific need of the organism for albumin in certain cases. In most cases, it is the yolk that is the most appreciated and eaten): 368 calories; 16 g of protein; 140 mg of calcium; 0 mg of vitamin C.

The calorific needs of a normal 70 kg adult man are about 2500 calories. To provide this amount of energy, one can easily calculate that a diet balanced in the way previously described (50 % fruit, honey, and dates; 30 % vegetables, including root-vegetables, leaf-vegetables, and aerial vegetables; 20 % protein- and lipid-rich

 $<sup>^{233}</sup>$  We consider the tomato as being a vegetable although it could be classed into the fruit category, especially when it is very ripe, because of its high content of easily assimilated sugars.

foods, 2/3 of which are of vegetable origin and 1/3 of animal origin<sup>234</sup>) should provide a total net weight equal to 2 240 kg of food a day, spread between 1 120 grams of fruit or a smaller quantity of honey or dates that are richer in calories (Category A), 672 grams of vegetables (Category B) and 448 grams of meat, eggs, fish, nuts, or cereals (Category C).

### Mathematical verification of the ideal nutritional balance

The ideal nutritional balance that we have described has the following dietetic characteristics for an adult man:

- Total weight ingested per day: 2 240 kg of food per day, divided between 1 120 grams of fruit (Category A), 672 grams of vegetables (Category B), and 448 grams of nuts, seed sprouts, meat, eggs, fish, or insects (Category C).
- Daily calorific supply: 2 500 calories (supply recommended for a 70 kg adult: 2 500 calories).
- Daily protein supply: 71 grams (recommended supply: one gram per kg, i.e., 70 grams for a 70 kg adult).
- Daily calcium supply: 954 milligrams (minimum recommended quantity: about 800 milligrams for an adult).
- Daily vitamin C supply: 667 milligrams (minimum recommended quantity: about 60 milligrams for an adult).

This nutritional balance, easy to put into practice (50 % fruit; 30 % vegetables; 20 % meat, fish, nuts, or seed) in the framework of a Stage I or Stage II diet, is therefore perfectly balanced from the dietetic point of view.

A diet like the one we have just described comprising 50 % Category A food (fruit or sweet foods: honey, dates); 30 % Category B food (vegetables, including leaf-vegetables, root-vegetables, and aerial vegetables), and 20 % Category C food (food rich in protein and lipids: meat, eggs, fish, nuts, seed sprouts), is perfectly balanced from the dietetic point of view, particularly with respect to the supplies of calories, protein, and calcium. This type of diet is, moreover, particularly rich in vitamin C and fiber that fare good for the digestion.

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 $<sup>^{234}</sup>$  It should be recalled here that the recommended diversification in protein sources (about 2/3 of vegetable protein for 1/3 animal protein) should not be ensured during the same meal (mixtures to avoid), but over several days or weeks: one can alternate, for example, animal protein and vegetable protein every other day; or one day with meat can be followed by one with fish or eggs, and three or four days with vegetable protein, while also respecting the body's needs (taking into account the taste of natural foods). In certain cases, one may want to regularly consume animal protein for a certain period (several days or weeks), but this should be automatically followed by a similar period focused on vegetable protein. Although it is quite possible to not respect this balance for a day or two with no

These foods can be distributed among the various meals during the day in various ways. As we see later, a meal of fruit at midday and a meal of protein-rich foods and vegetables in the evening provides a daily distribution of 1 120 grams of fruit at midday and 1 120 grams of protein and vegetables in the evening, spread between 448 grams of protein and 672 grams of vegetables (a little exercise: close your eyes and visualize appetizing examples of these meals).

It should be noted that this natural diet (Stage I or II), that is perfectly balanced from the dietetics point of view, supplies a largely sufficient amount of calcium (954 mg) despite the total absence of dairy foods. The calcium is supplied by the fruit (22 %, i.e., 207 mg), by the Category C foods (31 %, i.e., 295 mg, supplied in large part by the nuts and egg yolk), and by the vegetables (47 %, i.e., 452 mg, mainly supplied by green vegetables, such as lettuce).

The vitamin C supplied by a raw diet of this type is more than ten times greater than the minimum doses, which is all for the good: it is well-known that a large dose of natural vitamin C has no drawbacks and is good for the health, particularly for vitality, fighting infection, and for the prevention of cancer. This is why many dieticians recommend taking 500 mg to 1 g of vitamin C a day in the form of synthesized vitamin C in tablets. With plenty of raw foods, taking vitamin C in tablets is unnecessary as one already consumes 667 mg of vitamin C on average per day, supplied by fresh fruit and vegetables.

### **Breakfast**

"This is what, in Switzerland, is considered a normal morning menu: tea or coffee with milk and sugar, bread, butter, and jam. This sort of meal contains no raw food as provided by nature. It is very poor in various vitamins."

Dr. Catherine Kousmine.

A big cup of coffee and milk and buttered bread: this traditional Swiss and French breakfast is far from being environmentalist. None of its constituents is natural, none are raw, or contain any vitamin C. If your breakfast is like this, it would do you good to replace it with fruit, for example, the type and quantity of which you can choose freely according to your appetite. This way of eating in the morning is much lighter and more easily digested than a pile of bread and butter!

inconvenience whatsoever, it should always approximately resemble the above over one year?

In addition, fruit helps disintoxicate the organism, whereas coffee will just poison you a bit more. In the framework of an already fairly purified diet (Stage II), one or two glasses of water are enough in the morning before going to work. As for me, breakfast is half a liter of mineral water, (sometimes) followed by a cold shower to get me going.

### An apple a day keeps the doctor away

The apple is one of the most ancient domesticated fruits, of which there are hundreds of different varieties. The beneficial effects of apples have been known for centuries, hence the English saying: "An apple a day keeps the doctor away". The apple mainly contains carbohydrates which supply the energy enabling our muscles to function (10.4 %), but also 2 % food fiber and pectin which regulate the digestion, 9 mg / 100 g of vitamin C, and 8 mg / 100 g of vitamin A, as well as a good number of mineral salts and oligoelements. Easy to grow in all temperate countries, the apple is one of the basic fruits of a natural diet.

#### Lunch

The midday meal can be mainly composed of fruit, one or several sorts to be chosen according to taste. Here is Dr. Shelton's recommendation from the beginning of the century: "Only have a meal of fruit at midday: it's the ideal way of eating it". Fruit supplies the carbohydrates that contain the energy our body needs to function. On average, it is normal to eat a little over one kilogram of fruit, between one kilogram and one kilogram and a half at midday, for example, five or six large oranges. The fruit of this meal will provide you with about half the total number of calories you need for the day. If you eat one kilogram of a first variety of fruit, it is unnecessary to force yourself to continue: this is already a good meal, that provides enough calories for half a day. On the other hand, if you have only eaten a moderate amount of a first sort of fruit, an apple, for example, you can then choose and eat a second variety of fruit. If fruit does not attract you, try other sweet foods: dates or honey. As these foods are very concentrated, one should eat less of them than fruit. As 150 grams of honey or 250 grams of dates are approximately the equivalent of one kilogram of fruit. You may also eat vegetables at midday, instead of fruit, or in addition to fruit. One can also eat proteins at midday (meat, hazelnuts, etc.), especially if one has not eaten fruit, as the mixture of fruit and protein is not recommended.

## Examples of midday meals on this model

- Seven average-sized bananas (total weight absorbed: 1.2 kg);
- One apple and a dozen lovely fresh figs (total weight absorbed: 1.1 kg);
- 150 grams of honey (total weight absorbed: 150 grams, but approximately as many calories as one kilogram of fruit), and three carrots;
  - 150 grams of fresh dates and a lettuce;
  - One kilogram of grapes;
  - Three red peppers and 200 grams of almonds;
  - etc.

The apparently unbalanced character of these lunches (lack of proteins) is compensated by the evening meal, which provides a sufficient amount of proteins for the day. A protein balance does not have to be ensured at each meal, but is amply sufficient over the day.

To encourage you to eat fruit, here is some advice from Prof. Henri Joyeux, a well-known nutritionist and cancer specialist<sup>235</sup>:

- Eat at least two pieces of fruit a day;
- *Give preference to fruit in season*. Fruit which is not in season is either grown in greenhouses or imported. Imported fruit is picked too early, does not ripen well, and loses part of its nutritive value (vitamin content) during transport. Fruit produced in greenhouses is often grown with synthetic chemical fertilizer and does not receive its ration of sun;
- *Try a maximum of different varieties of fruit with time*. Most of the inhabitants of developed countries always eat the same types of fruit: apples, oranges, and bananas, for example. There are many, many others... try them!
- And don't forget honey. This natural product is a healthy, living, and nutritious food. To make one kilogram of honey, the bees travel 150 000 to 500 000 times between the flowers and the hive.

## Supper, the evening meal

In a raw diet, like the midday meal, the evening meal supplies about half the day's total amount of calories. The average quantity of proteins eaten in the evening should be about 400 to 500 grams of a single type of protein (the mixture of several protein- or lipid-rich foods is not very digestible). The average quantity of vegetables should be approximately between 500 and 800 grams, the exact quantity being

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<sup>&</sup>lt;sup>235</sup> H. Joyeux, member of the Medical Board of the Comby Institute.

determined also by taking in consideration the reactions of the organism. Several vegetables can be eaten at the same meal with no problem, for example in a salad (in the framework of a Stage I diet) or one after the other (in the framework of a Stage II diet). The consumption of fruit in the evening is optional and should only be occasional, as mixing protein and fruit is not recommended.

### Examples of evening meals

- Marinated fish followed by a large salad of raw vegetables (in Stage I), or raw fish followed by a selection of vegetables eaten one after the other (in Stage II);
  - 450 grams of almonds followed by two cucumbers and three carrots (Stage II);
  - Three avocados followed by celeriac in remoulade, or tomato salad (Stage I);
  - A whole coconut followed by a lettuce and two tomatoes (Stage II);
  - Etc.

## The Tahitian tradition of eating raw-fish

Tahitians have always traditionnally eaten a selection of various raw polynesian fish species that have just been emptied, washed, cut into fillets or diced, and sometimes marinated in lemon juice. To make it even more attractive, one can arrange the fish on lettuce leaves, and decorate it with slivers of carrots or celery. Fatty fish are preferable for this dish: tuna, sardine, mackerel, herring, salmon, anchovy, etc. In the framework of an improved, environmentally oriented diet, marinated fish is a delicious way of preparing fish simply, that is closer to a more natural diet. Its advantages: it is easy to make, does not take long and is always appreciated. In the framework of a Palaeolithic diet, the same fish can also be eaten raw without lemon, and, paradoxically, one then realizes that a well-chosen fish eaten raw is perfectly digestible, and that it is even better without being marinated in lemon juice!

### The only indispensable drink: water

What drinks are available in nature? There are just two (if we consider that maternal milk for infants is a food, not a drink). First of all, water, which covers more than half the surface of the planet and composes 70 % of our body. One can drink spring water of all types, mineral, gaseous, avoiding water polluted with nitrates, or chlorinated water (faucet water). The second natural drink, rich in mineral salts and nutrients, is coconut milk.

Numerous industrially-made liquids are sold in shops, wrongly designated as drinks, as they are liquid foods more than drinks: fruit juices, wine, beer, sodas,

milk, alcohol, etc. Apart from coconut milk, their consumption is relatively recent from the historical point of view and should remain moderate (Stage I type of nutrition), eliminating them altogether in Stage II (it is better for adults to eat grapes directly than drink wine, and better for infants to suckle maternal milk than cow's milk). Most of the attractively colored "drinks" that fill the shelves of supermarkets have, in addition, been submitted to numerous denaturing processes: Pressing (for fruit), oxidation in contact with the air, addition of sugar, citric acid, and artificial coloring, thermal denaturation, and sometimes alcoholic fermentation (for alcoholic drinks). Contrary to appearances and what advertising would have us believe, fruit juices and wines such as they are sold today are natural foods, but undergo a great number of chemical or thermal treatments. The consumption of fruit juice should be reduced as much as possible: it is always better to eat fresh fruit. Fruit squeezed at home (orange juice, lemon juice, etc.) is an interesting source of vitamins in the framework of an intermediate diet (Stage 1), whereas "purists" will always prefer to eat the whole fruit. Be that as it may, one should always be careful not to mix fruit juices with other foods. An aperitif composed of peanuts and orange juice is not ideal: a real orange or peanuts would be better (if possible fresh, rather than roasted). Fruit juices should, like all fruit, form a separate meal or be consumed at the beginning of the meal, as an aperitif.

Those who are lucky enough to live in a region with good quality spring water can obviously drink it. Unfortunately, drinking water is nearly always treated and chlorinated to avoid the proliferation of bacteria and its consumption is not recommended on the whole, especially in urban areas. Besides, adopting a raw nutrition so develops the sense of taste that, after a few months, you will clearly detect the chlorine in tap water, a horrible taste which certainly will not make you feel like drinking it. It is better to drink bottled spring water. Tap water purified by filtration<sup>236</sup> can be consumed in the framework of a raw diet, in addition to the mineral waters found on the market. In the same way as with food, one should ensure that one has a choice of several different waters, in order to vary the supply of mineral elements and one should choose those that have the most pleasant taste. If one type of water attracts you more than another, take this into account, you probably have a specific need for the mineral salts it contains.

The fact that some bottled water is degassed and regassed artificially does not seem to matter. The degassing and regassing operations do not modify the chemical structure of the water (H<sub>2</sub>O) and experience has shown that the consumption of regassed water does not, apparently, have any subsequent harmful consequences.

 $<sup>^{236}</sup>$  There are several tap water filtration processes for household use: some are based on charcoal filters, others on distillation using porous ceramic filters or osmotic membranes, ion-exchange resins, etc.

When should one drink? At mealtimes or between meals? Generally speaking it is always preferable to drink between meals rather than during meals, as the dilution of the gastric juices troubles the digestion<sup>237</sup>. Drinking at meals is a deplorable habit shared by many people today. One should quench one's thirst between meals when the stomach is empty. Most fruit and vegetables are composed of 90 % water, which is why it is not necessary to hydrate natural foods even more in order to digest them. Experience has shown that one does not feel thirsty during meals when one eats a great deal of fruit and vegetables.

## Is it natural to drink from a glass?

For millions of years, all animals and all primates drank with their heads lowered. It is only recently (in comparison with the geological time necessary to the evolution of a species), following his adopting an upright stance, that man started drinking standing up or sitting at a table, with his head held straight, which was only made possible by the use of bottles and glasses. The use of bottles, glasses and cups is an artificial device which has no harmful effects, since it does not modify the chemical composition of the water we drink, nor its digestion. However, it is easy to check that this change to an upright position has made us lose the appreciation of the quantity we need to quench our thirst. The dynamics of water flowing into a throat placed vertically is considerably different from what happens when one drinks with one's face turned downwards (when drinking in a river or sucking water from one's cupped hands or a plate full of water, for example). It can be observed that, after a certain quantity of water absorbed this way, one experiences a tightening of the throat which obliges to stop drinking<sup>238</sup>. This feeling of "automatic halt" after the ingestion of a certain amount water does not occur, however, (or so slightly as to be hardly perceptible) when one drinks the same quantity of water from a glass or a bottle (one's head is then obligatorily placed following a vertical axis). This upright position represented considerable progress that enabled man to use his hands to make tools, thus surpassing all other animals, but, when we had become intelligent enough to invent glasses and bottles, this stance also made us lose a very ancient adaptive mechanism for controlling thirst. All animals still possess this thirst regulation mechanism, except for man, who no longer knows how much to drink; all we can do is trust dietetics that recommend drinking

<sup>&</sup>lt;sup>237</sup> The digestion of each type of food is performed with a perfectly determined degree of acidity in the stomach. Meat, for example, can only be digested in a very acid medium (pH about 1). If one drinks, for example, a liter of water while the stomach is digesting a small piece of meat, the organism, in order to digest the meat properly, will have to acidify the entire liter of water; as a result, there is first an abnormally intense production of gastric acidity (to acidify the water that has been ingested), then, in a second stage, the organism has to neutralize this acidity.

 $<sup>^{238}</sup>$  This feeling is the consequence of an automatic and involuntary contraction of certain muscles in the throat, which makes it impossible for water to flow towards the stomach.

between one and two liters of water a day. Actually, we all possess an automatic, programmed, and extremely precise inner mechanism, that is still able to determine the amount of water that we should absorb, although we are not aware of it and believe we have lost this "instinct", simply because this regulation only works in the head down position that we have abandoned.

How much water should one drink? Having lost the "instinctive" regulation of the amount of water that each of us should drink, the medical profession usually recommends drinking at least one to two liters of water a day. But I would like to point out here that with a diet rich in raw fruit and vegetables, you will already be absorbing between two and two and a half kilograms of fresh food a day, that is to say nearly two liters of water a day. It is therefore not essential to drink as much when following a natural diet as in the framework of a diet based on dry foods, starch, bread and cakes. One should, however, drink half a liter to a liter of water a day nevertheless, in addition to fruit and other foods. It does no harm to drink a little too much<sup>239</sup>, as the excess is eliminated by the kidneys.

Coconut milk is a liquid food that is very rich in a number of mineral salts: it can be consumed at the evening meal instead of proteins, or during the day, for an afternoon snack, for example. If the coconut milk tastes soapy, this means the organism does not need it. If it tastes delicious, one can consume it until an unpleasant change in taste is observed. Several liters of fresh coconut milk are frequently consumed during the day in hot countries. Coconut milk, which is very nutritious, is sometimes of therapeutic use in certain illnesses.

We can also mention, as a matter of interest, the existence of another natural liquid source, easily available in nature wherever man goes: urine, which is not, strictly speaking, a drink. Explorers lost in the desert have survived by drinking all their urine until they were found. The idea of drinking a little urine obviously arouses violent disgust today, although in the past, it was believed to have numerous virtues, from disinfecting wounds (in external usage) to drinking it (in internal usage)<sup>240</sup>.

### Eating by pleasure gives more pleasure!

Eating by following one's pleasure is, by definition, the most "enjoyable" diet. Pleasure is an important factor for our satisfaction and evolution: I do not think one

<sup>&</sup>lt;sup>239</sup> Water, of course, we're not talking about whiskey or other alcoholic drinks here!

<sup>&</sup>lt;sup>240</sup> In India, and in certain traditional medicines, numerous virtues are attributed to urine when it is consumed respecting certain rules (in particular, one must never drink the first urine of the morning which contains the toxins eliminated during the night). See on this subject: Amaroli: A Millenary Medicine, Editions Vivez Soleil (Geneva).

can progress very far in life without a feeling of well-being, without a little daily happiness. Thus the enjoyment of food has a far from negligible place in the hit parade of earthly pleasures<sup>241</sup>! Faced with a choice of food, there are two ways of increasing the amount of eating pleasure it can provide. The first solution consists in transforming available food so that it becomes even better than in its natural form. This is the principle of cooking, whose objective is make food as enjoyable as possible, by preparing it in different ways, seasoning it, cooking it or mixing it. The second solution consists in choosing to eat, among several types of natural food, only those that one finds good in their natural form, and avoiding, on the contrary, their alteration. One then simply has to have a sufficiently varied selection of natural foods so as to be able to choose that or those whose taste seems the best: One can get a maximum of pleasure this way, by definition. As we have seen that the taste of food in its natural form is related to the body's needs, one also obtains an optimal nutritional balance and a maximum of health at the same time.

Modern culinary art mainly opts for the first solution: trying to make food as tasty as possible by transforming it via cooking. Who of us has never tasted the delights of gastronomy? To respect the natural order of things, it is nevertheless better to do the contrary: that is to say, as far as possible, re-learn to appreciate the taste of food as it is, rather than try to transform it to make it better, which is bound to affect our health. If the food tastes good as it is, I eat it. If it is not good, I leave it and choose something better. By definition, this system ensures that you get a maximum of pleasure out of a meal. I don't miss chocolate mousse, lemon tart, coffee, french fries, bread and jam, spaghetti in bolognese sauce, or pizzas, because the intensity of the pleasure I discovered in eating cherries, pineapple, bananas, raw fish, exotic fruit, shrimps and even insects in their natural form is so much greater! It is easy to increase one's pleasure when eating naturally: one just has to have as wide a choice as possible of good quality food on the table.

### Is a natural « instinctive » nutritional balance still possible?

"If one wants to define suitable proportions of various foods, there is no measure, weight, or number that can serve to determine them more exactly than the feeling of the body receiving them."

Hippocrates.

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<sup>&</sup>lt;sup>241</sup> This could be the introduction to a much wider debate on the role of pleasure in life, the finality of pleasure, both the motor and consequence of a species' evolution... We all could also question the place of pleasure in our industrial civilization and how we could perhaps live more happily if we gave greater importance to a "philosophy of pleasure" (which would, among other things, develop considerations linked to the pleasure of eating and communicating, that of sleeping, touching, working, talking, and walking in the country, etc.), but these developments would exceed the scope of this work.

The body provides a certain number of indications while one is eating: smell, taste, pleasure, consistency of the food, easy or painful deglutition, repletion, nausea, wind, etc. We usually do not take much notice of these signs, and force ourselves to apply rigid dietetic principles. However, one should take these automatic reactions into account as they correspond, to a certain extent, to useful information provided by the body. Certain reactions to food are pleasant, positive (a delicious taste, a mouth-watering smell, etc.), and express the need to eat (green light, go-ahead!), others are negative (leeks that are too pungent, apples that are rough-tasting, cherries that taste sour, etc.), and mean "STOP! DON'T EAT THIS FOOD!". These reactions, that we can call "instinctive" because they are automatic (involuntary) and innate (they can be observed in very young children) can help us balance our menus better and choose the "health foods" our body needs. It is therefore important to know what instinct can do, its possibilities, as well as its limits. Here is what instinct can do and what it cannot do, according to my experience of natural nutrition in various contexts:

- The idea that one has of eating a certain type of food (fantasy, dreams, premeditated decision to choose a specific food because of a reasoned "this food is good for this or that") is generally not in relation with the body's true needs and seems to be the result of a purely psychic process. One should therefore be wary of preconceived ideas with respect to nutrition: it is not because one thinks one should eat a specific food that the body really needs it. Our physiological needs are not expressed by ideas: food intake regulation mechanisms are olfactory and gustative;
- When in front of non-processed food (fresh fruit, for example), a pleasant smell and taste mean the go-ahead for its consumption. It is therefore recommended to eat food, which, in its natural form, is pleasant to the senses of both taste and smell;
- With natural food, a negative reaction (unpleasant taste or consistency, difficulty in swallowing) can occur during its consumption, after a certain quantity. This "instinctive halt" is sometimes precise to within a mouthful. This is a "red light:" it is strongly recommended to stop eating a food after a signal of this type. Experience has shown that to disregard a "red light" leads to a troubled digestion. Our body therefore gives information enabling the regulation of the quantities ingested. The proper functioning of this regulation, however, implies that the food is consumed in its natural form and that the subject is listening for the reactions occurring within himself, so as to stop at the first negative sign;
- From a choice of several non-processed, natural foods, smell and taste enable choosing those one needs most, that best meets the body's needs: the food that has the most attractive smell and taste;

- These bodily reactions are not reliable, however, and must only be taken into consideration with high quality organically-grown foods, provided they are not processed in any way and that they are eaten one by one (seasoning and mixtures mask the taste of food<sup>242</sup>);
- When in front of food that is elaborate (banana cake, for example), heated (raisins dried at 80° C, for example), mixed (bananas and cream), seasoned (salad with vinaigrette or other sauces), salted, or otherwise transformed, negative indications (repletion, bad taste, nausea, etc.) mean that the body does not need this food: a red light that should not be disregarded;
- When in front of food that is cooked, processed, seasoned, or mixed, a pleasant taste does not necessarily mean that one should eat it. Chocolate and sweet desserts, for example, are delicious, even if one has eaten too much. This is the trap most animals and hominoids fall into when they taste the delights of elaborated dishes: because these dishes taste good, they eat them, even if it is bad for them<sup>243</sup>. Gustatory pleasure vis-à-vis processed food bear practically no relation with the body's true needs. One cannot therefore trust the pleasure procured by processed, cooked or mixed foodstuffs: this could even be dangerous for one's health. As a consequence, it is obvious that in our modern world in which all food is cooked or processed, one has the impression that the nutritional instinct no longer exists in man. Actually, it does still exist, but can only function correctly with natural foods.

The automatic reactions of the body during the ingestion of food can therefore indicate, to a certain extent, if we should consume it or not, provided the food is natural and that it is physically present in front of us.

Be careful, though, instinct is not omniscient: you cannot know, for example, if you should eat a food that is not among the foods on the table. To ensure a proper nutritional balance, one should therefore have a sufficiently wide range of foods to choose from by means of taste and smell. Your nose will not tell you, for example, to go and buy fish at the fishmonger's (unless you walk past the shop and are attracted by the smell): it is up to you to be attentive and ensure that you have food in sufficient variety to balance your menus. The intellect thus plays a role in choosing food from a distance, in ensuring food supplies, and in remembering to buy food in a particular place. You decide to go and buy a pineapple, for example, because you feel like it or because it is a long time since you have eaten pineapple. At the time you take this decision, you do not know if it will be good for you and if

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<sup>&</sup>lt;sup>242</sup> To take an image, a traffic regulation system using red and green lights is very useful, provided that the lights in both directions are correctly synchronized. If all the lights at a crossing are red or green at the same time, this would cause collisions and it would be dangerous to blindly obey them. On the other hand, if the lights are well adjusted, traffic will flow better if it obeys them: When they are green, you go, when they are red, you stop. In a similar way, the body's reactions are well synchronized with natural foods, but not with seasoned or altered foods.

 $<sup>^{243}</sup>$  The same mechanism enables understanding why primitive men got into the habit of cooking and altering their food.

you will like its taste, but this stage is a prerequisite for what follows. On the other hand, it is your nose and your taste buds (not your head) that will tell you whether you should eat the pineapple physically present in front of you in your plate. The nutritional process thus comprises several stages: stocking up with food (finding the food; predominant role of the intellect at this stage) - approaching and picking up the food (predominant role of vision and touch at this stage) - absorption or not (predominant role of the sense of smell and gustative mechanisms) - digestion (predominant role of genetics and enzymes). Each of these stages obeys very precise natural mechanisms from which man is not exempt.

With foodstuffs that are denatured and altered, by cooking, for example, there is no "stop" reaction as with natural foods, or else the reaction comes much too late. As soon as one consumes processed, non-natural foodstuffs, one has to limit the quantities one absorbs, restrain oneself, and distrust an enjoyment that can lead one to overeating, in order to preserve one's health. This is, in fact, the case in the West: we eat adulterated foodstuffs and elaborate dishes whose nutritional quality is questionable often just for pleasure, and, in addition, we eat too much. Overeating is impossible with products consumed in their natural form, as, at a given time, a sudden drop in eating pleasure, followed by other reactions (repletion, etc.) oblige one to stop. In the wild, an animal chooses its food according to olfactory pleasure, and eats it according to the pleasure it feels while eating. It will also be limited by food availability and scarcity. Luckily, the inhabitants of developed countries have the good fortune to live in an opulent society and not be restricted by shortages of foodstuffs. We can, therefore, with a varied selection of good quality natural foods, ensure a proper nutritional balance guided by pleasure. Eating delicious environmentalist foods, what a marvellous program, isn't this what we are all more or less looking for?

Within the limits and according to the conditions that we have defined, the awareness of one's body delivers precious information that can help us balance our diet in a more natural way, not by following theoretical considerations, but by taking into account the organism's real needs.

### Food combination rules

"We mix foods that combat with each other in our bodies."

Hippocrates<sup>244</sup>.

<sup>244</sup> Quoted by Dr. Paul Carton in "The Essentials of the Doctrine of Hippocrates."

Dr. Percy Howe, at Harvard, noticed that some people, who were incapable of digesting oranges during meals, could eat as many as they liked with no problem if they ate nothing else at the same time. This example shows that combining foods, that is to say mixing several different foods during the same meal, can pose digestive problems.

Dr. Shelton spent a large part of his life studying food combinations. After a series of methodical experiments, he came to the conclusion that not only should we eat in a more natural way, altering our food as little as possible, but that we should also respect what he calls "food combination rules:" Some foods can be mixed with others, while other mixtures are to be avoided, as they can cause intestinal fermentation and digestive disorders.

As man is naturally greedy (this is logical and normal, as the purpose of pleasure is precisely to guide us in our choice of food), he inevitably tends to eat too much if he can; as soon as he finds himself in a culinary and gastronomic universe. Food combination rules are useful for limiting certain mixtures, which, if they are regularly renewed, can be harmful. The following rules are valid for both a traditional diet and a raw diet. Avoiding certain food combinations is already a step forward towards a better diet (Stage I).

It is not very natural to mix foods: meat, fish, avocados, and fruit are rarely found on the same site, for example. The dispersal of food resources in the wild imposes a dispersion of meals in time and in space, which is why we are not adapted to a great number of digestive mixtures. An animal which has just eaten eggs will probably have to walk several miles to find grapes, then several more miles to a beach to eat seaweed or fish. Its digestive system has inevitably adapted itself in time (principle of natural evolution and the adaptation of a species to its environment), over thousands of years, to this disparity in food resources. If it wants to drink, it will have to move again to find a river, etc. Man too is adapted to a relative dispersion of food resources in time and space. This is why, for a better digestion, it is advisable not only to mix foods less, but also to wait at least a few minutes before going from one food to another.

Experience has taught us that unfortunate food combinations can cause, in particular: tiredness, especially after meals, flatulence, gas, heavy sleep, difficulty in waking up, numbness, headaches, a lack of drive, or, on the contrary, irritability.

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The table below details "good" and "bad" food combinations. It has been established using experiments similar to those of Dr. Shelton. For several years now, I have forced myself to systematically and methodically test each food combination in the framework of a totally natural diet (an integral raw nutrition -Stage II), and to observe the quality of my vitality, sleep, and digestion during the following day. This work required several years of observation, as there are thousands of possible combinations between the 150 basic foods we have listed. The results, summarized in the table below, show that the "good and bad food combinations" that I have observed in the framework of a totally raw diet are approximately the same as those that Dr. Shelton set forth in the framework of a mixed, predominantly natural, but partially cooked diet. "Good" combinations are those for which digestion proves to be easy and vitality good 24 hours afterwards. "Bad" combinations are those which cause digestive trouble (gas, swelling, fatigue, etc.). These disorders occur fairly rapidly during the digestive process (tiredness even at the end of the meal) and do not generally last longer than about 24 hours. It is therefore easy to detect and remedy the cause, if it is linked to the problem of food combinations: one just has to know what the subject ate at his previous meal.

A simple solution for solving the problem of food combinations is to not mix foods at all, and to eat just one per meal. I myself have tried this way of eating, that can be called "totally dissociated nutrition" or "monomeal nutrition", along with about thirty other people for a month. Everyone was free to eat what they wanted at any time during the day, provided that they ate only one food per meal (with no quantitative limits), respected a pause of at least one hour after ingesting food before eating another meal, and ate at least one type of food from each category (A, B, and C) every day. The times of the meals, the nature, and quantity of the foods consumed, as well as the various reactions or sensations felt during the day were noted. Each evening, each subject assessed his vitality during the day, giving himself a mark on a scale of 0 to 10 (0 = very tired, 5 = average vitality, 10 = maximum vitality), then did the same for the quality of his digestion. Each morning, the quality of the night's sleep was also assessed on a scale of 0 to 10. The results of this experiment showed that digesting dissociated meals is much easier than digesting mixed meals. Vitality is greater and sleep more refreshing as well as shorter (a considerable reduction of two hours on average per night of sleep). However, this monomeal system eventually proved to be a little frustrating. Psychologically, one would like to eat several foods at the same meal, which is forbidden in a rigid system. A totally dissociated diet is also less obvious from the social and practical points of view, as one has to have several small meals instead of

one large one<sup>245</sup>, which is not really compatible with a professional activity and conventional meal times. A totally dissociated diet should therefore only be followed from time to time, in cures of a few days or a few weeks, during a vacation for example.

Although abusive mixing is obviously harmful, food combinations can also be useful, as certain foods are only well digested in association with others. Chimpanzees in the wild, for example, systematically eat termites at the same time as the leaves from certain leguminous plants, alternating termites and leaves in successive mouthfuls. Chemical analyses of the termites and the leaves proved that the chimpanzees' behavior was motivated by a digestive necessity: The leguminous leaves contain the specific amino acids required for the proper assimilation of the termite protein<sup>246</sup>. Some mixtures can thus be beneficial. Dr. Shelton also defines the practice of food combinations, not as a radical exclusion of certain combinations, but as "avoiding certain food mixtures in the composition of meals, and recommending others". I share this point of view, which is why, in the table below, we do not use the words "Yes/No" or "Authorized/Forbidden" to designate "good" and "bad" combinations, but "OK" and "To be avoided", as certain combinations are simply more advisable than others.

Another solution for solving the question of food mixtures would be to imagine that our body could manage the situation by making us avoid harmful mixtures and spontaneously orienting us to the mixtures we need, like the chimpanzees. If this were true, there would be no problem. From experience, however, this does not seem to be the case for man. If humans are left to eat freely from a complete range of foodstuffs, even natural food, they have a tendency to overeat by consuming a great number of different foods one after the other, which are then not well digested. The eating instinct of modern man, in front of natural food, indicates if this food is useful to the organism, but does not seem to be able, at least not completely, to manage food associations during the meal. To take an example, if you eat fresh pineapple, its taste will be either delicious or acid informing you whether you will be able to digest it or not, but it cannot tell you whether the (inadvisable) mixture of pineapple with the fish you have just eaten will be acceptable. This is why, even in the framework of a natural diet, certain rules are necessary in order to limit food combinations and set meal times. Instinct cannot do everything: it is just an inner mechanism that should be discovered and taken into account, but which has to be completed by acquired experience (nutritional education, that includes

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 $<sup>^{245}</sup>$  It is difficult to balance one's nutrition between categories A, B, and C when eating only two or three foods per day, whereas it is easy with four or five.

<sup>&</sup>lt;sup>246</sup> Hladik and Viroben, "The Protein Diet of the Chimpanzee in its Natural Forest Environment," Report at the Academy of Sciences of Paris, Tome 279, pp. 1475-1478, October 1974.

food combination rules); all this can then help us to evolve towards an optimal diet. These food combination rules should not be considered as rigid and obligatory, they can be disregarded from time to time. Experience shows that these departures are absolutely harmless if they are made occasionally. Certain food mixtures are mainly harmful when they are repeated.

As Dr. Shelton suggests, food combination rules should be considered as recommendations (incitement), and not as dogmatic dictates (orders). It is not dangerous to consume certain mixtures "to be avoided". It is the repetition of these mixtures that may eventually be harmful.

There is no harm in mixing the following foods during the same meal<sup>247</sup>:

- FF: Various kinds of fruit together. For example, apples, pears, and bananas;
- BB: Vegetables together. For example, carrots, tomatoes, and fennel;
- FB: Fruit with vegetables. For example, banana, cucumber, and green salad;
- SB: One concentrated sugar with vegetables. For example, honey, radish, and red cabbage;
- CB: A protein- or lipid-rich food with vegetables. For example, meat, lettuce, and carrots, or avocado, celery, and cauliflower.

Generally speaking, vegetables contain less sugar than fruit and less protein than Category C foods. This is why they mix well with all other categories of food<sup>248</sup>.

The following mixtures, on the other hand, are not to be recommended on the whole, and should be avoided in most cases:

- CF: a Category C food (rich in protein or lipids) with fruit. For example, avoid: eating almonds with bananas, or duck with oranges;
- CC: a mixture of Category C foods (rich in proteins or fats). For example, avoid eating eggs and fish, sardines and mackerel, or meat and avocado at the same meal. There is one exception to this rule: one can eat different parts of the same animal; for instance, beef, beef liver, and fat can be digested easily (this type of mixture exists in the wild, and we are practically bound to be adapted to it);
- FS: fruit with a concentrated sugar. For example, avoid eating bananas and honey. Very sweet foods (dates and honey) are not very digestible when mixed

 $<sup>^{247}</sup>$  For technical reasons, we have distinguished two subcategories in the A category: Fruit (F) and foods rich in sugar (dates, honey, dried fruit (S), as all kinds of fruit can be fairly harmlessly mixed together, whereas sugar-rich foods (dates and honey) should be mixed either together, or with fruit).

 $<sup>^{248}</sup>$  Most vegetables are more than 90% water; therefore they change the chemical medium of other foods ingested at the same time very little (there is little probability of chemical interactions between vegetables and other foods).

together or with fruit. One should therefore eat fruit *or* honey *or* dates. Avoid fruit and honey, or fruit and dates;

- CS: a Category C food (rich in protein or lipids) with a concentrated sugar. For example, avoid eating honey and almonds. One exception: eating honey (a sugar), bee larvae (rich in protein, polyunsaturated fatty acids and vitamin D), and pollen (a protein-rich food) one after the other at the same meal poses no problem at all. Here again, it can be noted that this mixture is not only possible, but nearly unavoidable in the wild, and we are practically bound to be adapted to this sort of combination;
- SS: concentrated sugar with another concentrated sugar. Concentrated sugars, such as honey or dates should be eaten separately, or together with vegetables, but not mixed together, nor with proteins or fruit. For example, avoid honey and dates, meat and honey, and fish and dates.

Generally speaking, concentrated sugars (S: honey, dates), like C Category foods (meat, fish, eggs, insects, avocado, nuts, cereals) should not be mixed together or with fruit too frequently. Usually, one should just eat one of these foods during a meal, followed by one or several types of vegetables.

All this can be summed up very simply in table form:

	Fruit	Honey	Vegetable	Protein-rich	Lipid-rich
Food		or dates		food	food
category	F	S	В	P	L
	Several	To be		To be	To be
Fruit	fruit:	avoided	OK	avoided	avoided
F	OK				
Honey	To be	Honey and	OK	To be	To be
or dates	avoided	dates: To be		avoided	avoided
S		avoided			
			Several		
Vegetable	OK	OK	vegetables:	OK	OK
В			OK		
Protein-rich	To be	To be	OK	2 proteins:	To be
food	avoided	avoided		To be	avoided
P				avoided	
Lipid-rich	To be	To be	OK	To be	2 lipids:
food	avoided	avoided		avoided	To be
L					avoided

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*Note*: The distribution of food in this table (F, S, B, P, L) corresponds to the categories A, B, and C that we have defined previously: Category A is composed of fruit (F) and sugars, that is to say honey and dates (S), i.e., A = F + S. Category B is composed of vegetables, i.e., B = B. And Category C is composed of protein-rich foods (P) and lipid-rich foods (L)<sup>249</sup>, i.e., C = P + L.

In order to use this table properly, copy it and stick it up in your kitchen. Experience shows that these food combination rules should be applied in the same way to cooked foodstuffs (Stage 0), natural food (Stage II), and mixed diets (Stage I). Some people have already obtained excellent results by simply avoiding certain mixtures (Stage I consists in eliminating various food combinations, while continuing to eat cooked, non-organic foodstuffs). You have everything to gain, therefore, by respecting as far as possible the combinations recommended by this table. I urge you to do so, but not to the point of making a religion of it!

Applying food combination rules, whether in the framework of a conventional diet (Stage 0), an improved diet (Stage I), or a totally natural diet (Stage II), facilitates the digestion. Just a few "bad mixtures" are enough to generate digestive fermenting that considerably reduces one's vitality and enjoyment of life.

It should be noted that recommended food associations are in fact those that are easy to make in the wild: for example, eating honey with pollen, beef liver with beef, figs with grapes, meat with lettuce, since, in the wild, these foods are easily found near together. This coincidence, which seems somewhat surprising at first sight, is no doubt due to the fact that the human body, over thousands of years, has become used to digesting mixtures of foods that are to be found together in the wild. The organism, as it evolved, has apparently developed the enzymes needed for the digestion of combinations to be found frequently in a natural environment: These combinations have therefore been "provided for" by our genetics. Vegetables (green vegetables, leaves, roots, stems, etc., such as salad, cucumber, carrots) are easily found everywhere and in all seasons in the wild<sup>250</sup>, unlike fruit, whose production is seasonal, and protein-rich foods, such as meat and fish, which are more difficult

 $<sup>^{249}</sup>$  Dairy products (milk, yoghurt, and cheese) and flour-based food (particularly bread), that we have not included in our definition of Categories A, B, and C because we do not recommend their consumption should be considered as protein-rich food (P).

<sup>&</sup>lt;sup>250</sup> This is also true of insects that can be found in abundance everywhere in the wild and which, from the food combination point of view can be mixed with all other foods without the slightest effect on the digestion. Insects thus constitute an exception to the rule of not mixing protein-rich foods. The fact that they can be eaten harmlessly along with other foods is an indirect consequence of the fact that insects are a very abundant natural food resource, which is not true of other protein sources (particularly meat and fish).

to obtain. It is undoubtedly because they are so abundant in the wild that vegetables are easy to digest when mixed together or with any other food: we have had numerous opportunities in the past and all the time we needed during the evolution of the species to become adapted to the digestive molecules produced by mixtures comprising vegetables. On the other hand, rare foods, that are more difficult to find in the wild, do not mix well together. One should preferably only eat one per meal, mixed if one wishes with vegetables, available everywhere: This is true of proteins, such as meat, fish, and eggs, but also of honey, dates, etc. The probability of finding honey or meat in the wild is low but not zero, which is why we are nonetheless adapted to these foods. However, the probability of finding two rare foods in the same spot (honey and meat for example) is infinitely lower, which is why we are less well adapted to this type of mixture.

To come back to the composition of our daily meals, a rare or seasonal food should not be eaten during the same meal with a second rare or seasonal food. When one eats meat or fish, for example, one should avoid eating eggs or fruit at the same meal, but there is nothing to prevent one from eating vegetables as dessert or insects as starters.

Some food combination rules are traditionally respected in our civilization; it is customary to eat meat or fish, but not both at the same meal.

Fruit can also be mixed together, for example bananas with grapes, or apples with pears, etc. One should avoid mixing too many different fruits at the same meal, however, as well as mixing fruit with proteins. "The acids contained in fruit do not mix well with proteins", wrote Shelton, as we have previously pointed out.

In practice, the standard meals that we propose in this book respect these food combination rules: One or several sorts of fruit for the midday meal (vegetables optional); and one Category C food (rich in protein or fats) with one or several types of vegetable for the evening meal. These typical meals are given for information only and there is no harm in departing from them, provided one always eats at least one sort of food from each category every day (to avoid deficiencies), that is to say, on average, per day, about 50 % fruit or sugar-rich food (Category A), 30 % vegetables (Category B), and 20 % protein- and lipid-rich food (Category C).

## Food quality is paramount

"Dietetics and medicine will only progress when it is remembered that the soil produces man's food."

André Voisin.

Food quality is an essential factor, both for eating enjoyment and health. Eating better means above all eating better quality food. Unfortunately, a great deal of the food that is to be found today in the stores has been processed, sterilized, precooked, frozen, irradiated, and no longer very natural! The following three degrees of quality can be distinguished:

- Commercial quality: The foodstuffs available in stores are produced according to criteria of economic profitability (always produce and distribute more as cheaply as possible), and of visual attraction (large-sized, flawless, and highly colored produce sells better). The producers, wholesalers, and retailers therefore find it advantageous to offer the public produce that has been artificially forced with chemical fertilizers, and whose color has been studied just as much as an advertisement. Chemical agriculture using synthesized fertilizer enables growing large-sized fruit and vegetables, which are visually highly aesthetic, although they are actually swollen with water and nitrates, contain few nutrients and are heavily loaded with pesticides. Commercial quality foodstuffs are found in most groceries, markets, and supermarkets. Most of it, especially fresh produce, is acceptable for an intermediate diet (Stage I), but is not really natural and should be consumed with a certain reserve (especially for a Stage II diet). Lacking better quality food, it is therefore better to eat it raw rather than cooked, as cooking will only alter it even more.

Just acceptable for a Stage I diet (with wariness and in limited quantities), the following foods should never be eaten in the framework of a Stage II diet, as they have been denatured thermally through cooking or heat-drying (we have seen that this is one of the main causes of molecular denaturation):

- Food in tubes or cans (olives, for example, even if the label says "Natural Olives", which guarantees nothing at all, as all olives are of natural origin, their maceration and cooking are certainly not natural). The same food, on the other hand, can be eaten in its natural form (in a Stage II, for example, one should not eat apple sauce, but fresh apples; organic-quality apple sauce or non-organic fresh apples belong to a Stage I diet, which is preferable, of course, to no nutritional concern at all);
- Dried food (dried bananas, figs, dates, fish, whole or unshelled nuts, etc.), as the drying temperature is over 50° C: It has all undergone a considerable thermal alteration, even if this is not visible;

- Regular quality honey, which has usually been heated (even certain organic-quality honey<sup>251</sup>);
- Nearly all meat (red or white), offal, poultry, eggs, and fish farm fish (particularly trout and salmon), as these fish are fed synthesized food and accumulate toxins in their flesh;
- Organic quality. The advocates of organic farming have reacted against the excesses of chemical agriculture and propose different agricultural standards, with no pesticides, additives, insecticides, or harmful treatments such as D.D.T., most of which are detectable by chemical analysis. Organic quality is definitely preferable to commercial quality. Organic fruit and vegetables are perfectly suitable for a truly natural diet. However, there remain two major problems that are not taken into account by organic farming: thermal denaturation and the selection of species. Many products carrying an "organic quality" label are heated, which constitutes a considerable and underestimated molecular alteration. This is the case, for example, of most nuts (often heated even when sold whole in health-food stores), and certain honeys and dried fruit distributed in health-food stores, which are dried at temperatures of up to 100° C, in order to prevent mold. They have therefore been considerably altered thermally and no longer have all the qualities of fresh produce. All dried dates (fresh dates are preferable, provided they have not been frozen), dried fruit, and many other imported organic foods are also submitted to considerable heat treatment, which is neither forbidden, not limited by present organic farming standards. Bananas, pineapples, and mangoes, for example, like other imported exotic fruit, are often immersed in hot baths containing various substances (this treatment can be "natural" in the case of organic produce, but the heating, passed over in silence, is never natural).

In addition, much organic produce, although grown following excellent criteria (tomatoes, cucumber, meat, for example), is then packed in heat sealed plastic, an operation that thermally alters the product. These examples clearly show that organic food, although distinctly superior to other products, is far from perfect. A stricter label, excluding all thermal alteration would certainly be preferable. In addition, some of the compost methods sometimes used in organic farming to replace conventional fertilizers, can also produce a thermal alteration. Certain compost techniques consist in gathering vegetable substances (grass, hay, or waste, etc.) in a heap about 1 meter high. The chemical reactions of the fermentation produce a great deal of heat, with temperatures spontaneously reaching 70 or

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<sup>&</sup>lt;sup>251</sup> Honey is often heated several times: first when the wax plug closing the cells of the honeycomb is removed with a hot wire or knife, then when the honey is extracted so that it is more liquid and easier to collect, and finally, after its harvest, to sterilize or liquefy it, or, on the contrary, to induce its crystallization.

80° C<sup>252</sup>. This type of compost is not natural, as, in the wild, fermentation occurs but at the same temperature as the ambient temperature, due to the fact that one never finds 80 cm-high heaps of grass or waste. Although organic produce is always preferable to non-organic produce, one should be wary of the use of heated compost, especially in a Stage II diet, and, if possible, avoid eating produce that has grown on it.

- Truly natural quality. Stricter than organic quality, this concerns fresh produce meeting all the requirements of organic farming (no chemical treatment), which has not been thermally processed by cooking, heat drying, freezing, or the use of heated compost (no thermal treatment), and which, in addition, comes from correctly grown species that have been selected as little as possible (species genetics better suited to our own genetics). A label of quality guaranteeing food of organic quality that has not been thermally processed has been defined by the Bruno Comby Institute. However, for the time being, unless you live near a company distributing instinctive-quality foods, one has to find the producers and the produce that meets these criteria oneself. Here are some suggestions as to how to go shopping without making things too complicated (these aspects of food supply are very important once you practise the diet, and should therefore be dealt with carefully).

## At the fishmonger's or in a supermarket, you can buy:

- Sea fish (sardines, mackerel, herring, tuna, etc.) provided it has not been bred or fed with industrial foods (salmon or trout if not wild, are always farmed), frozen (a label is obligatory in most countries, as defrosted fish should never be refrozen), or irradiated (the irradiation of food has to be mentioned only in certain countries, such as in Europe in particular, but imported products may have been irradiated in their country of origin...);
- Shellfish (mussels, oysters, clams, scallops, etc.), provided they are whole, in their shells, and have not been frozen or cooked. Sea oysters are preferable to farmed oysters which are more easily polluted or treated;
- Lobsters, shrimps, prawns, crayfish, and crabs, provided they are fresh, whole, and have not been frozen or cooked.

In the supermarket, you can buy, in addition to fresh sea fish or shellfish as described above, bottles of spring water, flat or sparkling mineral water, passion fruits, and coconuts<sup>253</sup>. Some supermarkets have an exotic produce counter that is often well stocked in fruit, but of very uncertain quality. Be particularly wary of the meat, eggs, nuts (high-temperature-dried, except for coconuts), and honey (heated

<sup>&</sup>lt;sup>252</sup> Especially if the plants are young with a high nitrate content, such as, for example, lawn mowings.

<sup>&</sup>lt;sup>253</sup> These keep so well and so long in their natural state that they are not usually treated, but simply collected and distributed as they are.

and bees fed with industrial sugar) you find in the supermarket, as they always come from farms, slaughter houses and industrial warehouses that are not compatible with our criteria. It is better to refrain from buying them and find more reliable sources for these kinds of product. The quality of supermarket fruit and vegetables is usually poor, and, on the whole, I advise you not to buy them except in some locally specific situations<sup>254</sup>. Some supermarkets sell food of organic quality, which one can buy provided it has not been irradiated, avoiding thermally processed produce (heat-dried nuts such as peanuts or walnuts, which is almost always the case, and is not detectable visually). Avoid also packing in heat sealed plastic, which is quite frequent and heats the food during the sealing operation, not only the plastic.

In local markets or health food stores, you can buy all fresh fruit and vegetables, preferably in season, non-processed, and as far as possible, of organic quality. One should completely eliminate hydroponically-grown produce (particularly tomatoes from Northern Europe, Belgium, and Holland, which are mainly grown without earth, by means of chemical products, and which, do not have any taste anyhow).

Directly from the farmer, paying particular attention to quality<sup>255</sup>: Honey (preferably on the comb, making sure it has not been heated or stirred, extracted without heat and that the bees have not been fed on sugar, even in the cold of the winter season); nuts and oleaginous fruit, in their shells, dried and stored at ambient temperature (beware of heat drying and shelling which causes oxidation and means that the nuts go rancid fairly rapidly without antioxidant treatment); eggs and meat (from animals exclusively fed on natural fodder from birth; be careful, for example, of animals that have been fattened with synthesized foods, irradiated or heat-dried cereals, and of meat that has been systematically jointed by immersion in a hot bath).

Do not forget that heated food (dried bananas bought in the supermarket, nuts bought in a health store, regular honey) has already been considerably transformed from the chemical point of view. If you expect good results from a raw diet, and especially if you are seeking therapeutic results, it is preferable to refrain rather than eat products of questionable quality: do not eat processed, irradiated, cooked, heated, or heat dried foods, or foods that may have been submitted to these treatments. Wherever one lives and whatever one's food budget, at the very worst, one can always eat fresh fruit, fresh vegetables, sea fish, shellfish, and seed sprouts.

### The preservation of raw foods

<sup>&</sup>lt;sup>254</sup> It is obvious, however, that it is better to eat even non-organic fresh fruit from a supermarket than canned food, or a totally traditional diet.

<sup>&</sup>lt;sup>255</sup> See some addresses at the end of the book for guaranteed natural, non-heated, non-processed produce.

All chemical reactions slow down when the temperature decreases. This is why food can be kept longer if one puts it in the refrigerator. One should, however, avoid freezing which considerably alters living matter, as the formation of minute ice crystals tears the cell and intracellular membranes $^{256}$ . Meat, fish, and seafood resist the cold well and can be kept for a long time at about  $0^{\circ}$  C ( $\pm$   $2^{\circ}$  C) in a refrigerator or cold room $^{257}$ . Storing fish on slabs of ice, the usual practice of fishmongers, is acceptable as it does not alter the food while keeping it cool. Most fruit and vegetables can be kept several days at room temperature. One can keep them longer by storing them in a cool place, such as a cellar (about  $12^{\circ}$  C), a refrigerator, or a cold room, if the temperature does not drop below about  $7^{\circ}$  C. Fruit does not resist the cold as well as vegetables, especially exotic fruit such as bananas. It is often practical to simply leave fruit on the dining table in a big basket. Children can help themselves when they feel like it and the fruit is always ready for the next meal.

#### Germinated seeds: a natural food rich in vitamins

"God said: I give you all the seed-bearing plants that are upon the earth and all the trees with seed-bearing fruit; this shall be your food."

Genesis, Chapter 1, verse 29.

Cereals are usually eaten by man in the form of bread or cakes. Human beings do not find raw seed very appetizing. In the wild, birds with crops, rather than man, eat seeds. There is, however, a completely natural way of eating seeds: making it sprout. The seeds become more tender, easier to handle and chew, better to the taste, and their chemical composition is enriched with vitamins during the germination process.

Seeds exists everywhere in the wild. They are highly vitalizing and delicious, easy to digest, can be eaten just as they are, and can easily be made to sprout in a little water. Seed sprouts are cheap as one kilogram of seed produces between three and ten kilograms of sprouts after germination. They are, therefore, a food that is environmentalist, cheap, easy to grow (children love growing them), and good for the health. In 1984, after a series of experiments, Professor David Beghin<sup>258</sup> concluded that seed sprouts were an exceptional food, not only for the dietary

<sup>&</sup>lt;sup>256</sup> This produces numerous chemical reactions in frozen food because the many enzymes and molecules contained either side of the membranes (cell membranes, mitochondria, etc.) are suddenly put in contact with each other and interact in a way that would not have been possible without freezing. Freezing, however, is still a minimum alteration compared to cooking. A frozen and defrosted product is still similar to the fresh product (although it is dead from the cell point of view), whereas a heated product soon loses its color, aspect, consistence, and taste, and has not much in common with the initial product.

 $<sup>^{257}</sup>$  Fish, meat, and seafood do not freeze at O° C, but at a lower temperature (about - 5° C), as the water they contain is salty, which reduces their freezing temperature.

<sup>&</sup>lt;sup>258</sup> Prof. David Beghin, Department of Human Nutrition, Washington University, U.S.

equilibrium of the inhabitants of developed countries, but also one that could enable the inhabitants of under-developed countries to eat properly. One can make all kinds of grain sprout: green soy in four days, rice in three, lentils in four, alfalfa in six, chick peas in four, unshelled sunflower seeds in two, etc.

In fact, all seeds are made to sprout and the most natural way for a human primate to eat them in the wild is not in the form of bread or raw seed, but in the form of seed sprouts. Our cousins the chimpanzees love young seedlings of various plant species in Africa.

In the wild, whole seeds before their germination are too small to be collected by an ape or a man, especially as they are usually hidden by grass. Birds, which are closer to the ground than we are, can find seeds more easily than we can, and their beaks are more suitable for picking up these tiny objects, unlike a primate's hand. Finally, birds have a gizzard specially adapted to digesting and crushing seeds, whereas man's stomach and digestive juices are unable to neutralize the phytic acid present in many seeds before germination. For primates, young seedlings are more tender to eat, and easier to locate and pick up in the wild, which is why we are more adapted to eating seedlings than dry seed. In addition, seeds are more digestible when sprouted than raw, as the phytic acid they contain is neutralized during the germination process. Seedlings are eaten by numerous species of ape in the wild, and, along with insects, constitute their main source of food protein. This is the case in particular of gorillas living in the mountains of Rwanda, whose diet had been studied in detail by Diane Fossey.

Considerable chemical changes occur in the seed during its first days of growth. The quantity of vitamins A, B, and C increases, as the plant needs them to grow. For example, the vitamin B2 content of mung beans increases tenfold between the first and tenth day of germination. Many enzymes that are indispensable to the growth of the young plant are also synthesized and the starch of the seeds is changed in more digestible sugars, such as dextrin. Seed sprouts therefore have numerous advantages from the nutritional point of view.

# Tips for sprouting seeds at home

- Gather the following equipment: Four jars or bowls, four pieces of mosquito net, four elastics;
- Buy grain that is preferably guaranteed non-heated and non-irradiated, the best being if possible "truly natural" quality. This point is important, as most seeds sold as food, even seeds of organic quality sold in health stores, are heat dried and some can be irradiated. The aim of these treatments is to kill parasites, avoid mold, and/or inhibit germination in some cases, but they alter the nutritional quality of

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the seed, and sometimes its germination potential. Seed which does not germinate is seed that has been processed by a treatment of some kind: heating, irradiation, or chemical. The contrary, however, is not necessarily true: the seed may germinate, but this does not mean that it has not been heated or treated. Store-bought seed is usually treated, at least thermally<sup>259</sup>. One should therefore make sure that the seed one buys is of good quality; the best solution is to buy it directly from the farmer with the guarantee that it has been grown organically, with no irradiation or heat drying after its harvest, the latter being the most important point and the most difficult to verify;

- Soak the seeds in water in a jar for 12 hours at ambient temperature (about 20° C). The quantity of seed should not fill more than 20 % of the volume of the jar, because the seeds will at least triple in volume. The quantity of water should cover the seeds to double their depth in the jar, as they will absorb several times their own volume in water in just a few hours. During this first soaking, it is preferable to use pure or mineral water. Cover the jar with the mosquito net, secure it with a rubber band and let the seeds soak. After 12 to 24 hours, drain the jar by turning it upside down and rinse well. You can use ordinary faucet water to do this, even if it is slightly chlorinated, as the seeds are not being nourished, but rinsed, and the water is not absorbed by the seeds as much as the first water used for soaking;
- The growth of the seeds then continues in a humid environment rather than in water. Leave the jar upside down to drain it. Once a day (morning or evening), rinse it with water;
- The seeds will gradually increase in volume then germinate. They can be eaten from the second day onwards. The seedlings will then be a few millimeters (second or third day) to two centimeters high (around the fourth or fifth day, depending on the seeds);
- To slow down germination (if you have to go away for a few days, for example): Place the jars in the refrigerator. A drop in temperature of a few degrees is enough to considerably slow down the germination rate;
- *To accelerate germination*: Raise the temperature of the jars a few degrees by placing them in a warmer room or above a radiator (not exceeding 30-35° C);
- *If the seeds start to go moldy as they germinate*: Rinse them more often, twice a day instead of once;

 $<sup>^{259}</sup>$  Cereals and seeds (soybean, for example) are usually dried at about  $80^{\circ}$  C, so as to kill insects and mold; at this temperature, the seed preserves nearly all its germination potential, but is already thermally denatured and contains a certain proportion of new chemical molecules produced by the heat effect.

- The seeds are usually eaten after about four days of growth. This is why it is practical to always have four jars of seeds in the process of germination, each with 24 hours difference. One can thus harvest the contents of a jar each day, and start soaking new seeds in it. A rotation with the four jars thus enables harvesting a jar full of delicious sprouts every day;
- The quantity of seed made to germinate allows the harvest to be dosed according to one's appetite and the number of persons to be fed. This germination process can be used by just one person, a family, or even a larger group of people.

You will be surprised to discover the highly varied, unexpected, and delicious tastes of seed sprouts; they can be eaten just as they are in the framework of a 100 % natural diet (Stage II), or in a salad in the framework of a mixed diet admitting mixtures and seasoning (Stage I). Seed sprouts are highly vitalizing: whatever your diet (vegetarian or carnivore, raw food or cooked), simply eating more sprouts provides a considerable amount of extra vitamins, particularly group B vitamins.

## How to dry meat and fish in the open air like the Eskimos

The Eskimos used to dry meat and fish in the open air before eating them. In the Middle Ages, a similar method was used to hang meat<sup>260</sup> and game which was not eaten fresh. This was common usage in Europe, the States, and in Asia. As man is not directly a carnivore, he is not well adapted to eating meat that is too fresh, which is why butcher's meat is never sold too fresh, but is left several days in cold storage. The Eskimos' drying technique is simple to put into practice at home: one just has to hang the meat or fish in a dry environment, at ambient temperature or in a refrigerator. Fish should be first emptied and cut into fillets, while meat should be cut into quarters or slices of various size. One can dry thin slices of meat or whole legs of lamb. The drying time depends on humidity and temperature. Humidity should be as low as possible; meat dries better in a dry location, as in a moist atmosphere, it will go bad rather than dry. The drying temperature should range from 0° to about 35° C. To preserve fish and meat longer, the temperature should be decreased to 0° C in a cold room or refrigerator; the drying process is then slower and the meat can be stored much longer (this is the case, for example, of the meat in a butcher's cold storage room, which can be stored for several weeks before being eaten). The higher the drying temperature, the sooner the product should be eaten.

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 $<sup>^{260}</sup>$  Meat is traditionally dried in the Alps and ham in the Massif Central in France, although present day drying methods are now industrialized and considerably exceed natural temperatures (a thermal alteration that did not exist in the past).

At 30° C, meat will spoil fairly rapidly and should be eaten the very same day or the next day at the latest.

Meat or fish left to dry should not be wrapped in paper or placed folded over in a dish, as it will then go moldy in its own juices instead of drying properly and anaerobic bacteria may proliferate. The fish or meat should be hung in a dry and well-ventilated place. The Eskimos used wooden poles or reindeer horns to hang their fish fillets to dry. Do not forget that an unpleasant odor means that a product should not be eaten. The drying meat or fish should be protected against flies (to prevent maggots) by means of mosquito net; it can be dried in a pantry, a cellar, a refrigerator, or simply protected by mosquito net. The delicious taste of meat dried Eskimo fashion will delight many a palate!

#### How to eat better at the restaurant and at business lunches

This is the basic topic of Michel Montignac's research and his popular diet, designated Stage I according to our own classification. Many people think that it is difficult to eat well when one is invited to parties, receptions, cocktails and restaurants for professional reasons. Nothing of the sort. In fact, one can always eat better anywhere. One always chooses what one swallows and there is always a minimum of choice! Faced with a buffet, the choice is really wide; you can help yourself to salads of raw vegetables (Stage I) and fruit (Stage II). At the restaurant, there are usually a good number of menus ranging from the most indigestible (cold cuts and mayonnaise) to the most environmentalist (raw salads, fruit, etc.). There again, choose what most appeals to you: a dozen oysters, a plate of seafood, raw vegetables, or fruit. People who have adopted a Stage I diet have more room for maneuver, as they can depart from Stage II principles.

Wherever you find yourself, you can nearly always choose a raw vegetable salad as a starter or the main dish (seasoned or not, as you wish). And, for dessert, a basket of fruit will do the trick wherever you are. When traveling, one realizes that eating better does not depend so much on the place, nor on outside constraints, professional or not, but on personal choice. Everyone has to choose for themselves!

The most difficult thing to change, and the most important, is not outside oneself (business invitations, temptations, the kind of dish served in restaurants, etc.), but one's own beliefs and behavior in everyday life.

As company restaurants are usually self-service restaurants, one can easily opt for more environmentalist dishes, according to taste.

If you invite friends out, why not go to a Japanese restaurant that serves raw fish as a specialty?

If you eat little because you are not very hungry or because your diet is different from that of your fellow diners, never try to justify your way of eating by imposing it on others. Everyone is free to eat what they want! On the contrary, take an interest in the dishes served to the other guests, and praise their choice: if you respect the choice of others, you will see that you will be respected in exchange. The worst thing one can do is to try to impose one's way of thinking or eating on others; this type of attitude never gives good results. We are all free to smoke or not smoke, to choose our destiny, to eat in whatever way we want, and to drink alcohol or be teetotallers. We must be tolerant, as difference is richness; life would be very monotonous and sadly stereotyped if we all lived according to the same model.

Over the last few years, I have had the opportunity to travel to a great many countries and I have very frequently been invited to luxurious restaurants for business meals in Rome, Geneva, Paris, Munich, and London, for sometimes very delicate discussions or negotiations. I have always eaten my fill, in a natural way, of raw foods (Stage II), and I can guarantee that these meals were delicious and never dull!

## How to eat better when traveling

Drinking water and food stores selling fresh fruit and vegetables can be found all over the world. Wherever one finds oneself, one can therefore eat a Stage I or Stage II diet. In planes, one can either prepare a small picnic, ask for some fruits, or take advantage of the trip to fast (a plane trip lasts 24 hours maximum). Some airline companies (Air Canada, for example, was the first company to offer this service) even offer their customers organic food, fruit, or vegetarian food, provided they are notified a few days in advance when buying one's ticket. Skipping a meal from time to time gives relief to one's digestive system and is very good for the health, so why not take advantage of the trip to fast a few hours or even a whole day? A short fast is not tiring when practised regularly, but, on the contrary, gives one new vitality. It is wrong to think that one is necessarily tired if one does not eat. The contrary even happens the first few days (for those who are used to fasting): not having anything to digest releases extra energy<sup>261</sup>. Personally, I always take a literbottle of mineral water along in my briefcase on a trip, so as to quench my thirst during the day. Thus, eating lightly or environmentally does not pose a problem when traveling.

<sup>261</sup> 40 % of the chemical energy supplie	ed by food is used for digestion!
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## How to eat raw foods at a cocktail party.

Parties and cocktails with their weight of traditions are usually an occasion for drinking and eating just anything, while telling oneself that one will not do it too often. There must be another way of participating in these ritual cocktail parties, without stuffing oneself with petit fours and alcohol. If you prefer to avoid alcohol (if you are driving, for example), ask for your favorite brand of mineral water: the era of the whiskey-drinking hero is past and temperance has become a valued and remarkable virtue. When you arrive, first go around meeting and speaking to people, for business or pleasure. When the time comes to eat, aim for the fruit and vegetables (raw salads), if there are any. If not, you are not obliged to eat anything: get yourself a large glass of water. When toasts are proposed, ask for mineral water. The days when one felt it one's duty to smoke a large cigar and down one's drink in one go in order to look good are over. Things are more reasonable today, and no one will resent your drinking a toast with water. A tip with respect to the ritual wine or champagne that it is sometimes difficult to refuse during a business lunch or family celebrations: allow yourself to be served and give a toast (distinctly and loudly, so as to be noticed) with your glass full of alcohol; everyone will watch you while you clink glasses and offer your best wishes to your friends and fellow guests, then simply put your glass of wine or champagne down on the table. No one will notice whether you drink the contents of your glass or not, as everyone will be busy emptying theirs. In 99 % of cases, even your neighbors will not notice that you have not drunk anything. You can also ostentatiously smell your glass of champagne, pretend to sip it without necessarily drinking, and put it down again without having drunk a single drop. Then pick up your glass of water again and there you are!

It should be noted that a glass of good wine or good champagne, even if it is not a very useful food (the consumption of alcohol is completely eliminated in a Stage II diet), is not very harmful either. These are foods of intermediate quality whose consumption is admitted in a Stage I diet<sup>262</sup> (a glass of wine or champagne, preferably of organic quality, is better than a plate of french fries, a pizza, or bread and cheese, if one does not exceed two or three glasses a day).

#### A raw diet for beautiful children

"Mothers, feed yourselves and your children properly in order to build a normal society."

Dr. Catherine Kousmine.

 $<sup>^{262}</sup>$  Wine and champagne are nearly natural foods: they are not denatured thermally (all the vinification operations are performed at ambient temperature), but are simply fermented, pressed, and filtered grapes (there is a slight mechanical denaturation), with a chemical structure similar to that of grapes on the vine, but slightly fermented.

Learning how to eat properly should be taught to children at school at an early age. What happens today? They are denied their mothers' breast and fed on cow's milk which is only partially suitable, then they start eating baby foods, after which they are fed soup, bread, sweet drinks, yoghurt in pots, chips, chocolate, and fried potatoes, when they are not fed Coca-Cola, coffee and wine in their bottles, as I have seen people do in the country. What will these babies' health be like when they are adults? Is the deficit of social security funds surprising? It is crucial for an infant to learn how eat properly, just as it learns how to speak and walk. Whatever the domain, good habits are acquired early on in life. This also applies to nutrition: we must not wait until our children are older and already ill to start their dietary education. In our society, the only groups concerned by this aspect are the large food industry groups whose teaching is obviously oriented towards advertising and the consumption of their products (baby food for very young children, then desserts and all kinds of dishes for older children), which are evidently always elaborate, refined, purified, or supplemented to justify their price. Yet none of these adulterated foodstuffs are necessary for the health of adults, or children's growth. Unfortunately, numerous parents and children are fooled by television commercials designed to optimize the profits of the food industry, which then sells us all kinds of adulterated foods supposedly full of health-giving nutrients, whereas we would be much better off eating raw carrots, green salads, apples from the garden, and nuts!

While waiting for better nutrition to become part of school curriculums, the nutritional education of children should be achieved by parents or private groups, independent of the food industry. The government, health insurance companies, and large firms are certainly the best placed to undertake such preventive educational and nutritional action for the public, as they can expect direct financial gain: a decrease in health expenditure and better productivity.

With a well-balanced natural diet, children grow up harmoniously, splendidly, in good health, and thrive without any childhood diseases. Children must obviously be breast-fed. Maternal milk should be a baby's exclusive and indispensable first food. When the mother's diet is well-balanced, breast-feeding usually poses no problem. Then, at the same time as its mother's milk, the baby can start eating some of the foods its mother eats. It will, in fact, ask for them spontaneously, by stretching out its hands, opening its mouth, and turning towards her when she is eating certain foods. Its parents can then let the baby taste what it is asking for. To begin with, the baby is not able to chew properly. The parents should chew the food first (especially if it is hard, like a hazelnut or a carrot), and then give it to the baby in a spoon or directly from mouth to mouth like all primates. Thus, during the first few months of its life, the baby becomes used to tasting the food its

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parents eat, in addition to being breast-fed. To begin with its food has to be chewed and salivated by its mother, then, as its teeth begin to appear, it can be progressively given natural foods in addition to its mother's milk, starting with soft consistency foods, such as avocado, peaches, or bananas. The child is weaned spontaneously when it no longer wants to suckle, around the age of three<sup>263</sup>. Children are subsequently fed the same diet as their parents. Children are to be seen asking for raw foods, not only fruit and vegetables, but also meat, fish, and insects (which they often adore and eat spontaneously when they have not been forbidden to do so). Children need a wide variety of foods to ensure proper growth: fruit, vegetables, and proteins, including a certain amount of animal protein. I do not recommend vegetarianism for children, who, in fact know very well how to make their nutritional wishes known and choose what they want to eat. They do need a wide choice of good quality products: they should be given a sufficient quantity of foods rich in the protein necessary for their growth, especially animal protein (meat and fish), as well as foods rich in calcium (green vegetables, nuts, fish, etc. as we have seen that we should be wary of cow's milk) for their bones. Children should eat more often than their elders, as their growth is rapid and their needs greater than those of adults in relation to their weight (more intense physiological activity). This is why a snack in the morning, one in the afternoon, and a light meal before going to bed, are necessary up to the age of about ten. The best gift you can offer your children is to give them a good education, good habits, and good health, which will serve them well their whole lives through!

# Nutrition and pregnancy

During pregnancy, women's nutritional requirements often change. Special "envies" such as eating raspberries or strawberries or other raw foods often appear. A pregnant woman should obviously refrain from smoking, drinking coffee and alcohol, and taking drugs, as this would intoxicate the baby inutero before birth. She should also pay particular attention to her diet, as the harmonious development of her child depends upon it. With a well-balanced natural diet, pregnancy progresses normally and the symptoms which often accompany the gestation period (fatigue, nausea, varicose veins, swollen legs, etc.) are minimal. My experience by observing raw foodists is that these symptoms even go unnoticed if the mother's has been on a proper diet for several years previously. In addition to the advice given in this book, a pregnant or breast-feeding woman should ensure she eats a sufficient amount of foods rich in protein, calcium, and iron:

 $<sup>^{263}</sup>$  Primate young are suckled for about 3 to 5 % of the animal's life, which, assuming normal human life expectancy to be 100 years, means that the duration of breast-feeding for humans is of the order of 3 to 5 years. This poses certain practical problems in modern day life for working mothers.

- Foods rich in protein (Category C): Nuts, seed sprouts, meat, fish, eggs;
- Foods rich in iron: Meat, figs, green vegetables (lettuce, spinach, etc.);
- Foods rich in calcium: Nuts, green vegetables, cauliflower, etc.

One can note that nuts, green vegetables, and animal protein (meat or insects) appear twice in this list, and therefore play a doubly important role during the gestation period.

# A raw diet to rejuvenate senior citizens

"The age at which one decides to stay young is no importance."

Henri Duvernois.

A small population on the border of the Himalayas fascinated scientists during the first half of the 20th century: the Hounza. Among them were to be found very numerous hundred-year-olds, still able to work vigorously, although this is a rare occurrence in the West. A detailed investigation of their way of life showed that their longevity was mainly due to their very frugal and unadulterated diet (at the time, they knew nothing of chemistry or modern cooking<sup>264</sup>). Unfortunately for them, contact with the modern world has led them down the road to decadence: a road was made across the mountains allowing access to their valley. Numerous tourists and tradesmen soon visited them and they now eat canned foods, on which they have become dependent, although they lived in total autarchy until the middle of the 20th century. Today, they no longer farm and have become a prey to alcohol and cigarettes. The result: just like the Eskimos, mortality and criminality in the Hounza population have terribly increased and their degradation no longer permits them to be cited as an example or rather they are the perfect example of the errors of our civilization. Their very rapid decline, like that of the Eskimos, shows in addition (this is a very distressful demonstration, but a lesson can be drawn from it) that the quality of the life and health of a population does not depend on where they live (they still live in the same region), or on its genetics (they are still the same people), but above all on their way of life and their diet.

Ageing depends in large part on what we eat<sup>265</sup>. It is well known, for example, that smoking accelerates the appearance of wrinkles in women, and Roy Walford (an American scientist) thoroughly studied the relationship between dietary habits and gerontology. Eating better is useful at any age, but is particularly indispensable when the organism begins to tire<sup>266</sup>. One can improve one's diet at any age and it is

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<sup>&</sup>lt;sup>264</sup> R. Mac Carrison and H.M. Sinclair, Nutrition and Health, Faber and Faber, London, 1953.

 $<sup>^{265}</sup>$  A.N. Exton-Smith, Physiological Aspects of Aging: Relationship to Nutrition, American Journal of Clinical Nutrition, Vol. 25, pp. 853-859, 1972.

<sup>&</sup>lt;sup>266</sup> W.C. Alvarez, Enzyme Defect Can Induce Cell Aging, Geriatrics, p. 72, August 1970.

never too late to do the right thing! With a standard diet comprising adulterated and processed foods, the organism becomes increasingly intoxicated as time goes by. The metabolism functions increasingly poorly. I have seen dozens of elderly people adopt a natural diet and obtain an improvement of many disorders linked to age (cholesterol, excess weight, troubled sleep, pains, rheumatism, etc.). At any age, eating better makes one feel lighter, more dynamic, and ten years younger. The benefits of better nutrition for elderly people are the same as for other adults, but they are all the more visible when the biological machine has been upset by a poor diet<sup>267</sup>. A better diet enables one to stay younger longer: as it supplies the organism with no poisons, only the substances it needs, it facilitates the life of the cells that can thus function harmoniously for a much longer time than if we just ate anyhow. Other factors, such as genetics, the environment, stress, sleep, one's professional environment, etc., can also affect ageing, which is why nutrition alone is certainly not an elixir of life guaranteeing eternal youth, but is nevertheless the main factor affecting cell ageing.

While I was working on this manuscript, I met an eminent and astonishing member of the Academy of Science, Professor Théodore Monod, 92 years old. Thirty years after having retired, he continues, despite his venerable age, to work every day in the Natural History Museum in Paris, teach, write books (he has already published about fifteen), militate in favor of pacifism, initiate new projects, grant television and radio interviews, meet numerous other scientists, with whom he collaborates, in his office, and he still fairly frequently participates in expeditions to the desert, during which he walks up to 20 kilometers a day. What was the secret of his incredible health, and how did he have all this energy at such an advanced age? I asked him and do you know what he replied? He explained that he paid particular attention to his diet. A strict vegetarian for 40 years, he eats little, fasts from time to time (sometimes several days, often in support of the many causes he defends), and avoids over-elaborated foodstuffs. And he has a little secret: he learnt to eat insects in the desert and, whenever he has the opportunity, eats a little grasshopper powder. A few days after our meeting, he took the plane for Mauritania for an exploration in the Sahara on camelback...

The important thing is not live a long time, but above all to live well. A better way of life means one can win on both counts: one can live longer *and* better.

## Precautions to take for a safe and healthy raw diet

"The destiny of nations depends on the way they are nourished."

<sup>&</sup>lt;sup>267</sup> M.E. Page, Young Minds with Old Bodies, Bruce Humphries, Inc., Boston, U.S., 1944.

By respecting the following few recommendations, everyone can, at his own pace, safely orient himself towards a more natural diet:

#### 17 commandments for a better diet

(To photocopy and display in your kitchen)

- 1. Eat plenty of raw fruit and vegetables, preferably of organic quality.
- 2. Avoid sectarian, intolerant, dogmatic, or philosophical teachings, as well as those not based on authentic scientific studies.
- 3. Alter your food as little as possible, and avoid adulterated foodstuffs (canned food, cold cuts, etc.), as well as cooked fats and all cooked food: eat more raw food.
- 4. Enjoy your food. Meals should be eaten with good humor. The family dining table is a joyful, not sad place, a place for conversation, communication, and conviviality; no one should remain closed in on himself: turn off the television during meals.
- 5. Do not eat too many types of food at the same meal. Minimize mixtures, taking into account food combination rules (above all avoid too much mixing of protein-rich foods during the same meal, as well as protein-carbohydrate mixtures). Too many mixtures can cause intestinal fermentation and somnolence.
- 6. Always have a variety of foods naturally rich in fiber and vitamins available on the table: a basket with several kinds of fruit and vegetable. Eat at least one piece of fruit, one vegetable, and one protein-rich food every day (meat, fish, eggs, shellfish, nuts, or seed sprouts). Vary your supplies from time to time. A sufficient variety will prevent any risk of vitamin or oligoelement deficiency.
- 7. Respect approximately the following proportions of the three nutritional categories: Category A: 50 % (fruit sometimes replaced by honey or dates), Category B: 30 % (vegetables), Category C: 20 % (food rich in protein or fats: meat, fish, eggs, nuts, seed sprouts). This will more or less guarantee correct proportions of the main nutrients: proteins, carbohydrates, lipids, and vitamins.
- 8. Eat moderately. It is always preferable to eat a little less than a little too much. For an adult, the normal weight of fresh food (gross weight ingested, weighed before desiccation or transformation) should be, on average, about two kilograms a day. This guarantees a correct calorie supply of 2 200 calories per day.

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 $<sup>^{268}\,\</sup>mathrm{A}$  famous gourmet whose recipes were not always natural, but who had perfectly understood to what degree our human condition depends on diet.

- 9. Be careful of refined and processed cereals (bread, flour, and by-products) and dairy products from animals (milk, cheese, cream, etc.): the consumption of these products is not natural for the human species and can cause allergies and various disorders. In this case, decrease or eliminate their consumption.
- 10. Vary your protein sources, from vegetable (nuts, seed sprouts) to animal (meat, fish, eggs, insects). If you are not vegetarian, for animal protein give priority to seafood (fish, shellfish, and crustaceans) rather than meat. If you are vegetarian or vegan (which we respect, but do not recommend practising in the long term), watch your protein intake so as to avoid any deficiency and learn to balance your diet so as to cover all your indispensable amino acids needs.
- 11. Vary the vegetables as much as possible: they should include leaf-vegetables (green vegetables, lettuce, etc.), root-vegetables (carrots, etc.), and aerial vegetables (cucumber, tomatoes, etc.).
- 12. Do not forget citrus fruit (oranges, grapefruit), that is rich in vitamin C, carrots (rich in vitamin A), walnuts, almonds, hazelnuts, and all oleaginous fruit (rich in calcium).
- 13. Ensure that your food is of the best quality: from the garden if possible or produced by organic farming, neither treated, nor thermally denatured.
- 14. Adopt regular meal times. Have a lighter breakfast (fruit). Those following a 100 % natural diet (Stage II) can simply eliminate breakfast (drink half a liter of water instead). The best times for meals are around 12 or 1 o'clock for lunch, and 6 to 7 o'clock for dinner. Avoid eating after 9 o'clock in the evening. Do not nibble during the day between meals.
- 15. Note the reactions of your body while you eat (smell, taste, repletion, etc.) and take any pleasure or displeasure experienced while eating into account. If certain fresh food tastes delicious, no doubt your body needs it, so eat it (without excess). On the contrary, never force yourself to eat food that you do not like. Respect the red and green lights.
  - 16. If you are stressed, tired, or simply traveling, do not hesitate to skip a meal.
- 17. Make sure you drink enough. Put bottles of mineral water in strategic places: in your office, on your night table, in your car, in the dining room. Drink about one liter of water a day, between meals. Vary the water you drink according to preference (for a well-balanced supply of mineral salts).

Read this apparently simplistic advice frequently: it will efficiently and rapidly guide you to a simpler and better diet.

## The body's disintoxication reactions

"Everything is cured via some evacuation, through the mouth, the anus, the bladder, or by some outlet."

Hippocrates.

By regularly inhaling cigarette smoke, a smoker introduces nicotine<sup>269</sup> into his body, which will circulate in the blood and lodge in the tissues. In the same way, by regularly eating adulterated foodstuffs, abnormal molecules penetrate into the body and tend to accumulate with time (toxins). When a smoker stops smoking, he will gradually eliminate the nicotine that has accumulated in his tissues. In the same way, when one switches to a better diet, the body will progressively eliminate the toxins stored in the body. It is well-known that a smoker who stops smoking will experience "disintoxication reactions", withdrawal symptoms, tiredness, or, on the contrary, nervousness, etc. These troubles last a few weeks, then disappear. Similar phenomena can be observed when one switches to a more natural diet, such as, occasionally, diarrhoea, a few spots, temporary tiredness, or a return of previous symptoms (limited) which show that the body is eliminating these toxins. These disintoxication signs usually occur during the first few months following a marked improvement of diet. They can vary from person to person and they are not dangerous, but, on the contrary, useful, as when one changes one's diet, the body frees itself in this way of the toxins (abnormal molecules) it had just stored up until that time. How long does it take to be completely disintoxicated? The first disintoxication reactions, like when one gives up smoking, only last a few weeks, the time required for part of the blood to be renewed, but it takes much longer for the body to be totally cleansed.

### How long does it take to completely disintoxicate the body?

A regular and better diet gradually regenerates the tissues and eliminates undesirable molecules (toxins) accumulated in the body. The total time required to disintoxicate a 70 kilogram-organism by means of a better diet, renewing 1 % of the body mass every day (ingestion of about two kilograms a day of fresh food, only part of which is assimilated through the intestinal wall), is about one year for draining eliminating 80 % of toxins, and several years for a nearly total disintoxication<sup>270</sup>.

<sup>&</sup>lt;sup>269</sup> And also tar, irritants, dust, carbon dioxide, and carbon monoxide; in all over 1 000 different substances have

been identified in cigarette smoke, a great number of which are toxic. See, on the subject, by the same author: How to Stop Smoking (Editions Dangles) and Free Yourself from Tobacco (Editions J'ai Lu).

270 Calculated assuming that the human body progressively eliminates toxins disseminated homogeneously throughout the organism, whose concentration (from the moment their ingestion is stopped) then obeys, at a rough estimate, an exponential model of the type: T (t) = T (0) exp(- t), where T is the toxemia (concentration of abnormal molecules of nutritional origin accumulated in the organism), T (0) the initial toxemia at the instant 0 (at the beginning of a diet free of toxins), it is time and a constant, which, in our example, is equal to  $0.01 \text{ day}^{-1}$ .

The toxemia curve after adopting a better diet is, at a rough estimate, a decreasing exponential converging towards zero after a certain time (of the order of several years).

The same calculation enables understanding why it takes several years to become intoxicated or for deficiencies to appear when following an incorrect diet. The body mass is only renewed fairly slowly and it is not because one has just adopted a better diet that all past errors are instantaneously forgiven and forgotten: The body needs time to progressively renew the tissues. The renewal rate is only of the order of 1 % a day. It is therefore normal that it takes about 1 000 days, that is to say several years, to really appreciate the effects of a diet. Even dangerous diets (particularly certain slimming diets) produce good results in the short term, as their consequences only appear in the long term, after several years. Actually, the organism's abnormal molecule content varies very progressively with time, for either intoxication or disintoxication. The objective of all too many nutritional systems and pharmaceutical treatments is to produce an immediate effect (a decrease in cholesterol level, slimming, etc.), which contents both patient and doctor to the detriment of long-term health. Demanding instantaneous results is not always compatible with the time required for long-lasting recovery. To benefit fully, a better, natural diet must be practised as regularly and as long as possible: eating better occasionally will do a great deal of good, but is not necessarily enough to offset nutritional errors made just as regularly. Fortunately, however, most of the symptoms disappear quite rapidly with a better diet, as soon the toxin level starts to decrease. But bear in mind that it takes months and years to renew the major part of the body mass.

## Interpreting the body's reactions

"Wise men seeks natural riches with great avidity."

Seneca.

Whether in the framework of a natural diet or not, when a symptom appears (tiredness, pain, weight loss, rashes, etc.), the origin of the disorder, if nutritional, can be related to several factors: a deficiency, excesses, the consumption of adulterated foodstuffs, an unbalanced diet, poor quality foodstuffs, bad food combinations. Finally, as a last possibility, the symptoms can also quite simply come from disintoxication reactions, both deliberately desired by the body and useful. It is therefore important to understand what is happening and to find the cause of the symptoms, so as to cure it. Remember that, if your state of health requires it, you

can, and should consult a doctor. In order to identify a possible nutritional origin of your illness, read carefully through the following points one by one:

- What did you eat at previous meals? Were they composed of natural or processed foods? If you feel unwell, there is a good chance that it is because you have eaten badly. Was this food processed, heated, or of questionable quality? *Solution*: identify the guilty foodstuff(s) and exclude for a while;
- *Nutritional deficiencies*: Certain disorders can result from nutritional deficiencies. Insufficient fruit and raw foods, not enough food, an unbalanced distribution of the three food categories, or the total absence of certain foods can cause nutrient, vitamin and mineral salt deficiencies. This is relatively rare in our society which suffers more from excesses (obesity, over-eating) than deficiencies, except for persons who never eat any raw food at all. With a variety of food from each food category (fruit, vegetables, proteins), enough food (about one kilogram of food per meal), and by roughly respecting the distribution rule of 50 %, 30 %, and 20 % of Categories A, B, and C (fruit, vegetables, and foods rich in protein and lipids), you will encounter no major deficiencies. *Solution*: Vary your supplies, eat more fruit, raw vegetables and natural foods, balance your diet;
- The consumption of processed foodstuffs: Certain disorders can result from the consumption of artificial substances to which we are not well adapted. For example, one should not be surprised at feeling nervous or depressed if one smokes or drinks coffee, or if one has just stopped taking tranquilizers (on one's doctor's advice) that one has been taking for several years. One should not be surprised either at being ill if one has eaten large quantities of cooked or processed foodstuffs (the 2nd or 3rd of January, for example, after a New Year's Eve party). Nor at having infections, migraine, or rheumatism if one regularly consumes dairy products. Is my diet natural? If the reply is no or if I have recently made a few departures from my usual diet, the symptoms I am suffering from are probably the result of these departures. *Solution*: adopt a better diet (Stage I or II), eat raw rather than cooked foodstuffs, at least until these disorders disappear;
- *An unbalanced diet*: Does my diet respect the approximate proportions of 50 %, 30 %, and 20 % of Categories A, B, and C (A: fruit and sweet food; B: vegetables; C: food rich in protein or lipids) respectively? Have I forced myself to eat something I do not like (a risk of excess and psychological frustration)? Have I eaten too much? Someone who never eats proteins, for example, should not be surprised at losing weight and feeling tired. *Solution*: Balance your diet better. Listen to your body and take into account the automatic reactions of the organism (smell, taste, repletion, etc.) in order to choose your food better;
- *Poor quality food*: Your diet may seem balanced, but the quality of the food is insufficient. The toxins contained in poor quality foodstuffs are enough, in some

cases, to generate disorders. One should then ask oneself: May some of the foodstuffs I eat have been treated, processed, irradiated, or thermally denatured (see the chapter on food quality)? Are the fruit and vegetables I eat of organic quality? Is there food of questionable quality in my shopping (meat, eggs, or fish produced industrially, for example)? *Solution*: Choose better quality products. Exclude suspect foodstuffs for a while;

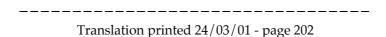
- *Bad food combinations*: The regular repetition of certain food combinations can eventually generate disorders. For example, if you eat almonds and oranges at the same meal, do not be surprised at suffering from somnolence, gas and flatulence afterwards. *Solution*: respect food combination rules;
- Disintoxication reactions (this assumption should be examined last so as to be sure that one has not disregarded an error one may continue to make unawares): Certain symptoms can simply arise from the body's cleaning reactions. During the first six months of a better diet, most disorders are signs of elimination of this type. A great deal of toxins have to be eliminated in the beginning. On the other hand, after six months, most of the symptoms experienced will be the result of certain errors in the way the diet is followed: food quality, food combinations, unbalanced diet, etc. Elimination reactions often follow the introduction of new food or food that one has not eaten for a long time. If, for example, I have only been on a natural diet for a month, and ate a papaya yesterday evening for the first time in my life, then felt cold some hours afterwards, the papaya probably triggered off the elimination process of old toxins, causing the shivery feeling. Solution: continue to eat as environmentally as possible and wait for the feeling to disappear. If it is a useful disintoxication reaction, the intensity of the symptoms will decrease with time. If the symptoms appear progressively, last a long time while tending to worsen, then it is likely that they are due to a regularly repeated error in your diet; go through the points above until you find this error. It may also be a problem not of nutritional origin; in this case, consult your doctor.

By examining these points one by one, you will nearly always find the cause of your disorders as soon as they appear (as most symptoms and health deficiencies are food-related). You will thus progressively improve the quality of your dietary balance and you will feel better than ever.

## Occasional fasting: a natural health cure

"Fasting owes its favorable effect on health to the fact that the deprival of food rests the viscera, saves the body's available strength, and burns up and eliminates a host of bad substances, accumulated in fatty and toxic storage."

Dr. Paul Carton.



Fasting has been known since Antiquity. Animals fast instinctively when they are ill.<sup>271</sup> Today, fasting is sometimes used for therapeutic purposes, and is recommended by most religions, for spiritual reasons: The Christians (Easter and weekly fasting), the Moslems (the Ramadan), the Jews, the Hindus, and the Buddhists all recommend fasting as a method of purification for the body and the soul. Fasting is a health method whose origin goes back to the dawn of time: in the wild, there is not always food to eat and one sometimes has to fast several days or at least eat very little for several weeks. This is why we are perfectly adapted to fasting, which, used advisedly, can, especially in our opulent society, prove beneficial to health. Be careful, though, not to go to extremes: it is not good to fast to excess, especially for someone who is not used to it. For an adult in good health, it is very beneficial to fast one day from time to time, but it is not one hundred times better to fast one hundred days in succession: it would be too long and dangerous! Like sports, fasting is a technique that one must take up very progressively and without excess, starting with short fasts, skipping a meal from time to time, and increasing the duration of the fasts very progressively, without exceeding a few days, even for persons accustomed to fasting. A little fasting is beneficial. Too much would be obviously!- harmful.

Fasting was brought back into favor at the beginning of the 20th century by Doctors Shelton and Carton, to such a degree that, today, numerous clinics in various countries propose fasting under strict medical control. Fasts of more than three days or for therapeutic purposes should not be undertaken without proper medical monitoring. On the other hand, for a person in good health, skipping a meal or even fasting a day or two from time to time is excellent relief for the digestive system. During a fast, digestive tranquillity enables the body to perform extensive cleansing operations. In order to continue to produce energy, the body will use its fatty stores, then its toxins, and superfluous, abnormal, or diseased cells (excrescence, cancer, abnormal molecules), which explains why fasting facilitates the cure of certain illnesses.

Eating after a fast is at least as important as fasting itself. Why bother to fast in order to clean the organism if, at the end of the fast, one intoxicates oneself again with a disastrous diet? All the benefits of the fast would be cancelled out. After a fast, a diet based on organic quality fruit and vegetables eaten raw and chosen according to the body's needs (Stage II) is the ideal diet recommended by the specialists in this field<sup>272</sup>. Then those who do not wish to continue a Stage II diet,

<sup>&</sup>lt;sup>271</sup> An actual experience: Dolie, a hunting dog, was ill for several days (a diet based mainly on canned dog food), and eventually lay down, half asleep, near the chimney. When her master put a piece of meat in front of her nose, she ignored his present, hardly smelling or seeing what she usually adored. She felt nothing: red light! Her instinct told her to eat less, until her illness was over.

<sup>&</sup>lt;sup>272</sup> See the numerous works by Shelton, Mosseri, Désiré Mérien, and others on fasting.

can progressively resume a Stage I diet. The duration of this transition period should be about equal to the duration of the fast (for example: a transition of one day for a 24-hour fast, ten days after a ten-day fast).

Some people have fasted for 30 or 40 days with no problem, and say they feel all the better for it. However, long fasts of over three days can be risky for non-accustomed persons, which is why it is definitely preferable to go on numerous short fasts, for example for one day a week, rather than a longer fast. Roy Walford, a famous American gerontologist, fasts regularly two days a week, and his observations in the laboratory (he still works although well past retirement age) show that those who do so thus not only improve their health, but also considerably extend their life expectancy. He explains in his book<sup>273</sup> how mice fed only every two days live twice as long as mice fed regularly every day. Personally, I fast when I am traveling or spontaneously when I am not hungry. The duration of these fasts rarely exceeds one day. Once only, I fasted for about ten days and I must say that I felt very well (as well as usual) then and even better afterwards, full of energy!

To learn more about fasting, I recommend you consult the numerous and excellent works published on the subject. Priority should be given to short fasts rather than long fasts, as the former do not need medical control. One should not forget to drink enough water during a fast, at least two liters a day, because although one can go without eating for quite a long time, no one can live without water.

A better, Stage II diet is an excellent complement to a fast, and will prolong the body's cleansing work afterwards.

### Seven new recommendations of the AMERICAN CANCER SOCIETY:

1/ Maintain your ideal weight. 2/ Vary your diet. 3/ Eat a variety of fruit and vegetables every day. 4/ Eat foods rich in fiber (vegetables). 5/ Reduce your total fat intake. 6/ Limit your consumption of alcohol. 7/ Limit your consumption of food preserved by means of salting, smoking, or nitrites.

<sup>&</sup>lt;sup>273</sup> R. Walford, The Longest Life, Robert Laffont, Paris, 1987.

### POSTSCRIPTS BY SCIENTISTS

"Each of us, by reforming their way of eating, can protect themselves from illness, make the most of life, and ensure a happy future for their children."

Dr. Catherine Kousmine.

Scientists in various fields (medicine, anthropology, biology, agronomy, nutrition, zoology, cancerology, pneumology, psychology, psychiatry), from several countries (United States, Canada, France, Germany) explain below, each from his point of view, his point of view on the nutritional research presented in this.

Professor Michael Lukas Moeller, Professor in Medicine, Germany:

I have devoted many years to the study of various types of human nutrition. Man became man in about four million years, without ever eating cooked food until relatively recent times. As a result, our whole metabolism is essentially adapted to food as found in the wild, and therefore not processed in any way or cooked, this food being optimal for the body and psyche. In the field of alternative diets, one can find a great number of ideologies and fanaticism. A natural nutritional method, both safe and scientific, such as the raw nutrition presented here, will be a great help to many people who wish to change their diet, but who do not want to fall into the rut of fanaticism.

I wish Bruno Comby's book the great success it deserves.

Dr. Eric Billon, Psychiatry Consultant at Grand Portage hospital in Quebec:

Bruno Comby is a high-level scientist, a nuclear engineer, the director of a research laboratory, a specialist in better living. After more than ten years of research on nutrition, he proposes a simple means of improving our health and well-being: a better diet.

Tobacco, stress, AIDS, delicious insects, and now nutrition: Each time Bruno Comby proposes simple but efficient solutions for our health. His argumentation holds together and even links up the "Let your diet be your sole medicine" of Hippocrates and the most recent medical knowledge in the domain of nutrition.

Numerous works have shown the vital need for the vitamins and enzymes that can be found in food. These substances are very fragile and disappear in large part when we submit food to industrial processing and cooking. On the one hand, several studies have highlighted the harmfulness of certain molecules, especially carcinogen molecules, that appear due to the effects of cooking foodstuffs. In the domain of modern psychiatry, few studies have been performed on the role of

nutrition in psychiatric or psychological disorders. One has to go back to the sixties or seventies when F.C. Dolan's research developed arguments pointing to "endorphin-like" effects induced by the consumption of processed cereals, playing a role in the development of schizophrenic symptoms. Other researchers now describe actual withdrawal symptoms when subjects are brutally weaned from foodstuffs rich in exorfin (cakes, chocolate, ice-cream, instant coffee, etc.). These studies pose numerous questions:

- The drastic changes in the diet of numerous populations have unquestionable repercussions on their health. To what extent do they affect our mental state?
- Do we really know all the consequences for our health of a diet that has been excessively cooked and processed?
- Where is the frontier between drug addiction and a specific partiality and what are their relations with behavior, or even affect pathologies?

Much remains to be done in order to answer these important questions. But, meanwhile, following a better diet enables those in good health to live better, and helps patients significantly improve their health. Some cures are even facilitated by this change in diet.

What are the mechanisms of the action of a given food in the organism? We are far from knowing everything! Bruno Comby puts us on the right track and demands standardized investigation to refute or support his approach.

This book has the merit of setting up a body of coherent knowledge to help the neophyte discover a more natural diet. And the clinician who wishes to help his patients will find here a number of practical instructions. Thanks to Bruno Comby, the raw diet now has its practical guide.

Dr. Marie-José Mongaboure, doctor, Consultant in the pneumology service of a Parisian hospital:

The health-diet relationship is growing more and more significant as the number of studies in the domain of dietetics increases. By addressing the subject of human nutrition from the scientific, experimental and -above all- practical points of view, this work by Bruno Comby contributes to a better understanding of our nutritional needs, as:

- He takes into account the results of his predecessors, as proved by his bibliography;
- The dietary approach he proposes is simple, logical, and is based on solid scientific foundations, supported by a maximum of data available in various fields, such as anthropology, medicine, physiology, dietetics, biology, ecology, palaeontology, etc.;

- The practical advice he gives us is easily adaptable to modern life, and enables modifying one's diet either gradually, observing at each step the improvements that encourage us to continue, or more rapidly, so as to attain a maximum of well-being and health.

Bruno Comby's book has another quality, that of being the fruit of his own work: His observations are based on hundreds of subjects over several years.

Dr. Christian Tal Schaller, specialist in prevention, nutrition, and natural health, Geneva:

The increasingly elaborated and chemically treated foodstuffs that we eat are at the root of our civilization's ills. It is high time we gave some thought to human nutrition, not only with respect to quantity but also with respect to the quality and vitality of food. The human body is designed to function on a diet that uses natural plants, to which we are perfectly adapted, as its main energy source. This can be summarized by the three golden rules of diet: Vegetable, Variety, Living.

Bruno Comby's book on nutrition is important as it shows the dangers of an adulterated diet, and of the industrial manipulation and excessive cooking of food. He clearly describes the positive results obtained by means of a more natural diet for numerous health disorders.

Dr. Jean Devernoix de Bonnefon, M.D., from the Faculty of Medicine of Paris, specialized in clinical nutrition:

Our health is above all the result of the suitability of our diet and environment to our inner environment, which is determined by our genetic code. The recent, rapid, and now generalized denaturation of our diet due to changes in culture and technology is, in my opinion, the main cause of so-called "civilization diseases". These diseases are today the essence of our morbidity and mortality.

In the past, men ate their food without altering it. The relatively recent character of industrial processing and cooking, in relation to the very slow evolution of the genetics of a species, does not enable affirming a genetic adaptation to processed foodstuffs; yet it is our genetic code that determines the whole construction, the functioning, and the repair of our organism, including its system of immune defense and its metabolism.

As a result of the genetic stability of all species, the number of genetic mutations that occur in time is very low. In consequence, a natural primate diet seems, even today, to be the simplest and safest way of eating. Our capacity of genetic adaptation is limited and we know that the good French cooking of our provinces, even of organic quality, leads in a few decades, to obesity, high blood pressure, arteritis, cancer, infarction, and many illnesses.

A diet excluding as far as possible any chemical or thermal alteration of food respects the molecular structure of the enzymes and vitamins that are destroyed or altered by any rise in temperature. Pyrolysis, a scientific term meaning the cooking of food, generates new molecules and we now know scientifically that a great many of these molecules are toxic, mutagenic, or carcinogenic. Nothing permits to affirm that our genetic code is adapted to these denatured molecules. In addition, the number of new and abnormal molecules thus obtained tends to increase when several types of food are cooked together. It is therefore legitimate to also question our habit of eating too many different types of food at the same meal. Furthermore, cooked fats have proved to be the main nutritional factor in cancer and atheroma (the obstruction of the arteries): in developed countries, this represents millions of deaths each year favored or caused by an adulterated diet. All this deserves some thought!

A better diet must respect a factor that is not taken into consideration by modern science because it cannot be measured: vital potential. You can extract any plant or tree with its roots from the soil for several hours. After putting it back in the earth, the plant will continue to grow, as it is still alive. The same does not hold true after a few seconds of cooking. Cooked foodstuffs are dead food, at most good for survival only. One must not forget that food penetrates our body. It is with this food that our tissues are constructed and also repaired, hence the therapeutic power of diet. It is essentially from the life of our food that we draw our own lives.

Diet also has a powerful curative and disintoxicating potential for the organism. Clinical experience has confirmed that a better diet, when it is well prescribed and applied, by excluding in particular all dairy products, improves or cures, sometimes spectacularly, many illnesses that are sometimes difficult to cure by conventional means, such as certain auto-immune, allergic, metabolic and degenerative diseases.

In my opinion, this practical work on natural nutrition is of great public usefulness. Diet is one of the most promising avenues of medical research and future therapeutics.

Prof. Marcel Bénévent, Agronomist, Honorary Professor of Agronomy, Biology, and Zoology:

Experimenting with a dietary method presents considerable difficulties for isolated researchers. Yet numerous results have been observed in those following a raw diet and accounts of cures do exist. These results are perfectly consistent with the experimental results Doctor Francis Pottenger obtained with cats. The latter had carried out detailed experiments with great scientific rigor in Pasadena, California, from 1932 to 1942. This study involved in all 900 animals of several successive generations. The cats were raised on two different diets, some fed entirely natural

food, and the others identical, but cooked food. Whereas the former remained in perfect health, Pottenger observed that the latter were subject to a whole series of various deficiencies, illnesses, and anomalies, which worsened during successive generations, to such a degree that the fourth generation did not survive long enough to reproduce. As a doctor, Pottenger also worked on human growth; he noted a whole series of deficiencies similar to those he had observed in the cats in human beings, whose diet is, to varying degrees, considerably denatured by cooking and technology.

Those of Pottenger's cats fed on cooked food could be "regenerated" by a return to a better diet (raw and not cooked), after a lapse of time depending on the level of degradation of their health. In a similar way, the proper practice of better nutrition enables obtaining the regeneration of health in man.

Another of Pottenger's observations: Complementary experiments permitted him to note reciprocal relations between the health of the soil and that of plants and animals. This is perfectly consistent with Doctor Rusch's hypothesis of the "unity of living matter". Doctor Rusch was one of the founders of organic agriculture, which is needed to provide good quality products for a better diet. Everything is linked in nature. The quality of animals obviously depends on the quality of the products they eat.

#### CONCLUSION

#### REDISCOVER NATURE

"A life one does not seek to understand does not deserve to be lived."

Socrates.

Eating better food, of better quality, learning to balance one's meals properly, and taking into account the body's reactions in order to live better: Nothing seems more self-evident now. Several tens of millions of people have already benefited from a more ecological diet, closer to nature, by adopting vegetarianism, dissociated diets, the Beverley Hills diet, Dr. Haas's diet, raw food diets, fruit diets, Palaeolithic nutrition, hygienism, the Kousmine method, the Montignac method, etc. This book gives you a synthesis of all these different methods, classing them into two stages (I and II), and by separating the essentials from information of secondary importance so that the reader can find his way in the "diet jungle". The multiplicity and diversity of these diets shows the interest that dietary reform arouses. A more natural diet, better suited to our needs, opens the way to more vitality, health, slenderness, well-being, longevity, and harmony. You can continue a raw diet for life, whether you choose Stage I or II, provided your diet is balanced. You can also try it intermittently, by Stage I or II cures, as you prefer, and, even if this is not recommended, you are perfectly free to make departures into a Stage 0 diet if you really feel the need. This book gives you indications on the path to follow: Eat natural, good quality, less adulterated food. These guidelines for a better diet not only develop our environmental awareness, but also, and this is important, more pleasure and enjoyment in life.

Bernard Clavel said: "The pleasure of not smoking is superior to the pleasure of smoking", which seems obvious to all non-smokers. After fifteen years of scientific research and personal experimentation in the field of raw nutrition, I have no hesitation whatsoever in paraphrasing him by saying: "The pleasure of eating raw foods is much superior to the pleasure of eating poorly". All raw foodists know how much this is true. Test a raw diet yourself for at least a month (a totally or partially natural diet, it is up to you to set the rules of the game), and you too will see that the eating pleasure one has with a raw and more natural diet of good quality food is much, much greater than the best traditional gastronomic cooking, with, as a bonus, health, lightness, slenderness, beauty, vitality, and well-being.

Pleasure is natural, and the foremost force of life.

The most wonderful research aims at understanding man and nature, understanding one's self, discovering the secrets of life, and sharing them!

By eating better, we can increase our NATURAL AWARENESS, develop our love of nature, and thus better preserve nature, our environment, our own health, and the future of the planet.

#### **BEYOND RAW FOOD**

Together let's build a more efficient, more preventive medicine, and a better world, where each and every human person is joyful, peaceful, and can live happily and healthily. Protecting our health and making sure we get the correct foods that our body really needs through a better diet is just as important - if not more - as preserving the environment. Beyond the simple question of nutrition, this book would like to show you the path towards a better life, in greater harmony with oneself, with others, with the laws of nature and biology. Well ordered environmentalism starts with oneself. If we do not take care of our own lives, improve our behaviors, and work for a better planet, who will?

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#### THE STRESSOMETER

- + The STRESSOMETER COMBY is a new medical electronic instrument developed by Bruno Comby, presently used by physicians, hospitals, health professionals, and individuals concerned by their nervous condition.
- + The technology used by the STRESSOMETER is built around an accelerometric "HIGH-TECH" piezo-electric sensor, with a microchip for digital treatment of the signal. Thereby, it measures very precisely the human microscopic Tremor of the Nervous system at Rest (TNR), of a few microns of amplitude, invisible by the naked eye.
- + Its use is particularly interesting for those practising RAW NUTRITION because cooked and artificially transformed foods are one of the main factors (with nicotine and caffeine) that increases the stress level measured with the Stressometer.

Those on a raw diet observe improvements in their stress levels after a few days. In approximately 3 months, the tremor and nervousness are then stabilized to the normal physiological tremor level of raw eaters. A few exception to the diet, especially if it concerns bread and cereal products, will generally increase, and sometimes double the tremor level. Therefore, via tremor measurements, the Stressometer helps to better understand the effect of raw or cooked foods on the nervous system.

- + The Tremor of the Nervous system at Rest (TNR) measured with the STRESSOMETER in a Standard Measuring Position (SMP) increases also under stress, as a consequence of the action of adrenaline as a neurotransmitter, as well as in presence of nicotine, caffeine, and other stimulants. It decreases with a better diet as well as during relaxation sessions, or by the use of tranquillizers (especially betablockers).
- + Certified by the GLEM (Group of Laboratories for Electro-Medical Devices), the STRESSOMETER is in conformity with European and international regulations for electro-medical devices (NF C 74-010 & IEC 601.1).
- + The ADTM 50 version of the STRESSOMETER is a multi-purpose instrument for use by health professionals and populations concerned by stress and nervosity. Every unit is assembled, tested, and calibrated under strict technical control, in order to offer total satisfaction to the customer.
- + The STRESSOMETER has been developed by Bruno COMBY with a team of physicians and scientists, and the cooperation of the Medical Board of the Bruno Comby Institute. Clinical and scientific research has been performed during 10 years before commercialization.

- + The STRESSOMETER COMBY is presently the only instrument available in the world capable of measuring the Tremor of the Nervous system at Rest, a clinical indicator of the subject's nervous condition.
- + The STRESSOMETER COMBY opens new possibilities in a field of growing interest: medical prevention, more precisely the detection, supervision and monitoring of stress, tremor and nervous disorders.
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  - health professionals, especially those concerned by stress, neurology, psychology, lifestyle.
  - persons on a special diet, or interested in his lifestyle and stress management.
  - subjects under psychological or emotional stress (exams, nervous stress) or physiological stress (changes in diet, medical treatments).
  - individuals under tobacco, coffee or drug addiction (and weaning of the same)
  - elderly subjects over 60 years of age (senile tremor) & persons suffering from nervous diseases (in particular essential tremor and Parkinson's disease).

## THE BRUNO COMBY INSTITUTE

The Bruno Comby Institute is a non-profit organization composed of members who wish to promote a healthier way of life. The objectives of the Institute are: to support scientific research and the promotion of public health, for the preservation of the environment and the improvement of living conditions, so as to contribute in building a better future.

Institute members include readers, friends, and supporters of Bruno Comby, as well as physicians and scientists from several countries: France, Germany, the USA, Canada, Belgium, the Netherlands, Switzerland, Finland, etc. The institute proposes information concerning prevention, quitting smoking, nutrition, sleep, and stress-control.

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All institute members personally benefit from prevention, improved health, and better performance, thanks to the advice given by the institute in the areas of healthy living, stress-control, nutrition, quitting smoking, sleeping better, and prevention of alcoholism and drug addiction. Our members therefore contribute to their own well-being as well as to the promotion of public health and the global reduction of health care costs.

Members are regularly informed of current activities (research, scientific results and accomplishments, dates of the forthcoming conferences, new books, radio and TV programs, etc.).

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Finally, if you join in, you will have the satisfaction of being a member of a prestigious organization whose main interests are human well-being and scientific

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and technological progress, with respect for the environment (planetary ecology) and human beings (human ecology).

Together we can improve the human condition. Let's learn to conduct our lives and our behavior in a better way. By transforming ourselves and working together in the same direction, we become more effective in all aspects of our lives. Your presence, opinion on our books and activities, and your contribution, even if modest or by simple encouragement, are useful and we thank you in advance.

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- MAXIMIZE IMMUNITY Available in English, French & German. The results of a raw natural and immune-related diseases, to help cure infections, allergies, cancer, etc., through diet-therapy; © First French edition, 1989: Editions Soleil; 1994: Editions de l'Homme; © German edition, 1994: Waldthausen Verlag; First English edition, 1992: Marcus Books; foreword by Dr. René Olivier (Pasteur Institute).
- POWER SLEEP Available in German, French & Portuguese How to increase your energy in less than 2 minutes at home or at work, with power-naps and the siesta, with an introduction by JACQUES CHIRAC, FRENCH PRESIDENT (himself a power-sleeper); © First French edition, 1992: F.X. de Guibert; © German edition, 1994: Mosaik (Bertelsmann Group); © German paperback edition, 1996: Goldmann Verlag; © Portuguese edition, 1993: Livros Do Brasil; © Czech edition, 1997: Pragma.
- STRESS CONTROL Available in French, Spanish, Italian & Czech For a pleasant and peaceful life; © French edition, 1988: Editions Dangles; © German edition: Bettendorf'sche Verlags, 1996; © Spanish edition, 1989: Ediciones Mensajeros; © Italian edition, 1991: Edizioni Musumeci; © Czech edition, 1997: Pragma/Egem; foreword by Pr. Joyeux.
- DELICIOUS INSECTS Available in German, Italian & French An abundant source of high-quality natural protein could help feed the Earth's increasing population: insects that taste delicious. It has been presented on many of the major TV and radio talkshows in the world, and has initiated the worldwide renaissance of the entomophagic movement; with insect-cooking recipes and details on how to eat your first insect; © French edition, 1990: Editions Jouvence; © Italian edition, 1992: Edizioni Piemme; © German edition, 1993: Eichborn Verlag; foreword by Dr. de Bonnefond and Pr. Della Beffa.
- HOW TO GIVE UP SMOKING Available in French & Spanish the n°1 bestseller of non-smoking titles in France; © 1986, French edition: Editions Dangles;

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- © French paperback edition, 1991: Editions J'Ai Lu; © Spain, 1989: Ediciones Mensajeros; foreword by Pr. Joyeux.
- **EXAMS IN YOUR POCKET -** Available in French A working method aimed at students and adults from age 15 upwards, as well as their teachers and parents, to help prepare examinations more efficiently, for easy success and exams in your pocket with minimum time-investment; © French edition, 1994: Editions Artulen.

## Bruno Comby's Scientific Publications:

- Numerical modelization and mathematical simulation of trajectories of spaceships during atmospheric re-entry, published by Aerospatiale & Polytechnique University Press, 1983, 350 pages (out of print).
- Cost-effective promotion of non-smoking in companies, published by ENSTA University Press and the National Committee Against Tobacco, 1985, 50 pages (out of print).
- New method for the measurement of human tremor at rest, published by the International Archives of Biophysics, Biochemistry and Physiology, vol. 100, pp73-78, 1992.
- Study of the food intake, lifestyle, and experienced health of a population of raw-eaters, published by the IBC Laboratory, 1995, 22 pages.
- Influence of diet on the evolution of the clinical and biological health of HIV-positive patients, published by the IBC Laboratory, Paris, 1989, 25 pages.
- Definition of the Bruno Comby Institute's quality certification requirements "better than organic" for the production, promotion and distribution of fruits, vegetables and other high quality instinctive foods, published by the IBC Laboratory, 1995, 7 pages.
- Multi-parameter analysis of human and animal tremor at rest, published by the IBC Laboratory, 1990, 25 pages.
- Optimal and controlled method for industrial mass breeding of edible crickets and locusts, published by the IBC Laboratory, 1991, 20 pages.
- Scientific and medical validation method of a new instrument for the measurement of tremor at rest, published by the IBC Laboratory, 1995, 5 pages.
- Technical note concerning the definition of a reference scale for the measurement of human tremor, published by the IBC Laboratory, 1995, 5 pages.

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Foreword: Change Your Diet!

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Acknowledgements
The Stressometer
The Bruno Comby Institute
For more information

#### **DRAWINGS:**

The page numbers are those of the French version of the book

- p. 16: Well-being, Beauty, Vitality, Health
- p. 24: Environmentalism and the respect of nature also applies to nutrition
- p. 29: \_
- p. 40: Beef, Crab, Peas, Sardines, Sugar, Salt, Chocolate, Cow's milk, wine, Cream, Ready-to-eat;

An adulterated diet is a source of illness, suffering, and destruction of the environment.

- p. 51: Stress and suffering, or, on the contrary, happiness and well-being: it's up to us!
  - p. 53: Cooking gradually changes the chemical structure of food.
  - p. 54: A better diet brings health, beauty, vitality, slenderness, and well-being.
- p. 64: Fresh fruit, particularly grapes, are rich in vitamins and mineral elements that are essential for good health.
- p. 83: The diet best suited to primates in the wild is based on plants that have not been altered in any way, eaten in their natural form. Is man an exception to this rule?
- p. 89: Traditional Eskimos weather the very difficult conditions of the Arctic winter on a diet mainly composed of raw meat and fish.
- p. 90: Natural fish eaten raw is a Japanese and Tahitian specialty. The polyunsaturated fats contained in fish are good for the health and help prevent heart disease.
- p. 99: It is quite possible to eat better on a vegetarian diet, but it is also possible, for those who wish to do so, to eat better while continuing to eat moderate amounts of meat, preferably fish and good quality eggs. Some even enjoy another source of alternative protein: Edible insects, such as crickets, whose taste is similar to that of caviar and foie gras.
- p. 120: The habit of eating an excessive amount of adulterated foodstuffs forms part of an unnatural way of life that leads to stress, depression, and illness. It is up to you to prefer well-being, vitality, and health.
  - p. 122: Stress, a sedentary life, cooking.
- p. 125: Of course this sort of life is meaningless. We can opt for a better, happier, and healthier life.
- p. 127: A better diet can release us from all sorts of worries, increase our freedom, save time, improve our well-being and health. (FREEDOM, DIETARY ENVIRONMENTALISM, JOY, HEALTH, LIFE).

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- p. 129: Incredible! I've never eaten anything so good!! A better diet gives greater eating pleasure.
- p. 135: Adulterated food promotes obesity. Natural food is a source of equilibrium.
- p. 138: A better diet improves the complexion and definitively solves the problem of acne. A better diet develops the beauty and purity of the features and regenerates the skin and tissues by draining their toxins.
  - p. 140: A better diet develops sports performances.
- p. 151: A better diet favors the prevention of cancer and heart disease, and can also accelerate the cure of numerous diseases, supplementing conventional medical treatments. General Hospital, Continue the following treatment, morning, midday, and evening: Fresh vegetables, Exotic fruit, Raw meat, Raw fish (vary the doses according to the appetite of the patient).
- p. 155: Menu: Cold cuts, tobacco, alcohol, cooking, artificial coloring, pepper, sugar, salt, coffee / Menu: Fruit, vegetables, seed sprouts, nuts, water, raw food.

The consumption of unwholesome foodstuffs induces great physiological stress.

- p. 162: Nature's Pharmacy: I would like: a tablet of fresh air, a box of sun, a rest pill, a lettuce, a basket of fruit, a bowl of nuts, and a bottle of exercise, please!
- p. 179: An unhealthy diet, smoking, etc., decreases the quality of life by introducing unnatural chemical substances into the organism (toxins).

## p. 189: I am extremely happy POSITIVE THOUGHT

Respecting biological rhythms, drinking water, working for a better world, exercising daily, a vitalizing diet.

Eating better is part of a cycle each element of which promotes others: positive thought, the respect of biological rhythms, drinking water, working for a better world, doing a little physical exercise every day.

- p. 204: A more natural diet, rich in fruit and vegetables, is ideal during the summer, when traveling or during vacations.
- p. 207: A natural buffet for a reception: A wide choice of exotic fruit and natural foodstuffs is a pleasure for both the eyes and the palate.
- p. 214: Is it natural for a human baby to drink milk from the udder of a cow? The chemical composition of cow's milk is very different from that of human milk: poorer in iron and beta-lactaglobulin, richer in protein and calcium. The best milk for an infant and one perfectly suited to its needs is its mother's.
- p. 254: The quality of food is very important. It is preferable, as far as possible, to eat fresh, organic quality food that has been altered as little as possible. And even, on occasion, food that you have picked yourself.
  - p. 259: Equipment: mosquito net, an elastic band, pure water, jar, seeds.

- 1) Soaking; leave the seeds to soak for a night (about 12 hours) at a temperature of  $20^{\circ}$  C.
- 2) Rinsing: In the morning, cover the jar with the mosquito net using the elastic band, empty the water and rinse several times.
  - 3) Draining: Leave the jar to drain upside down at a temperature of about 20° C.
  - 4) Rinsing: Rinse abundantly morning and evening, and drain again.
  - 5) Consumption: Around the 3rd or 4th day, the seeds are ready to eat...

Soaking: 1st day - 2nd day - 3rd day - 4th day - ready to eat... the seed sprouts are about a few millimeters to two centimeters long.

A simple and natural technique for producing seed sprouts at home. Very rich in vitamins from the nutritional point of view, seed sprouts are also delicious, a food of exceptional vitality. Children love to grow them. The seeds grow in three or four days. It is therefore convenient to have a rotation of four jars at the same time: one eats the contents of one of the jars each day, then puts new seeds to soak while one is rinsing and moving the other jars along.

p. 262: One can eat better under any circumstances: at home, at the restaurant, on the train, during receptions, at business lunches, at the week-end, on walks, when traveling, and on the plane.

p. 264: \_

p. 270: One can eat better at any age: before birth, in childhood, adolescence, adulthood, and later.

p. 295: Bon appétit!

p. 300: \_