An HERBAL/MEDICAL DICTIONARY

BY
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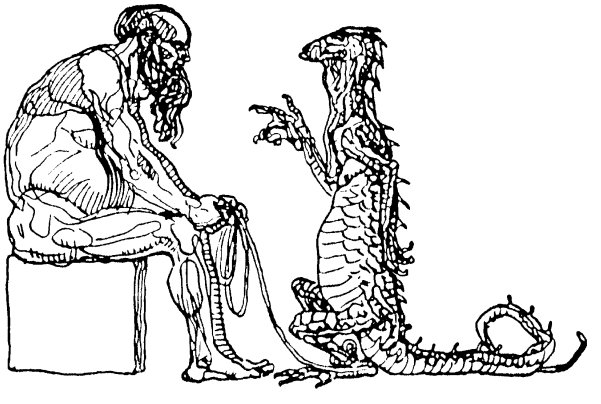
A Glossary of terms used in Herbalism,
Medicine and Physiology
Descriptions, Explanations,
and Implications in
Wholistic and Vitalist Therapy



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by Michael Moore

The definitions below are pertinent to my use of those terms as an herbalist. Those of you versed in medicine may find the emphasis sometimes peculiar. You are used to employing those parts of anatomy, physiology and pharmacology that explain phenomena treatable with Standard Practice Medicine. Clinical diagnosis uses the physical sciences to help define conditions with medical implications, even though much of both physiology and pharmacology deals with observations that may not have medical treatment. It isn't unimportant, simply not pertinent.

MY application of physiology and pharmacology is similarly biased towards MY tools. Herbs work rather poorly within the current medical model; they neither block nor suppress effectively (at least those that are reasonably safe). The best that can be said is that they NUDGE. We need to use the sciences to define constitutional, environmental and life-style factors, since we cannot CREATE a new state, only manipulate existing potentials. With herbs, you usually try to STIMULATE native resistance, and need to understand the factors that compromise it. The focus is on self-limiting and acute disorders, chronic and functional disorders, and the subclinical imbalances that are not "ripe" enough to warrant a medical approach but that compromise general health and that may in time lead to disease. Medicine needs to use procedures in intervening when native strengths have proved inadequate; the use of herbs needs to understand the co-factors and physiology of native strengths in order to extend them. Hence some of the definitions, while being accurate, may seem to emphasize almost trivial aspects.

It's all a journey, this process of trying to help sick people. Current medicine drives quickly, but only on roads it has built. Herbal therapies travel on horseback; poorly on the roads, best across the countryside where the cars can't go. The great evils of medicine are that it claims to be scientific (it is an art using science as a tool) and that it denies other modalities (using the standards of science, not art).

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ACHENE A dry, one-seeded fruit, without a predictable opening and formed from a single carpel. It usually one of many, like an unshelled Sunflower seed.

ACHLORHYDRIA The lack of free hydrochloric acid in the stomach; more broadly, inadequate or suppressed secretions. Without enough acid, proteins are not broken down, butterfats are not digested, Vitamin B12 may not be absorbed, and there is a long-term risk for the potential of food sensitivities to undigested foreign proteins.

ACID In our context, a substance having a pH below that of neutral water (7.0) when in solution. Most metabolic waste products are acidic. Sour. See **pH**

ACIDOSIS Specifically, the abnormal buildup of acids in the body, classically caused by diabetes or kidney disease. Broadly, the potential caused by increased protein intake or metabolism, coupled with inadequate intake (or loss) of alkali.

ACUTE A type of disease or disorder having a sudden onset with severe symptoms, and generally a short or self-limited duration (such as a head cold or sprain). The opposite of **CHRONIC**.

ADAPTOGEN A recent (and to me, slightly flaky) term used to describe agents, often botanical, that stimulate non-specific resistance, and that seem to decrease hypothalamus and pituitary over-reactions to perceived...not real...stress.

ADENITIS An inflammation of one or several lymph nodes, or related lymphoid tissues.

ADRENAL CORTEX The outer covering of the two adrenal glands that lie atop each kidney. Embryonically derived from gonad tissue, they make steroid hormones that control electrolytes, the management of fuels, the rate of anabolism, the general response to stress, and maintenance of nonspecific resistance.

ADRENAL MEDULLA The inner part of the adrenals, derived embryonically from spinal nerve precursors, they secrete epinephrine, norepinephrine and dopamine; used locally as neurotransmitters, sensitive receptors can be mobilized totally by the adrenal medullas.

ADRENALIN Called epinephrine in the U.S., this is a substance secreted into the bloodstream and reacted to by specialized receptors throughout the body, initiating a "code blue" or flight-or-fight response. Many receptors are a regular part of sympathetic function, and respond to their own local relative, norepinephrine or noradrenalin, in the course of normal autonomic nervous system interplay. See: **SYMPATHETIC, PARASYMPATHETIC, LIMBIC**

ADRENERGIC Functions that are dominated by epinephrine (the blood hormone) or norepinephrine (local sympathetic adrenergic nerve stimulus)

ADRENOCORTICAL Pertaining to the adrenal cortex.

ALOPECIA The loss of hair.

AERIAL The parts of plants growing above ground.

ALKALINE In our context, a substance having a pH above that of neutral water (7.0) when in solution. Signified as pH (potential of Hydrogen), alkaline fluids, such as the blood (pH about 7.4), have the ability to neutralize acids (solutions below pH 7.0). Metabolic wastes are acids, and the alkaline reserve of the blood neutralizes them until they are excreted. See **pH**

ALKALOID One of a varied family of alkaline, nitrogen-containing substances, usually plant-derived, reacting with acids to form salts. Normally intensely bitter, alkaloids form a body of substances widely used in drug and herbal therapy. They are usually biologically active and have a toxic potential. The term is more pharmaceutical and medical than chemical since alkaloids come from a variety of otherwise unrelated organic compounds. (Examples: caffeine, morphine, berberine).

ALTERATIVE A term applied in naturopathic, Eclectic, and Thomsonian medicine to those plants or procedures that stimulate changes of a defensive or healing nature in metabolism or tissue function when there is chronic or acute diseases. The whole concept of alteratives is based on the premise that in a normally healthy person, disease symptoms are the external signs of activated internal defenses and, as such, should be stimulated and not suppressed.

Sambucus (Elder), as an example, acts as an alterative when it is used to stimulate sweating in a fevered state. Without a fever or physical exertion, ***Sambucus*** tea will increase intestinal, lung, and kidney secretions. With fever or exercise, the buildup of heat from combustion, and the dilation of peripheral blood supply, it takes the defense response to the next stage of breaking a sweat. You might have sweated eventually anyway, but you may be one of those people who doesn't perspire easily, and a diaphoretic such as ***Sambucus*** will act as an alterative for you by stimulating the next stage of defenses sooner than you would have on your own.

The term alterative is sometimes inaccurately used as a synonym for "blood purifier," particularly by nature-cure neo-Thomsonians such as Jethro Kloss and John Christopher. "Blood purifier" is a term better applied to the liver, spleen, and kidneys, not to some dried plant.

ALTERNATE Having plant parts, particularly leaves, arranged alternately along a stem, as opposed to in pairs or whorled.

AMEBIASIS Having an amoebic infection, usually in reference to amoebic dysentery, caused by the parasitic amoeba, ***Entameba histolitica***.

AMENORRHEA Absence or suppression of menses. Primary amenorrhea is the failure to begin menses by age 16, secondary amenorrhea is tardy menses (from pregnancy, stress, dieting, illness or intensive physical training) in the previously menstruating woman.

ANABOLIC Promoting anabolism. Specifically, an agent or function that stimulates the organization of smaller substances into larger ones. Examples: making a starch out of sugars, a protein out of amino acids, or making triglycerides out of fatty acids are anabolic functions. Anabolic steroids are internal or external substances that will induce increased body size or mass. The opposite of **CATABOLIC**.

ANAL WARTS Also called Condylomata acuminata. A sexually transmitted viral infection, caused by human papillomavirus. See **VENEREAL WARTS**

ANALGESIC A substance that relieves pain. (Examples: aspirin, Balsam Poplar.)

ANESTHETIC A substance that decreases nerve sensitivity to pain. Examples:

nitrous oxide, Peppermint.

ANGINA PECTORIS A painful chronic heart condition, characterized by an oppressive sensation, difficulty breathing, and pain in the chest or arms. Attacks are often triggered by exertion or a sudden adrenergic discharge, and the underlying cause is insufficient blood supply to the heart muscles

ANGINA, VASOMOTORIA Like the previous, but less dangerous and more frequently caused by purely neurologic stimulus. The pain is more spasmodic and there is usually little actual blood vessel blockage.

ANGIOTENSIN A substance formed in tissues or blood vessels when there needs to be local or even massive vasoconstriction. The primary precursor is renin, made by the kidneys, and elevated when the blood seems dehydrated or low in volume; the next substance needed for this reaction is a liver protein, angiotensinogen; when both are present in the blood, local factors can then form this pressor substance. Excess production is often implicated in high blood pressure.

ANORECTIC An agent that suppresses appetite for food.

ANOREXIA Having little or no appetite for food.

ANTIBODY Immunologic proteins, usually made from immunoglobulins, that are capable of binding to, and rendering inactive, foreign substances that have entered the skin envelope and have been deemed dangerous. They may be synthesized anew in the presence of a previously encountered substance (antigen); they may be present in small amounts at all times in the bloodstream; or they may be present in the tissues in a more primitive form designed to react to a broad spectrum of potential antigens. The latter may be responsible for some allergies.

ANTICHOLINERGIC An agent that impedes the impulses or actions of the nerves or fibers of the parasympathetic ganglia, competing with, and blocking the release of acetycholine at what are called the muscarinic sites. Cholinergic functions affected are those that induce spasms and cramps of the intestinal tracts and allied ducts. Examples: Atropine, ***Datura, Garrya***.

ANTICOAGULANT A medication or natural compound that slows or prevents the formation of blood clots. Examples: Heparin {endogenous), Dicumarol and warfarin (drugs), ***Melilotus*** (coumarin-containing).

ANTIDEPRESSANT Literally, substances meant to oppose depressions or sadness, and generally heterocyclic types such as Elavil, MAO inhibitors like phenelzine, or lithium carbonate. This category of substances formerly included stuff like amphetamines and other stimulants. Our only plants that could fit the current definition would be ***Hypericum, Peganum*** and perhaps ***Oplopanax***.

ANTIFUNGAL An agent that kills or inhibits fungi, and, in my usage here, an herb that inhibits either a dermatomycosis like ringworm or athlete's foot, or one that inhibits ***Candida albicans*** either externally as a douche or internally as a systemic antifungal. (Examples: Nystatin, griseofulvin, ***Tabebuia***.)

ANTIGEN A substance, usually a protein, that induces the formation of defending antibodies. Example: bacterial toxins, Juniper pollen (in allergies). Auto-immune disorders can occur when antibodies are formed against normal proteins created within the body.

ANTIHISTAMINE An exogenous agent that inhibits the release of histamine, the amino acid derivative that stimulates vasodilation and permeability under many circumstances, particularly tissue irritation. The most common type of antihistamine, the H1 receptor antagonist, produces many moderate side effects, and the H2 receptor antagonist cimetidine is even more problematic. That they are so commonly used can lull both physician and patient into trivializing their iatrogenic potential. Histamines, which are most abundant in the skin, respiratory, and GI tract mucus membranes, help heal; using antihistamines to inhibit the healing response for the whole body simply in order to lessen the acute but physiologically superficial symptoms of something like hay fever is to risk many subtle side effects.

ANTIMICROBlAL An agent that kills or inhibits microorganisms.

ANTIOXIDANT A substance that prevents oxidation or slows a redox reaction. More generally, an agent that slows the formation of lipid peroxides and other free-radical oxygen forms, preventing the rancidity of oils or blocking damage from peroxides to the mitochondria of cells or cell membranes. (Examples : Vitamin E, ***Larrea*** (Chaparral), Gum Benzoin.)

ANTIPHLOGISTINE An agent that limits or decreases inflammation; an anti-inflammatory or antihistamine.

ANTISPASMODIC A substance used to relieve or prevent spasms of the smooth muscles of the intestinal tract, bronchi, or uterus.(Examples: barbiturates, ***Garrya***.)

ANTIVIRAL An agent that experimentally inhibits the proliferation and viability of infectious viruses. In our domain of herbal medicines, some plants will slow or inhibit the adsorption or random initial attachment of viruses, extend the lifespan of infected target cells, or speed up several aspects of immunity, including complement, antibody, and phagocytosis responses. Herbal antivirals work best on respiratory viruses such as influenza, adenoviruses, rhinoviruses, and the enteric echoviruses. Touted as useful in the alphabet group of slow viruses (HIV, EBV, CMV, etc.), they really help to limit secondary concurrent respiratory infections that often accompany immunosuppression.

ANTIPHLOGISTINE An agent that limits or decreases inflammation; an anti-inflammatory or antihistamine.

APOCRINE Secretory glands, especially found in the armpit and groin, that secrete oily sweat derived from shed cell cytoplasm, and which contain aromatic compounds that possess emotional information for those nearby. Examples: The smell of fear, the scent released after orgasm, the odor released by annually-frustrated Chicago Cubs fans.

APTHOUS STOMATITIS Little ulcers or canker sores on the surface. of the tongue, lips, and cheek mucosa. In adults, they are often related to gastric reflux and dyspepsia.

AROMATICS Chemically, molecules containing one or more benzene rings, but in our usage, plant compounds which, upon contact to the air, form gases which can be smelled: volatile oils. (Examples: menthol, Peppermint oil.)

ARRHYTHMIAS An abnormal or irregular rhythm, usually in reference to the heart.

ARTERIAL Blood that leaves the heart. When it leaves the right ventricle, it is

venous blood; and when it leaves the left ventricle, through the aorta, it is fresh, hot, oxygenated red stuff. After it has passed out to the capillaries and started to return, it is venous blood.

ARTERIOSCLEROSIS The condition of blood vessels that have thickened, hardened, and lost their elasticity-"hardening of the arteries." Aging and the formation of blood-derived fatty plaques within or directly beneath the inner lining of the arteries are the common causes. Many of the large arteries aid blood transport from the heart by their rebound elasticity, "kicking" it out; smaller ones have muscle coats that need to contract and relax in response to nerves. All this is compromised when there is arteriosclerosis.

ARTHRITIS Literally, inflammation of one or more joints, usually with pain and sometimes with changes in the structure. Osteoarthritis is a chronic condition of loss in the organization of joint cartilage, with gradual calcification of the gristle, formation of spurs, and impaired function. Rheumatoid arthritis is an auto-immune disorder, with chronic inflammation and eventual distortion of the joints; the victim experiences a lessening of good health, worsening metabolic imbalance, allergies, and general stress (emotional, physical, and dietary).

ASCITES An abnormal buildup of serous fluid, usually in regards the viscera. Although many infections and serious metabolic disorders can induce it, the most common cause is trauma and surgery.

ASTHENIC having little tone or strength, especially in regards the nervous system or the skeletal muscles.

ASTHMA, EXTRINSIC Asthma triggered by pollen, chemicals or some other external agent.

ASTHMA, INTRINSIC Asthma triggered by boggy membranes, congested tissues, or other native causes...even adrenalin stress or exertion

ASTRINGENT An agent that causes the constriction of tissues, usually applied topically to stop bleeding, secretions, and surface inflammation and distension. Some, such as gallotannins, may actually bind with and "tan" the surface layer of skin or mucosa. (Examples: a styptic pencil, Oak Bark.)

ATONIC Having poor tone or diminished strength.

ATOPIC A type of inherited allergic response involving elevated immunoglobulin E. Sometimes called a reagin response, it means that you have hay fever, bronchial asthma, or skin problems like urticaria or eczema. It can be acquired, sometimes after hepatitis or extended contact with solvents or alcohol, but if your mama sneezed and your daddy itched, you will probably have one form or another of the above stuff at different times of your life. Solution: since you can't change your stripes, keep in balance and avoid, if possible, the distortions of constant medications, both prescription and over-the-counter.

ATROPINE An alkaloid derived from Belladonna (***Atropa belladonna***) and related plants that blocks some cholinergic or parasympathetic functions. It has been used to stop the cramps of diarrhea and is still found in some OTC cold remedies, since it dries up secretions. The main current medical use is in eye drops used to dilate the pupil.

AUTOIMMUNITY The state of having acquired an immunologic memory that says a normal cell membrane is "other", and having forming antibody responses against it. A

viral infection or organic chemical (hapten) may have started the response, but surviving healthy cells may have so close a charge pattern (epitope) that acquired immunity keeps on as if the cell was still "other". Any physical stress that causes the target tissue to become inflamed or replicate rapidly to heal can restimulate the auto-immune response.

AXIL The upper angle formed by a leaf or branch with a stem. Things that pop out in the axils are called **AXILLARY**.

AZOTEMIA The abnormal presence of urinary waste products in the blood.

B

BACTERIOSTATIC Slowing or stopping the proliferation of bacteria.

BASAL METABOLISM The basic rate of combustion by a person, usually measured after sleep and while resting.

BALSAMIC Soft or hard plant or tree resins composed of aromatic acids and oils. These are typically used as stimulating dressings and aromatic expectorants and diuretics. This term is also applied loosely to many plants that may not exude resins but which have a soothing, pitchy scent. Examples: Balsam Poplar, ***Eriodicyon***.

BASAL At or near the base, such as leaves sprouting directly from root or crown.

BELLS PALSY An inflammatory condition of the facial, nerve, with paralysis, distortion and diminished tears.

BENIGN PROSTATIC HYPERTROPHY, or **HYPERPLASIA** (BPH) The benign buildup in the prostate of "warts" or epithelial neoplasias that can block or interrupt urination, and which are usually concurrent with moderate prostate enlargement. They cause a dull ache on urination, ejaculation, and/or defecation. The diagnosis is medical, since the same subjective conditions can result from cancer of the prostate. BPH is common in men over fifty and can be the result either of diminished production of complete testosterone or poor pelvic circulation. Alcohol, coffee, speed, and antihistamines can all aggravate the problem.

BETA BLOCKERS Drugs used to slow the response to epinephrine (released by the adrenal medulla), usually to attempt controlling high blood pressure

BILIARY COLIC See **CHOLECYSTITIS, CHOLECYSTALGIA**, etc.

BILIOUSNESS A symptom-picture resulting from a short-term disordered liver, with constipation, frontal headache, spots in front of the eyes, poor appetite, and nausea or vomiting. The usual causes are heavy alcohol consumption, poor ventilation when working with solvents, heavy binging with fatty foods, or moderate consumption of rancid fats. The term is genially archaic in medicine; people who are bilious are seldom genial, however.

BILIRUBIN A waste product of hemoglobin recycling, it is primarily excreted in feces, oxidizing into that familiar brown color (except for beets).

BILIRUBINEMIA The presence of abnormally high bilirubin in the blood, usually signifying hepatitis, with jaundice due next week.

BIODIVERSE The state of life interdependency that is possible when large and small plants, soil organisms, insects, and fuzzy beasts exist in the ebb and flow created by the natural environment. Cut down the trees once and you lessen the biodiversity drastically. Wait fifty years and cut again and you have a small fraction of the life-form variety that you started with; the old diversity will never return...never.

BIOMASS The actual amount of existing material within a species or genus.

BIOSPHERE Literally, the part of the earth that supports life; more broadly, a large community of life-forms sharing a similar environment, such as a rain forest or prairie grassland.

BIPINNATE A pinnate compound leaf whose leaflets, in turn, are stems that have pinnate leaflets.

BITERNATE A compound leaf divided in threes, whose leaflets are in turn di- vided in pairs.

BITTER TONIC A bitter-tasting substance or formula used to increase a deficient appetite, improve the acidity of stomach secretions and protein digestion, and slightly speed up the orderly emptying of the stomach. A good bitter tonic should possess little, if any, drug effect, only acting on oral and stomach functions and secretions. Dry mouth, bad gums, teeth problems with bad breath in the morning, and weak digestion, often with constipation, are the main deficiency symptoms. A bitter tonic has little effect in normal digestion. Example: ***Gentiana***

BORBORYGMUS The bubbling, gurgling passage of gas across the transverse colon...NOT a small North African rodent.

BPH Benign Prostatic Hypertrophy, or Hyperplasia.

BRACTS Reduced or modified leaflets that are usually parts of flowers or an inflorescence, generally subtending or beneath the floral parts.

BRADYCARDIA A distinctly slow heartbeat, which may be a normal idiosyncrasy or with causes ranging from regular strenuous exercise to abnormally slow heart stimulus to the side-effects of medication. Bradycardia is usually defined as a pulse below sixty beats a minute, or seventy in children.

BRADYKININ A plasma polypeptide that tends to lower blood pressure and increase capillary permeability.

BRAIN FEVER Cerebral hyperemia. See **Poe, Edgar Allen**

BRICK DUST The presence of reddish brown sediment in the urine, indicating uric acid, hippuric acid and creatinine excess in the blood...an anabolic greaseball who needs more liquids and alkali and who has over-acidic urine. It can be symptomatic of more serious problems as well.

BROMIDES A binary salt of bromine, formerly used as a simple sedative. Given so freely and with no intent of affecting a healing, it became synonymous with a useless treatment only meant to shut up the patient. Excessive bromide use can cause some pronounced neurologic disturbances... they disappear with cessation of the drug.

BRONCHITIS Inflammation of the mucus membranes on the bronchi, usually caused by an infection, sometimes by allergies or chemical irritations.

BRONCHORRHEA Excess mucus secretions by the bronchi; a runny nose of the lungs.

BUFFERING SYSTEM The several blood factors that enable the acid waste products of metabolism to be carried in the alkaline blood without disrupting its chemistry. These include carbolic acid, carbonates, phosphates, electrolytes, blood proteins, and erythrocyte membranes.

BURSITIS Inflammation of a bursa, the lubricating sac that reduces friction between tendons and ligaments or tendons and bones. The more common localities for bursitis are the shoulders, the elbows, the knees, and the big toe (a bunion).

C

CALYX The outer set of sterile, floral leaves; the green, clasping base of a flower.

CANDIDIASIS Generally, a disorder caused by ***Candida (Monilia) albicans***. This is a common yeast-like fungus found in the mouth. vagina. and rectum, as well as on the outside skin. It is a common cause of thrush in infants and vaginal yeast infections. In recent years much attention has been given to the increased numbers of people with candidiasis in the upper and lower intestinal tract. This condition is now known to occur as a result of extended antibiotic therapy and anti-inflammatory treatment. Most anti-inflammatory drugs are really immunosuppressants, and the normal, stable competition between fungus and bacteria is altered by the antibiotic use; this rather benign and common skin and mucosal fungus can then move deeply into the body.

Although both therapies are of major importance in managing disease, they are often prescribed or requested trivially, and both are centerpieces to the increased reliance on procedural medicine (surgery). The drug industry is paralyzed by the cost of marketing new drugs, whereas surgical procedures need far easier peer and FDA acceptance. Procedural medicine normally needs antibiotic AND anti-inflammatory therapy.

CAPILLARY The smallest blood or lymph vessel, formed of single layers of interconnected endothelial cells, sometimes with loosely attached connective tissue basement cells for added support. Capillaries allow the transport across their membranes and between their crevices of diffusible nutrients and waste products. Blood capillaries expand and contract, depending upon how much blood is needed in a given tissue and how much is piped into them by the small feeder arteries upstream. They further maintain a strong repelling charge that keeps blood proteins and red blood cells pushed into the center of the flow.

Lymph capillaries have many open crypts, allowing free absorption of interstitial fluid forced out of the blood; these capillaries tend to maintain a charge that attracts bits of cellular garbage too large to return through the membranes of exiting venous capillaries.

CARBOS Carbohydrates, like starch or sugar.

CARDIOGLYCOSIDES Sugar-containing plant substances that, in proper doses. act as heart stimulants. Examples; digitoxin, strophanthin.

CARDIOTONIC A substance that strengthens or regulates heart metabolism

without overt stimulation or depression. It may increase coronary blood supply, normalize enervation, relax peripheral arteries (decreasing back-pressure on the valves), or decrease adrenergic stimulation. Examples: ***Crataegus, Selenicereus***.

CARDIOPATHIES Heart diseases, usually needing medical intervention.

CARPEL A simple pistil or modified leaflets forming a compound pistil.

CATABOLIC The part of metabolism that deals with destruction or simplification of more complex compounds. Catabolism mostly results in the release of energy. Examples: the release of glucose by the liver, the combustion of glucose by cells.

CATARRH Inflamed mucous membranes, an older term that usually implied excess secretions, particularly with congestion.

CAULINE Belonging to the stem, as in cauline leaves emerging from the stem

CELIAC Pertaining to the abdomen.

CENTRAL NERVOUS SYSTEM A collective term for the brain, spinal cord, their nerves, and the sensory end organs. More broadly, this can even include the neurotransmitting hormones instigated by the CNS that control the chemical nervous system, the endocrine glands.

CERUMINOSIS Too much beeswax. See: **BEESWAX, NONE OF YOUR**

CERVICAL VENOSITIES Enlarged varicose veins on the cervix of the uterus, often accompanying ulcerations or long-term pelvic congestion. A symptom only of congestion or impaired circulation, they can occur in both semi-trivial and serious conditions.

CERVICO-OCCIPITAL HEADACHE A headache of the neck and side of the head...a tension headache.

CHOLANGITIS Inflammation of of only bile ducts. This word and the next three describe conditions that may be, subjectively, all the same.

CHOLECYSTALGIA Cramps or tenesmus of the gall bladder or bile ducts.

CHOLECYSTITIS Inflammation of the gall bladder and ducts, sometimes from the presence of passing stones, sometimes following fasting or anorexia, sometimes because of a spreading intestinal tract infection....sometimes just because you eat three avocado sandwiches before going to bed.

CHOLELITHIASIS Having gall stones.

CHOLESTEROL A fatty substance produced predominantly by the liver, and necessary for building cell membranes, insulating the CNS, covering fats for blood transport, forming bile acids, oiling the skin and making steroid hormones. Blood cholesterols are not derived from food (digestion breaks them down) but are intentionally synthesized by the liver, in response to seeming need. Elevated cholesterols are the result of certain types of stress or metabolic imbalances, and the liver makes more than the tissues need. Although not a direct cause, high consumption of fats and proteins will convince the liver to kick into a fat/protein or anabolic stance...THEN it may oversecrete cholesterols, perhaps thinking you are putting food away for the winter.

CHOLINERGIC Pertaining to functions primarily controlled by the parasympathetic nervous system. See **PARASYMPATHETIC**

CHOREA A neuromuscular condition, with twitching and spastic muscle control.

CHOREA, SYDENHAM'S A disease or syndrome of children, usually following or companion to rheumatic fever, and having involuntary movements, anxiety and impaired memory. It usually clears up in two or three months.

CHRONIC A disease or imbalance of long, slow duration, showing little overall change and characterized by periods of remission interspersed with acute episodes. The opposite of **acute**.

CHRONIC FATIGUE SYNDROME (CFS) is a recently designated semi-disease, often attributed to EBV (the Epstein-Barr virus) or CMV (***Cytomegalovirus***) infections, characterized by FUOs (Fevers of Unknown Origin) and resulting in the patient suffering FLS (Feels Like Shit). In most of us, the microorganisms involved in CFS usually provoke nothing more than a head cold; in some individuals, however, they induce a long, grinding, and debilitating disorder, characterized by exhaustion, depression, periodic fevers...a crazy-quilt of symptoms that frustrates both the sufferer and the sometimes skeptical physician. MCS (Multiple Chemical Sensitivities) are another syndrome that is often lumped with CFS, and they may often be two faces of the same condition.

I am not using all these acronyms to mock the conditions, but as an irony. There is too much (**A**cronym **S**afety **S**yndrome) in medicine, reducing complex and frustrating conditions to insider's techno-babble, somehow therein trivializing otherwise complex, painful and crazy-making problems. The widest use of acronyms (AIDS, HIV, CFS, MCS, MS etc.) seems to be for diseases hardest to treat, least responsive to procedural medicine, and most depressing to discuss with patients or survivors.

CHYLOMICRONS These are organized blobs of fats, synthesized in the submucosa of the small intestine out of dietary fats, phospholipids, specialized proteins and cholesterol, carried out of the intestinal tract by the lymph, and slowly released into the bloodstream. In the capillaries, the triglycerides inside the chylomicrons, recognized by their protein markers, are absorbed into the tissues for fuel or storage, and the outside cholesterol and phospholipid transport-cover continues through the blood to be absorbed by the liver for its use. This sideways approach takes (ideally) a large part of dietary fats into the lymph back alleys, spreading their release into the bloodstream out over many hours, thereby avoiding short-term blood fat and liver fat overload. To synthesize the maximum amount of dietary fats into chylomicrons, you need well-organized emulsification and digestion of lipids by the gallbladder and pancreas.

CIRRHOSIS, LAENNECS The most common type of cirrhosis, caused by chronic alcoholism and a lousy diet (or malabsorption).

CIRCUMBOREAL Plants that are found worldwide, encircling the lands around the north pole.

CISTERNA CHYLI A sac in the back of the pelvic region that drains the lymph from the intestinal tract, pelvis and legs, and acts as the beginning of the thoracic duct. See **LACTEALS, THORACIC DUCT**

CLONIC Smooth muscle spasms or colic that alternate rhythmically with a rest state...like birthing contraction or waves of nausea.

CMV (***Cytomegalovirus***) This subtle, worldwide microorganism is a member of the herpes virus group. It is large for a virus, contains DNA, and has a complex protein capsid. It forms latent, lifelong infections, and, except for occasional serious infections in infants and malnourished youngsters, seldom produced a disease state. With increased use of immunosuppression therapies for conditions ranging from arthritis to cancer to organ transplants, the incidence of adults with major infections of CMV increases yearly.

CNS Central nervous system.

COLIC Cramping or spasms of a smooth muscle tube, such as the uterus (menstrual cramps) the ureters (passing kidney stones) or the stomach (stomachache). Also called tenesmus.

COLIFORM BACTERIA Intestinal bacilli that are gram-negative, sugar-digesting, and both aerobic and anaerobic. They are usually from the family ***Enterobacteriaceae; Escherichia coli*** is the best known of the group.

COLITIS Colon inflammation, usually involving the mucus membranes. Mucus colitis is a type with cramps, periods of constipation, and copious discharge of mucus with feces. Ulcerative colitis has pain, inflammation, ulceration, fever, and bleeding, all interspersed at various times - a long and serious illness.

COLLAGEN The fibrous insoluble structural protein that forms almost a third of our total body protein and holds everything together. Too much collagen is what makes a steak tough.

COLLOID Gooey substances, usually proteins and starches, whose molecules can hold large amounts of a solvent (usually water) without dissolving. In lifeforms, virtually all fluids are held suspended in protein or starch colloids (hydrogels). (Examples: cell protoplasm, lime Jell-O.)

COLOSTRUM The first breast milk after birth, containing minerals and white blood cells. This is followed gradually by true milk.

COMPLEMENT A large body of blood proteins (over 20), initiated in the liver, and intimately involved in nearly all aspects of immunity and nonspecific resistance. They form two types of self-mediated cascade reactions to antigens, antibody-antigen complexes, dead tissue and the like, and are almost solely able to initiate the rupture and killing of bacteria. The protein strings they form around foreign substances are the main "hooks" used for absorption by macrophages as they digest and clean up.

CONGESTION Thick and boggy tissues, usually resulting from excess inflammation, or irritation that is unremitting. It is characterized by the accumulation of an excess volume of fluid, with impairment of venous and lymphatic drainage, and the buildup of unremoved cellular waste products.

COMPOUND Leaves that are made up of leaflets, such as pinnate and palmate leaves.

CONJUNCTIVA The mucus membrane which covers the underside of the eyelids and the front surfaces of the eyeball.

CONJUCTIVITIS An inflammation of the conjunctiva, either from environmental irritation, allergies, viral or bacterial infections.

CONSTITUTIONAL Deriving from basic hereditary strengths and weaknesses, and including early environmental factors.

CONTUSIONS A bruise, characterized by a trauma in which the skin is not broken but underlying blood vessels are busted, causing a deep or lateral hematoma, with disorganized blood and interstitial fluid buildup. see **EXUDATE**

CORDILLERA The mountain ridge that spans North America, from Mexico through the Rocky Mountains into Alaska.

CORM The fleshy, bulblike, solid base of a stem, often rising out of a tuber or bulb.

CORPUS LUTEUM A temporary endocrine gland formed at ovulation from part of the former egg follicle, and the source of progesterone. See **PROGESTERONE, ESTROGEN, MENOPAUSE**

CORTICOSTEROIDS Natural steroid hormones or synthetic analogues, usually taken for suppressing inflammation (and immunity) and therefore having cortisone-like functions, or taken as analogues to adrenocortical androgen...or even testosterone, in order to impress the other gym members, make varsity by your junior year or to join the WWF and get newbie-mangled for two years by The Hangman or even the Hulkster Himself. Then, if your gonads don't fall off and your back holds up you get promoted to Good Guy, have your chance to Take A Name and finally wear your chosen costume...a spandex violet nurse's uniform.

COUGH, HECTIC The dry and unproductive coughing in early bronchitis, when the mucosa is irritated but still too infected to secrete mucus

COUGH, PAROXYSMAL Attacks of uncontrollable coughing or "whooping", often relating to whooping cough or bronchiectasis, but they can also be caused by the smoke from burning plastics and (memories of yesteryear) hash oil.

COUGH, REFLEX A cough induced by intestinal, gastric or uterine irritation, and not from respiratory causes.

COUNTERIRRITANT A substance applied to the skin to produce an irritating, heating, or vasodilating effect, in order to speed local healing by increasing circulation of blood, radiating the heat inward to inflamed tissues deep below the skin. It can also be used to induce reflex stimulation to seemingly unrelated internal organs. (see **DERMATOMES**)

CREATININE It is the waste product of creatine, an enzyme found in large amounts throughout the tissues, and mainly excreted in the urine. The parent compound creatine enables the body to use the "blue flame" of anaerobic combustion (as opposed to the yellow flame of oxidation). Elevated creatinine in the blood may be an early symptom of kidney disease.

CRENELATED (or **CRENATE**) Leaves having rounded, scalloped teeth along the edges.

CROHN'S DISEASE Also called regional enteritis or regional ileitis, this is a nonspecific inflammatory disease of the upper and lower intestine that forms granulated lesions. It is usually a chronic condition, with acute episodes of diarrhea, abdominal pain, loss of appetite, and loss of weight. It may affect the stomach or colon, but the most common sites are the duodenum and the lowest part of the small intestine, the lower

ileum. The standard treatment is, initially, anti-inflammatory drugs, with surgical resectioning often necessary. The disease is autoimmune, and sufferers share the same tissue type (HLA-B27) as those who acquire ankylosing spondylitis.

CRUDE DRUG A dried, unprocessed plant, and referring to one that was or is an official drug plant or the source of a refined drug substance. A—

CRUDE BOTANICAL, on the other hand, is one of our herbs that has no official standing. Examples: ***Digitalis*** leaves (crude drug), White Sage (crude botanical).

CYSTITIS An inflammation, often infectious, of the urinary bladder. It usually arises from a distal infection of the urethra or prostate.

CYSTORRHEA Mucus in the urine, usually following infection or from chronic congestion of the bladder mucosa.

CYTOKINE Also lymphokine, a broad term for a variety of proteins and neuropeptides that lymphocytes and macrophages use to communicate between themselves, often from long distances. They stimulate organization and antibody responses, seem to induce the bone marrow to proliferate the type of white blood cells needed for immediate resistance, and generate sophistication and fine tuning for an overall strategy of resistance. A lymphocyte FAX.

CYTOPROTECTANT A substance or reaction that acts against chemical or biological damage to cell membranes. The most common cytoprotectant actions are on the skin and the liver (hepatoprotectant), although there has been recent research involving lymphocyte T-cell cytoprotectants.

D

DECIDUOUS A plant that drops its leaves in the fall or, in some cases, during drought.

DECOMPENSATION The failure of the heart to maintain full and adequate circulation.

DELIRIUM TREMENS (DTs) A distinct neurologic disorder suffered by late-in-the-game alcoholics, characterized by sensory confusion (is it red or sour, hot or loud, smelly or wet, am I thinking or screaming); part of the problem is the result of diminished myelination of nerves and decreased brain antioxidant insulation (cholesterol), with nerve impulses "shorting out" across temporary synapses. It sounds ugly.

DEMULCENT An agent that soothes internal membranes, traditionally separated from exernal soothing agents, emollients.

DERMATOMES As spinal chord nerves branch out into the body, some segments fan out across the skin; these are the nerves that monitor the surface and are the source of senses of touch, pain, hot, cold and distension. All this information is funneled back in and up to the brain, which learned early on to correlate WHAT information comes from WHERE.

Think of the brain as the CPU, with the spinal chord nerves uploading raw binary data; the brain has to make a running program out of this. It must form a three-dimensional hologram or homunculus from the linear input, and retranslate it outwards as binary data.

The surface of the forearm, as an example, has sensory input gathered from several different and very separate spinal chord nerves. The brain will origami-fold these separate data streams into FOREARM. If you were to inject novacaine into the base of the left first sacral nerve (LS1), you would find that a whole section of skin became numb. So well defined a section that you could outline in charcoal the demarcation between sensation and numbness. This section would be a long oval of of numbness around the left buttock, under to the groin, perhaps part of the thigh...and the left heel. That spinal nerve is solely responsible for carrying sensation from that zone of skin...that dermatome; your brain mixes all the dermatomes together to get a working hologram of your total skin surface.

That particular nerve also brings and sends information about the uterus, abdominal wall and pelvic floor. If you are a woman suffering pelvic heaviness and suppressed menses, a hot footbath might be enough S1 (heel dermatome) stimulation to cross-talk over to the referred S1 pelvic functions...and heat up the stuck uterus.

Much of acupuncture, Jinshinjitsu, and zone and reflex therapy (not to mention Rolfing) uses various aspects of this dermatome crossover phenomena (by whatever name) and zone counterirritation was widely used in American standard medicine up until...penicillin. It was still being described in clinical manuals as late as 1956, although with the mention that it was only used infrequently and a "mechanism not understood" disclaimer.

DIABETES Properly diabetes mellitus, it is a disease characterized by high blood sugar levels and sugar in the urine. Diabetes is really several disorders, generally broken down into juvenile onset and adult onset. The first, currently called insulin-dependent diabetes mellitus (IDDM or Type I), is somewhat hereditary, and results from inadequate synthesis of native insulin or sometimes from auto-immunity or a virus, and occurs most frequently in tissue-types HLA, DR3, and DR4. These folks tend to be lean. The other main group is known as non-insulin-dependent diabetes mellitus (NIDDM or Type II). It is caused by a combination of heredity, constitution, and lifestyle, where high blood sugar and high blood fats often occur at the same time, and where hyperglycemic episodes have continued for so many years that fuel-engorged cells start to refuse glucose, and the person is termed insulin resistant. These folks are usually overweight, tend to have fatty plaques in their arteries, and usually have chunky parents.

DIAPHORETIC A substance that increases perspiration, either by (1) dilating the peripheral blood vessels ***(Capsicum),*** (2) directly stimulating by drug action the nerves that affect the sweat glands ***(Asclepias tuberosa)***, or by (3) introducing a volatile oil into the bloodstream that performs both tasks ***(Asarum canadensis)***.

DIARRHEA A watery evacuation of the bowels, without blood.

DIASTOLIC The lower number of a blood pressure reading signifying the myocardial and arterial relaxation between pump strokes. Too close to the higher number (systolic) usually signifies inadequate relaxation of the heart and arteries between heartbeats.

DIE-OFF The phenomenon of killing so many infectious organisms so quickly that the amount of dead biomass itself causes liver overload, allergic reactions, or a mild foreign-body response. It can occur with antibiotic therapy, treatment of candidiasis, and even with use of some herbal antivirals. Outside of prescription antifungals, it is seldom acknowledged as a medical problem. If you use a liver stimulant, diaphoretic, and diuretic, you will increase the efficiency of transport, catabolism, and excretion, and lessen the effects of die-off.

DISTENTION An excess expansion of a tissue or organ, either from inflammation,

injury or, as in the Bean Syndrome, gas.

DIURETIC A substance that increases the flow of urine, either by increasing permeability of the kidneys' nephrons, increasing blood supply into the nephrons, or increasing the blood into each kidney by renal artery vasodilation.

DIVERTICULOSIS Having congenital pouches of the type found in many organs, particularly the colon, that are benign, but, being little cul-de-sacs, are likely to become inflamed from time to time. Diverticulitis is the term for inflamed diverticula.

DUODENUM This is the beginning of the small intestines, and it empties the stomach. It is 9 or 10 inches long, holds about the same amount of food as the digestive antrum or bottom of the stomach, and, through a papilla or sphincter, squirts a mixture of bile and pancreatic juices onto the previous stomach contents. These juices neutralize the acidic chyme; the pancreatic alkali and bile acids form soap to emulsify and aid fat digestion; and the duodenum walls secrete additional fluids and enzymes to admix with the pancreatic enzymes to initiate the final upper digestive investment. The duodenal wall secretes blood hormones to excite the brain, and gallbladder and pancreas secretions, and, if overwhelmed, can inhibit the stomach from sending anything else down for a while, until they can catch all their collective breath.

DURAL HEADACHES The most common type, resulting from autotoxicity or an excess of blood metabolites, such as from liver dysfunction or hangovers.

DYSCRASIA Presently a term referring to inadequate synthesis of blood proteins by the liver, especially clotting factors. Formerly the term described an improper balance between blood and lymph in an organ or a whole person. Archaically, it referred to an imbalance between the four humors: blood, phlegm, yellow bile, and the postulated black bile.

DYSENTERY Severe diarrhea, usually from a colon infection, and containing blood and dead mucus membrane cells.

DYSMENORRHEA Painful menstruation.

DYSPEPSIA Poor digestion, with heartburn and regurgitation of stomach acids.

DYSPLASIA Abnormal tissue growth...classically midway between hyperplasia (overgrowth) and neoplasia.

DYSPNEA Air hunger with pained breathing. It occurs normally from physical exertion, and abnormally either from impaired respiration, emotional distress, or a breakdown in nerve responses

DYSURIA Painful urination.

E

EBV Epstein-Barr Virus, a relative of the herpes virus, is the cause of infectious mononucleosis, an African malignancy called Burkitt's lymphoma, and at least part of Chronic Fatigue Syndrome. A very common virus, most of the time it only causes a head cold.

ECLECTICS The name commonly applied to the American School Physicians, a distinct group of Medical Doctors who trained in their own schools, and were licensed as M.D.s. They specialized in low-tech, nonhospital rural health care...the famous country doc with a black bag. Besides standard medical procedures, they used a more wholistic approach to disease, sometimes terming themselves Vitalists. They were the most sophisticated of the many movements that arose in response to the almost maniac medical practices of the first half of the 19th century, especially in the United States, where, as always, medicine was philosophically invasive and heroic (often a wonderment to visiting physicians from Paris or London)

The Eclectics flourished and grew out of the settlement and usurpment of the Ohio and Missouri Valleys, with a sparse population and no organized hospitals, relied on methods that were not invasive (unless emergencies dictated), used therapies that relied on strengthening natural resistance (no hospitals, just someone's sod hut) and made particular care to explain and prepare the family or neighbors for THEIR part in caring for the patient...long after the physician left. Scudder, John King, Felter, Ellingwood and Clyce Wilson were some of the more famous Eclectics, and John Uri Lloyd was the most famous pharmacist/pharmacologist within the profession.

The Eclectic movement lasted from 1840 to 1937...when the only remaining medical school, unwilling to change to a Flexner Curriculum (as had the other survivors) closed its doors in Cincinnati. Long operating in a tradition of radical, populist and anti-establishment philosophy, they were unable to get any public funding, were unable to ally themselves with full universities (and share faculty and funding), and were unable to expand their teaching facilities with only a base of tuition income.

They lost the licensing wars and are no more. Their tradition was exported by practitioners in Germany and Mexico, and the German Eclectics, transformed by that peculiar culture into wild-eyed Nature Curists such as Ehret, Mausert and Lust, started the nucleus for the Naturopathic movement in Yellow Springs, Ohio (next-door to Goddard College) in 1947, helping to found the initial form of the National College of Naturopathic Medicine...10 years after, and 50 miles away from the last Eclectic Medical School. Without benefit of Tanna Leaves or Charleton Heston and an armful of pickled mummy-organs, Eclectecism was reborn into the body of Naturopathy. See: **THOMSONIANS**

ECTOMORPH A thumbnail description of the somatotype who is dominated by the ectoderm, specifically the skin, nervous system, and endocrine glands. Less arcane, a tall and thin person, with long limbs, narrow chest, and a somewhat oversensitive nervous system.

ECZEMA A chronic dermatitis, more common in those with thin skin or allergies of an atopic or IgE-mediated type, and often clearly and distinctly aggravated by emotional stress.

EDEMA A localized or systemic condition in which the body tissues contain an excessive amount of fluid. Systemic edema can be as mild as premenstrual water retention (I mean mild by comparison) or involve loss of blood proteins or kidney and heart failures. Local edema is the result of extensive or extended inflammation, with blood protein leakage and the loss of interstitial colloid.

EHT Essential Hypertension...the early, mesomorphic stages of high blood pressure, cause mostly by thick blood and accompanying sodium retention.

ELECTROLYTES In my context, acids, bases, and salts that contribute to the maintenance of electrical charges, membrane integrity, and acid-alkaline balance in the blood and lymph.

EMPHYSEMA A pulmonary condition with loss of elasticity in the alveoli and the interalveolar septa...the meat-foam and their interleaving sheaths that you fill up when you breathe. If a septum gets too stretched over time, several of the little sacs will coalesce together, decreasing the surface area for oxygen and carbon dioxide exchange. If enough of these sacs lose their separateness, like small soap bubbles joining to make a few larger ones, breathing gets harder because each breath accomplishes less interchange of gases, resulting in emphysema Caused by years of bad asthma, tobacco smoking, chemical damage, and other chronic lung disorders, it can be halted but not reversed. The first breath you take as a newborn defines forever the number of the alveolar bubbles...they cannot be regenerated if they coalesce together.

ENDEMIC Confined to a limited geographic or ecologic niche.

ENDOGENOUS From within the body, either a native function or the product of the extended colony...normal flora in the colon are considered endogenous.

ENDOMETRIOSIS The presence of endometrial tissue outside of the uterus. The endometrium is the mucus membrane inner lining of the uterus, with glandular cells and structural cells, both responding to estrogen by increasing in size (the proliferative phase), the first responding to progesterone (the secretory phase); if there is endometrial tissue outside of the uterus, the tissue expands and shrinks in response to the estrus cycle, but the normal shedding of the menstrual phase can be difficult.

The most common type of endometriosis is found in the fallopian tubes; the abnormal fallopian endometrial tissue can shed and drain into the uterus, but it hurts! It's funny, but little tiny ducts, like the ureters, bile ducts, and fallopian tubes really cramp. The colon and uterus are big muscular tubes and, when cramped up, cause rather strong pain. When one of those little bitty things gets tenesmus, your face gets white (or light tan), you start to sweat, shiver, and revert to a fetal position. Endometriosis that occurs around the ovaries or inside the belly and therefore can NEVER drain is a purely physical and medical condition, but fallopian presence of endometrium usually reaches its peak in the early thirties. It can be helped by ensuring a strong estrogen and progesterone balance, thereby decreasing the tendency to form clots in the tubes, and to experience severe cramps every month

ENTERIC pertaining to the small intestines.

ENTERITIS Inflammation of the small intestines.

ENTIRE A leaf with a straight, untoothed margin.

EOSINOPHILIA A group of conditions having the characteristic elevation of eosinophils. These somewhat mysterious granulocytic leukocytes (white blood cells filled with cottage cheese) are definitely involved in parasite resistance, seem to initiate strong inflammation under some conditions, can facilitate clotting by inhibiting heparin, yet also are a part of the process of healing and inflammation control as an infection winds down.

Eosinophilia is on one hand an inherited condition associated with atopic dermatitis (common, relatively benign, and irritating as hell), but, when acquired from chemical contact, drug reaction or spontaneously surfaced auto-immune response, it can destroy muscles, nerve, lungs, even kill. It caused the notorious string of chemical reactions that was triggered by tainted Japanese tryptophan.

EPIPHYTE An air plant, growing on or with other plants but not in any way parasitic.

EPISTAXIS Nosebleeds.

EPSTEIN-BARR VIRUS A large, ubiquitous, and normally benign, herpes-like virus with both DNA and capsid. It is sometimes implicated in mononucleosis and at least two types of lymphomas. Recently it has been become connected with the symptom picture called chronic fatigue syndrome (as has been CMV) and can produce many ill-defined (but subjectively distressful) symptoms, including fatigue, fevers of an unknown origin (FUO...love those acronyms!), and emotional lability. Immunosuppression, from whatever cause, allows the syndrome to occur. Many people in and out of medicine have come to regard it as both another form of Multiple Chemical Sensitivities (MCS, naturally) and a sequel to excessive medical use of immunosupressant anti-inflammatories.

ESOPHAGUS The dense, muscular tube, 9 to 10 inches long, that extends from the back of the throat (pharynx) to the stomach.

EXOGENOUS Arising from the outside; the opposite of endogenous

EXPECTORANT A substance that stimulates the outflow of mucus from the lungs and bronchial mucosa.

EXTRASYSTOLES A premature contraction of the heart. It can be caused by nervousness, indigestion, a tired and enlarged heart - anything up to overt organic heart disease.

EXUDATES The feral and congested fluids built up in a bruise or infection. Unlike a transudate, which is merely edema from lymphatic congestion, exudates contain dead cells, erythrocytes, white blood cells and often pus.

F

FAUCES The throat.

FEBRILE Feverish.

FIBROIDS Also called a leiomyoma or fibromyoma (or myofibroma, for that matter), it is an encapsulated tumor made up of disorganized and irregular connective tissue. A uterine fibroid is benign, there may be one or many, they grow slowly, have unknown causes, and may or may not cause painful menses or mid-cycle bleeding. Much depends on where they are in the uterus and whether or not they extend far enough into the cavity to impair and thin out the endometrium. If they do, they cause distress.

FLATUS Intestinal or stomach gas. If it rises upwards, it is an eructation (burp or belch); if it descends, causing borborygmus (love that word), you are flatulent (fartish).

FLAVONOIDS From flavus, Latin for yellow. A 2-benzene ring, 15-carbon molecule, it is formed by many plants (in many forms) for a variety of oxidative-redox enzyme reactions. Brightly pigmented compounds that make many fruits and berries yellow, red, and purple, and that are considered in European medicine to strengthen and aid capillary and blood vessel integrity, they are sometimes (redundantly) called bioflavonoids.

FLUIDEXTRACT An extract of an herb that is made according to official (and

unofficial) pharmaceutical practice, with a strength of 1:1. That means each ounce of the fluidextract has the solutes found in an ounce of the dried herb. Advantageous for some herbs (such as ***Arctium*** or ***Taraxacum***), where the active constituents retain the same proportions as in the plant, even though reduced to a very small volume of menstruum, it is deadly for others (such as ***Hydrastis*** or ***Lobelia***), whose constituents may have wildly varying solubility, and whose fluidextract will contain only the most soluble constituents and lack others completely.

The gradual disappearance of herbal preparations in Standard Medicine in the 1930s can partly be attributed to the almost complete reliance on fluidextracts. Some manufacturers (notably Lilly and SK&F) sold Tinctures (1:5 strength and meant to, at the least, contain EVERYTHING in the plant) that were made from diluted fluidextracts. Some fluidextracts were even made from dilutions of what were termed Solid Extracts....heat-evaporated tars, easy to store, easy to make in huge labor-minimal batches, where 100 pounds of Blue Cohosh could be reduced to 25 pounds of solid extract. This convenience pitch, with many constituents oxidized by heat, others never even extracted, could be diluted four times to sell as a fluidextract, TWENTY time to market as a tincture. These practices by American pharmaceutical manufacturers, with eyes perhaps on the larger drug trade (the use of crude drugs being a diminished part of their commerce, yet needing MANY different preparations...and being labor-intensive and profit-minimal...and sort of old-fashioned) ended up supplying terminally impaired products. Their value being reduced, physicians relied more and more on mainstream pharmaceuticals...and the medical use of whole plant preparations died.

FOMENTATION A hot, wet poultice used on painful, inflamed areas. The usual form is a towel dipped in tea and applied hot or warm to the swollen tissue, being changed when it cools.

FUNCTIONAL An imbalance of response, without permanent tissue damage, and generally reversible.

❦G❦

GANGLIA (singular: ganglion) Colonies of neurons outside the brain and spinal cord sometimes acting to control local functions. These are little affected by normal stress conditions. (Example: the solar plexus, made of two separate ganglions.)

GARBLE Rummaging through and cleaning out herbs; sorting.

GARDNERELLA Formerly ***Hæmophilus***, this is an anaerobic bacteria that is a main contributor to bacterial vaginosis. It is sometimes sexually transmitted, but can stick around for years as a passive part of the vaginal flora, only to flare up. It seems to occur in up to a quarter of relatively monogamous women and in half of women with multiple male partners. As bacterial vaginosis, ***Gardnerella*** is one of the three main causes of vaginal discharges, along with ***Trichomonas*** and ***Candida albicans***. Antibiotic therapy for male partners seems of only marginal value, and the distinguishing characteristic of the infection is nearly no ***Lactobacillus*** vaginal presence, the main part of the flora that retains the lactic acid and peroxide balance so important in a healthy vagina. Live culture yogurt, as both food and douches help the problem.

GASTRALGIA A stomach ache.

GASTRIC Pertaining to the stomach.

GASTRIC ULCER A usually chronic condition, started by irritation, with congestion in time, leading to edema, blistering, and the formation of an ulcer. ***Hylobacter*** infections seem to prolong and aggravate the condition, but the presence alone of the bacteria, without functional impairment, will not begin the disease. Possessing a certain "workaholic" panache...even boasted of in some business circles as if to validate one's work ethic, it nonetheless is fatal if untreated.

GASTRITIS Inflammation of the stomach lining, with either congested and boggy or inflamed membranes. It may be caused by bacteria and yeast or chemical irritation like alcohol, but most frequently it is the result of emotional stress and inappropriate patterns of eating.

GASTROENTERITIS Inflammation of the stomach and small intestines. It is more likely to be infectious than simple gastritis and is often accompanied by fever and general malaise.

GASTROESOPHAGEAL REFLUX The involuntary regurgitation of stomach contents or surface acids into the throat, with heartburn; it can be simple or serious.

GI Gastrointestinal

GIARDIASIS An intestinal tract infection caused by ***Giardia lamblia***, a flagellate protozoa now common to much of the world. Brought in by hikers and the hoards of grazing cattle, wintering over in beavers, elk and moose, it is one of the few parasites to be encountered in the mountains and north country. It is not normally a very serious infection, but for some reason certain people experience great debility.

GLAUCOMA An eye disease, usually chronic and slow, with increased pressure of fluid within the eye causing degrees of impairment to the optic nerve, and slowing circulation between the eye chambers sufficient to also contribute to lens deposits and corneal opacities. When under adrenalin stress or under the effect of most stimulants, pupils dilate, the eyeball changes shape, and pressure within the eye increases. This may not itself start glaucoma, but adrenergic stress will surely make it worse.

GLOSSITIS Inflammation of the tongue.

GLUCAGON A hormone produced by the alpha cells of the pancreas that increases the release of sugar by the liver: it is hyperglycemic. The substance produced by the beta cells, insulin, induces many tissues (muscles particularly) to absorb glucose through their membranes and out of the blood; it is hypoglycemic.

GLUCOSIDE A plant compound containing a glucose and another substance (the bioactive part). A special-case glycoside.

GLYCOSIDE A plant compound containing one or more alcohols or sugars and a biologically active compound. The sugar part is called a glycone, the other stuff is called an aglycone. The important things to remember about some glycosides is that they may pass through much of the intestinal tract, with the hydrolysis of the molecule only occurring in the brush borders of the small intestine. The result is that the bioactive part, the aglycone, is absorbed directly into the bloodstream, and is often not floating around the intestinal tract contents at all.

Quinones are irritating and even toxic when ingested, but when taken as glycosides, they are absorbed directly into the bloodstream, where they are not dangerous (in moderation), and get excreted in the urine, where they inhibit infections. Plants like Madrone, Uva Ursi, and Manzanita work in this fashion. Some plant-derived

heart medicines are only safe in proper doses because they, too, are glycosides, and they can be carried safely bound to proteins in the bloodstream, whereas if the aglycone were in the free form in the gut it might be either toxic or be digested directly into an inactive form.

GLYCOSURIA Sugar in the urine, from hyperglycemia, diabetes, or sugar binges.

GOITER, EXOPHTHALMIC The physical symptoms often associated with Grave's disease or thyrotoxicosis, with an inflamed, sometimes enlarged thyroid gland and, most noticeably, protruding eyes.

GOUT A disease that causes episodes of acute arthritis and inflammatory swelling in one or more joints. Gout usually starts in a well-used, oft traumatized joint like the right big toe or knee, and usually starts in the night, during the time that Traditional Chinese Medicine calls "liver hour," 2:00 to 4:00 A.M. (allowing for daylight saving time). The inflammation is caused by uric acid crystals that have lodged in the joint's white blood cells and results from the condition called hyperuricemia. Most folks with gout have a hereditary tendency to poorly excrete uric acid in urine as they get older, and it stays in the blood until. . . gout.

GRAM-POSITIVE/NEGATIVE Gram's Method is a staining procedure that separates bacteria into those that stain (positive) and those that don't (negative). Gram-positive bugs cause such lovely things as scarlet fever, tetanus, and anthrax, while some of the gram negs can give you cholera, plague, and the clap. This is significant to the microbiologist and the pathologist; otherwise I wouldn't worry. Still, knowing the specifics (toss in anaerobes and aerobes as well), you can impress real medical professionals with your knowledge of the secret, arcane language of medicine.

GRANULOCYTES These are a group of white blood cells that have many and well-pigmented granules, and derive from the bone marrow myeloblasts. The granules are sources of digestive, immunologic, and inflammatory proteins. The classic granulocytes are neutrophils, eosinophils, and basophils, but one should also include mast cells. Also, macrophages, which start out as agranulocytic monocytes but get lots of granules when they grow up.

GU Genital-urinary tract...of particular application to males.

H

HEMORRHAGE Bleeding, pure and simply. Menses is not blood but the carefully orchestrated excretion of excess endometrium. If the membranes fail to vasoconstrict and bleed further, THAT is hemorrhage.

HEMATURIA The presence of blood in the urine.

HEMOLYSIS Breakdown of senescent red blood cells into recyclable constituents, with particular importance given to the reuse of the heme part of hemoglobin.

HEMOLYTIC Promoting the breakdown of red blood cells; a normal process, hectic and skillfully balanced, the term is usually applied to excess conditions or toxic substances that degrade the bonds between healthy red blood cells and their hemoglobin coat or cause the liver and spleen to hypercatabolize otherwise healthy erythrocytes.

HEMOPATHY A disease of the blood.

HEMOPTYSIS Coughing up blood or pulmonary bleeding. If simply resulting from excessive coughing, where bleeding is from prolonged tracheal or pharynx irritation and minute mucosal hemorrhage, it can be self-treatable...anything else and start worrying

HEMORRHOIDS Enlarged veins protruding into the anorectal area, either internal or externally visible. They are either the result of poor sphincter tone and portal congestion, or sphincter hypertonicity, skeletal muscle and adrenergic excess..."Jock Hemmies".

HEMOSTATIC A substance that stops or slows bleeding, used either internally or externally

HEPATIC Pertaining to the liver.

HEPATITIS An inflammation of the liver. It can be caused by an infection or by a simple liver toxicity, such as a three-day binge with ouzo, metaxa, and Ripple chasers.

HEPATOCYTES A functional or parenchymal liver cell, specializing in enzyme synthesis.

HEPATOMEGALY An enlarged liver. **Hepatosplenomegaly** is both an enlarged liver and spleen. **Hepatosplenopalestrinamegaly** is an enlarged liver, spleen and 17th century Italian composer.

HERPES A small group of capsid-forming DNA viruses, sometimes divided into Type I (forming vesicles and blisters on the mouth, lips-generally above the waist) and Type II (usually sexually transmitted, with symptoms mostly below the waist). Both types form acute initial outbreaks, go dormant, reactivate, and so forth. For most folks, frequent outbreaks are clear signs of stress or immunosuppression. Both types are EQUALLY dangerous for infants.

HERPES ZOSTER See **SHINGLES**

HIATUS HERNIA An upwards protrusion of the stomach through the diaphragm wall. It is particularly common in women in their fourth and fifth decades.

HISTAMINE The defense substance responsible for most inflammation. It is synthesized from the amino acid histidine and is secreted by mast cells, basophils, and blood platelets. It stimulates vasodilation, capillary permeability, muscle contraction of the bronchioles, secretions of a number of glands, and attracts eosinophils, the white blood cells that are capable of moderating the inflammation. Mast cell histamine release is what usually causes allergies.

HIV Human immunodeficiency virus, the retrovirus that is at least partially responsible for AIDS. At this time it is not clear what other disorders besides AIDS may come from HIV infections. AIDS is a syndrome, partially (perhaps totally) produced by HIV. As with EBV, it is quite possible that the virus may cause only moderate immunosuppression in some people, while in others it will progress further to AIDS. the jury (all of them/us) is still out.

HOMEOPATHY Almost two centuries old, it is a system of medicine in which the treatment of disease (symptom pictures) depends on the administration of minute doses (attenuations) of substances that would, in larger doses, produce the same symptoms as

the disease being treated. Homeopaths don't like that "disease" word, preferring to match symptoms, not diagnostic labels. Although by no means harmless, homeopathic doses are devoid of drug toxicity.

Many practitioners these days prefer high, almost mythic potencies, sometimes resorting to a virtual "laying on of hands" to attain the alleged remedy. When M.D.s used homeopathy frequently (turn of the century), there were violent battles between low potency advocates and the high potency charismatics. Some preferred low potencies or even mother tinctures (herbs!), which I find quite reasonable (naturally), such as Boericke. Others sought ever higher and higher potencies, tantamount to dropping an Arnica petal in Lake Superior in September and extracting a drop of water at the mouth of the St. Lawrence River the following April. Kent and Clarke were such homeopaths.

Philosophically, to me, we are all surrounded in a subtle tide of unimaginably complex pollutants and organochemical recombinants...all low and middle potency homeopathic attenuations...our milieu itself is Mother Nosode...how can we be expected to respond to elegant but unimaginably subtle influences when our very bones radiate a low-potency gray noise. If you have no idea what I am talking about, just consider it a family argument.

HONEYMOON CYSTITIS Urethral irritation from excess sexual activity...or as a famous French writer described it,"the plentiful rubbing together of bacons.

HYALURONIDASE An enzyme made by traumatized cartilage (to soften and regenerate itself when injured) sperm cells (to dissolve the protective layer around an ovum), the spleen (to speed up hydrolysis), added to an IM injection (so it doesn't get surrounded by connective tissue and never disperse) and produced by some really nasty bacteria so they can dissolve connective tissue and get deep into the body. Hyaluronic acid is the target, and it is a basic mucopolysacharide rivet, keeping large masses of polymerized compounds in the state of constant colloid jello (or more technically, a hydrogel facilitant)

HYBRID This is produced by a cross-fertilization between two species. This happens a lot more often than botanists would like, since a species is presumed to have distinct genetic characteristics and shouldn't do this hybridizing thing as often as it does. Most of the dozen or so species of Silk Tassel are really genetically the same, and the three hundred species of Aconite worldwide are all capable of hybridizing as well.

HYDROCELE An organized mass of serous or lymphatic fluid, usually encapsulated by connective tissue. An internal blister. The term is usually applied to a hydrocele of the testes, but a breast cyst is also a hydrocele.

HYPERCORTICAL Overly anabolic; used here to describe the constitutional, not pathologic state

HYPEREMIA Excessive presence of blood, usually arterial; and the resultant increase in heat and metabolic rate. Hyperemia can be a pathology, blowing out blood vessels and the like; used here to describe the chronic or subclinical condition of functional vascular excess and excitation.

HYPEREXTENSIONS The excessive extension of a limb or joint, usually followed by pain and some inflammation.

HYPERGLUCONEOGENESIS Also hyperglyconeogenesis. The state of excessive synthesis of glycogen (storage starch) or glucose by the liver, derived from non-sugar sources, such as amino acids, lactate and the glycerol remnants from triglyceride breakdown. In strictly subclinical terms it signifies a yinny, catabolic excess, wherein

building materials are less desirable than FUEL, and it is singularly difficult to buff up in any way. There are disease states where this can occur...starvation would induce it as well, but I am not addressing this aspect, since I don't consider this to be the realm of alternative approaches.

HYPERGLYCEMIA Elevations of blood glucose, either from the various types of diabetes, excessive sugar intake (short term) or from adrenalin or stimulant causes.

HYPERGLYCOGENOLYSIS The tendency, usually by the liver, to convert glycogen into glucose at too rapid a rate for metabolic needs.

HYPERKINETIC Too physically active, jittery, peripatetic.

HYPERLIPIDEMIA Elevated blood fats, either from heredity, having so many calories in the diet that they are ending up as a constant stream of liver-synthesized storage fats, an excessively anabolic metabolism...and a constellation of less common disease causes

HYPERNATREMIA An excess of sodium in the blood...a short-lived condition since the body retains water until the concentration is back to normal...and the blood volume (as well as blood pressure) has increased.

HYPERSECRETION Oversecretion of fluids by a gland. It may occur from irritation, infection, or allergy, as in the nasal drooling in a head cold or hay fever, or, as in gastric hypersecretion, from a functional imbalance in the chemical and neurologic stimulus of the stomach lining.

HYPERTHYROID Elevated thyroid levels, either functional and constitutional in nature or the more profound state of thyrotoxicosis and overt disease

HYPERURICEMIA Having elevated blood uric acid, either from high consumption of organ meat or spirulina. See **URIC ACID**.

HYPOCHONDRIUM The regions of the belly below the ribcage and to the sides, as in left or right hypochondrium.

HYPOCORTICAL Having low adrenocortical function.

HYPOGLYCEMIA Low blood sugar. It can be an actual clinical condition (rather rare), but the term is usually applied to LABILE blood sugar, where the highs are socially acceptable, if zappy, but the lows cause headaches, depression...and sugar cravings...which only kick the sugars UP...which forces the sugars DOWN...etc. This is a subclinical condition that usually goes nowhere, at least clinically, but can drive you (or your companion) crazy. Some normal and healthy food have a rapid blood presence and can leave you hanging; fruits, potatoes and carrot juice are LOUSY...legumes, particularly beans, supply slow and extended release of calories...mostly because of high levels of soluble fiber...and laborious digestion. Even adding such dietarily useless items like Psyllium Seed and Chia Seed can do wonders to slow down sugar spiking.

HYPOTENSION Low blood pressure. Not always a bad thing unless you need 11 hours of sleep or faint if you stand too quickly.

HYPOTESTOSTERONISM Having either low secretion levels of testosterone by the testes, having low functional effects because of poor circulation, having competition by less active testosterone metabolites, or having high levels of adipose-released estradiol

(former testosterone) in obesity that ends up suppressing testosterone. There are, of course, organic diseases that can cause the condition.

HYPOTHALAMUS A part of the diencephalon of the brain, it is a major actor in the limbic system. This is a functional, not anatomic, system in the brain that influences and is influenced by emotions.

Call the limbic system an ad hoc committee that decides how things are going today, based on past, present, potential, and myriad informational inputs from the somatic body. The hypothalamus gathers the data and sets the levels of the pituitary thermostat. The pituitary does what the hypothalamus tells it to do, and our whole chemical nervous system responds to the pituitary, which responds to the hypothalamus, which, along with the rest of the limbic system, decides the kind of day we need to get ready for. And to think that some doctors used to (and still) scoff at a "psychosomatic disorder."

HYPOTHYROID Having deficient thyroid levels, either from overt thyroid disease like myxedema, a generally low metabolism from functional causes, or subsequent to emotional depression or the use of depressant drugs.

HYPOXIA Lack of sufficient oxygen, such as occurs at high altitudes.

I

IATROGENIC Illness, disease, or imbalances created by medical or nonmedical treatment that were not present before treatment. In medicine the therapy is blamed (not the therapist) and changed to something else. In alternative medicine it may be called a "healing crisis" and deemed good for you. Beware: if the therapy makes you feel worse in a new way, it is almost always the wrong therapy.

IBS Irritable Bowel Syndrome.

IgE Immunoglobulin E is a type of antibody produced by IgE plasma cells. These are specialized B-cell lymphocytes that make free-floating antibodies for what is termed humoral resistance. IgE is peculiar for several reasons. It is not made to be specific against only one antigen like other gamma globulins, but instead can bind with a number of dangerous proteins. Further, IgE travels to mast cells, sticks to their surfaces, and when antigens get stuck to the IgE, the mast cells secrete inflammatory compounds like histamine. Since IgE is a generalist, coded for a number of potential toxins, not just a single substance, it can decide that Juniper pollen and cat dander are antigens...and you have an allergy. Elevated production of IgE is often inherited, which is why allergies run in a family-and why, once you have an allergy, the mast cells and IgE can decide that, for the duration, a whole bunch of other stuff causes hypersensitivity reactions, stuff that wouldn't normally bother you without an ongoing allergy.

ILEOCECAL Pertaining to both the last section of the small intestine (the ileum) and the beginning of the large intestines, the ascending colon or cecum. EXAMPLE: Ileocecal valve

ILEUM The lower two-thirds of the small intestine, ending in the ileocecal valve and emptying into the cecum of the colon. The last foot of the ileum is the only absorption site available for such important dietary substances as vitamin Bl2, folic acid, some essential fatty acids, fat soluble vitamins, and recycled bile acids.

IMMUNITY The ability to resist infection and to heal. The process may involve acquired immunity, (the ability to learn and remember a specific infectious agent), or innate immunity (the genetically programmed system of responses that attack, digest, remove, and initiate inflammation and tissue healing).

IMMUNOSTIMULANT An agent that stimulates either innate or acquired immunity. In the U.S., immunotherapy is relegated to experimental medicine, but a number of plant substances are used in Europe as immunostimulants. The presumption of immunostimulation is that you increase native resistance and let it run its course.

American Standard Practice, with all good intentions, tends to aggressive procedures, and feels empowered only when intervening against, not with, physiologic responses. Medicine is the only approach to many problems, but in the U.S. we all tend to forget that our brand of standard practice is uniquely aggressive and invasive amongst the industrialized nations. There are other ways...which is presumably why you are using this glossary in the first place.

IMMUNOSUPPRESSANT An agent that acts to suppress the body's natural immune response. This is totally understandable in tissue and organ transplants, and in some dangerous inflammatory conditions, but nearly all anti-inflammatory medications are immunosuppressant, including cortisone, antihistamines, and even aspirin. Some medical radicals are convinced that the chronic viral and fungal disorders of our age are partially facilitated by such medications.

INCONTINENCE The inability to retain urine in the bladder for a reasonable length of time. It is can be caused by urethral irritation, loss of tone to the basement muscle of the bladder (the trigone), scarification or growths on the urethral lining, nerve damage, or emotional stress.

INDOLENT A sluggish and unresolving condition, often with ulcerations and necrosis.

INFLUENZA A specific type of acute viral respiratory infection, with one virus (many strains) and a short, nasty stay. A few thousand people die from it every year, but humans alive at present have almost universal partial resistance. It was not so during WWI, when it first began to spread. It was variously called Spanish Influenza, La Grippe, and Influenza (Italian for Influence)...everyone blamed some other country for it. The Turks and Armenians took a break from mutual mutilation and blamed it on each other, since it was killing as many people as the 1,000,000 fatalities THAT bit of genocide fostered. It ran across the world like some Bergmanesque horseman, and killed at least 20 million people before it petered out around 1925. The villages of Northern New Mexico, filled with grim and genetically toughened Spanish settlers, survivors of terrible weather, 300 years of isolation, the Inquisition and Anglo carpetbaggers, suffered fatalities that reached 40% in some places. The flu is new.

INGUINAL NODES Lymph nodes in the groin, next to the genitalia

INSULIN-DEPENDENT DIABETES Also called Juvenile-onset Diabetes, IDDM (Insulin-Dependent Diabetes) and Type I, it is a deficiency condition wherein the pancreas does not manufacture enough insulin or what it makes is formed improperly. It is usually inherited, although it may not surface until pregnancy, recovering from a life-threatening illness, boot camp or some other profound metabolic stress. It can have a not-hereditary source, since it seems to enigmatically follow after a viral disorder, and can occur spontaneously as an auto-immune condition.

The percentage of folks with non-hereditary Type I diabetes is constantly increasing (or the other group is stable, but total numbers are increasing). Radical

environmentalists and tree-hugging Gaiaist Pagans (I'm using the dialectic current to the pro-business backlash of the 1990s, when Green is out, and White-With-Green i$ in) claim this is another aspect of massive though subtle pollution from organochemical soup, which even some Real Doctors admit can cause increased auto-immune disease. (SOMETHING is causing it, at any rate, not simply cola drinks.)

INSULIN-RESISTANT DIABETES Also called NIDDM (Non-Insulin-Dependent Diabetes) and Type II (Type II), it generally means you make your own insulin, you eat too many calories, your storage cells are filled and are taking no more fuel, your liver is stuck in a rut and keeps making more glucose out of everything you eat, your brain has no control over its consumption of glucose, but you have run out of places to put it so you pee it out, sweat it out, etc. etc. Also called Adult-onset Diabetes. An Internist may cry out in dismay at this simplification, and there are many subtle distinctions between the various types, as well as a number of distinct hereditary considerations. This, however, is the glossary of an herbalist, and this is the common picture of the Type II person that herbs will help.

INTERSTITIAL FLUID The hydrogel that surrounds cells in soft tissues. It is a mucopolysaccaride starch gel, and the serum that leaves the blood capillaries flows through this gel, some to return to the exiting venous blood, some to enter the lymph system. There is an old medical axiom: the blood feeds the lymph, and the lymph feeds the cells. Interstitial fluid that flows through the starch colloid is this lymph.

INTRINSIC Arising from the nature of a thing...native or inherent. Intrinsic asthma, as an example, arises from congestive inflammation, neurohormonal and auto-allergic conditions of the lung and bronchial membranes themselves, not from EXTRINSIC causes, like Juniper pollen or a bee sting.

INTRINSIC FACTOR One of two proteins secreted from the lining of the stomach whose sole purpose is (it seems) to cradle B12 in a pre-fitted styrofoam mold and (A) carry it through the Seven Levels of Digestive Hell until it reaches those few absorption sites in the last foot of small intestine that understand its "Special Needs" (sounds either sexually kinky or the airplane dinner label on kosher food for flying Hassidim jewelers) and finally (B) slip it from one protein to the other, and thence into the cell membranes where its is turn handed over to (C) the specialized blood protein that can carry it safely to the final target tissues (3 times out of 4, the bone marrow).

Cyanocobalamin (B12) has parts that fall off, radicals that twirl around in five directions on three charge potentials, and is as durable as a 49¢ water pistol. And, if we have an ulcer, chronic enteritis or long-standing steatorrhea, we either get B12 shots (and hope the liver still makes that blood carrier) or walk around with pernicious anemia and a hematocrit of 16.

IRITIS, RHEUMATOID An autoimmune (rheumatoid factor) inflammation of the iris. This is a face of rheumatoid arthritis seldom diagnosed, along with rheumatoid otitis. Although antiinflammatory drugs may be necessary, I would recommend starting off with simple things like ***Arctium, Rumex crispus*** and ***Taraxacum***, along with alkalizing teas such as Nettles, Red Clover and Alfalfa (oops...I mean ***Urtica, Trifolium*** and ***Medicago***). If they don't help enough you can STILL take the drugs.

IRITIS, VIRAL A viral infection of the iris. It appears red, swollen, and pupil contraction and relaxation is erratic and pulled. The usual cause is a herpes infection, often resident in the trigeminal nerve, and reoccurring during times of stress or sympathetic to a larger viral condition.

IRRITABLE BOWEL SYNDROME (IBS) This is a common and generally benign

condition of the colon, taking different forms but usually characterized by alternating constipation and diarrhea. There is often some pain accompanying the diarrhea phase. The bowel equivalent of spasmodic asthma, its main cause is stress, often accompanied by a history of GI infections. Adrenalin stress slows the colon and causes constipation, followed by a cholinergic rebound overstimulation of the colon. It is also called spastic colon, colon syndrome, mucous colitis, even chronic colitis. True colitis is a potentially or actually serious pathology.

ISOTONIC Having the same salinity as body fluids. You can make a quart of water isotonic by adding a slightly rounded measuring teaspoon of table salt to a quart of water.

J

JAUNDICE The presence of bilirubin deposits in the skin, whites of the eyes and mucosa. Bilirubin, the unrecyclable waste products of hemoglobin, are normally excreted in the bile, get carried down the intestinal tract and color our feces its usual comfortable brown. If the bile ducts are blocked, blood breaks down too quickly, or the liver itself is diseased (it performs much of the recycling), then the yellow/orange/brown bilirubin has nowhere to go but out the urine (making it the standard hepatitis color) and into the skin. Jaundice ain't bad...its the causes that one should worry about.

K

KLEBSIELLA A bacteria genus of the ***Enterobacteriaceae***. ***K. pneumoniae*** is implicated in much pneumonia, particularly when it is a secondary infection following a simple chest cold.

L

LACHRYMITIS (also Lacrimitis) Inflamed lacrimal or tear ducts.

LACTEALS Specialized lymph formations found in the small intestine mucosa. Together with enzymatic activities in the submucosa, they collect digested fats into stable transport bubbles called chylomicrons, and draw them up into the lymph system. There they are gradually leeched into the blood as the lymph passes upwards through the body, the remainder discharged into the venous blood with the lymph...12-24 hours later. Time-Released fat capsules.

Fats lower the blood charge and make it sticky, which can interfere with vascular capabilities; the sideways bypassing of the blood in this manner spreads the fats out over long periods. The rest of the digested constituents can happily flow up to the liver through the portal system, unsludged, and the liver itself therefore has little lipid stress to face. If fats are poorly digested in the upper intestinal tract, the floating bubbles are larger, broken down too slowly to be well absorbed into the lymph system, and the portal blood...and liver...get sludged. Ever wonder why a bunch of lousy pizza can give you hemorrhoids the next day? Sludgy portal blood and backed-up venous drainage from the legs is why.

LACTOBACILLUS A genus of gram-positive, acid-resistant bacteria in the

Lactobacillaceae family. We know of ***lactobacillus*** because of its use in making yogurt and the conventional wisdom of taking it in one form or another after antibiotic therapy, but it is an integral part of the colon and mouth flora, and is the critical acidifying agent in vaginal flora. There is a growing body of rather ignored data showing the value of regular consumption of a ***lactobacillus***-containing food in immunosuppression, slow virus, and candidiasis conditions.

LANCEOLATE A leaf that is lance-shaped.

LARYNGITIS Inflammation of the larynx, usually implying hoarseness or aphonia.

LATERAL At or on the side, usually from a stem.

LDL Low Density Lipids. The levels are usually indicative of liver function and metabolic tendencies, and the relative proportions of LDL, VLDL and HDL show relationships between caloric intake, anabolic energy, skeletal muscle metabolism and adipose tissue health. They are not innately wrong, anymore than is cholesterol; both are ABSOLUTELY necessary for health. It's all a matter of proportion, and the relationship between consumption and tissue needs.

LEAFLET A small leaf that is part of a compound leaf.

LEUKOCYTES White blood cells, of whatever race or creed.

LEUKOCYTOSIS Having abnormally high numbers of white blood cells, usually the result of a non-viral infection.

LEUKOPENIA Having abnormally low numbers of white blood cells.

LIMBIC SYSTEM A functional, not physical, system in the brain, generally considered to mediate emotions with metabolism.

LIMBIC/HYPOTHALAMUS Broadly the accumulative process of emotional and metabolic evaluation, as carried on by the various parts of the brain that are part of the ad hoc “evaluations” committee (the limbic system) and those changes in metabolism that, based on the evaluations, are acted out in the whole body by the hypothalamus. The hypothalamus, the main part of the system with tools, acts through a blood translator, the pituitary gland.

LINIMENT A liquid containing therapeutic agents for topical application. It may be an alcohol, oil, or water preparation.

LIPID A descriptive term, rather than chemical one, for fats. Broadly, it means true fats (like triglycerides), lipoids (like phospholipids) and sterols (like cholesterol).

LIPOTROPIC FACTORS Various compounds and processes that enable the liver to metabolize fats properly or prevent the formation of cholesterolic stones in the gall bladder by supporting the continued emulsification of gall bladder bile. EXAMPLES: Lecithin, choline, ***Aristolochia***

LITHIASIS Having stones, usually in reference to the kidneys and urinary tract, sometimes to the gall bladder apparatus. Technically this can also refer to salivary gland calculi and impacted precipitants in the seminal vesicles or prostate.

LOCHIA The uterine discharge following birth, changing from reddish the first few

days, to yellowish or clear after a couple of weeks. Many traditional skills of a midwife or *partera* center around evaluating the qualities and progress of lochia.

LUMBAR REGION The lower back, five segments of the spinal chord and column, between the sacrum and thoracic regions.

LUTEINIZING HORMONE (LH) This is a sugar-bearing protein manufactured by the anterior pituitary. Like a lot of the pituitary hormones, it surges on and off, since constant secretion would overload and deaden receptors. In women, it builds up after menses, stimulating the release of estrogen from the ovaries. Estrogen in turn stimulates the hypothalamus to increase its stimulation of LH from the pituitary, until, a day or two before ovulation, they produce a guitar-amp feedback, and the cells that produce LH start to surge follicle-stimulating hormone (FSH). The egg pops, being replaced by the corpus luteum, which produces progesterone for the next eleven to twelve days. Progesterone inhibits and lowers LH levels, as well as inhibiting levels of estrogen already being produced by the young follicles that will produce next month's egg. In men, LH is responsible for stimulation of testosterone, although FSH and the testes hormone inhibin are responsible for both the production of sperm and controlling testosterone.

LUTEINIZING-HORMONE RELEASING HORMONE (LH-RH) The same substance as Follicle-Stimulating-Hormone Releasing Hormone (FSH-RH), both of which are actually Gonadotrophin-Releasing Hormone (GnRH or GRH). Confused? Imagine being an endocrinologist 20 years ago. These (This) are (is) a peptide secreted into the little portal system that drains from the hypothalamus to the pituitary. If it is surged hourly and not too strongly, the pituitary secretes LH and the ovaries secrete estrogen. If it is surged hourly and strongly, the estrogens rise drastically, the pituitary secretes FSH, you pop an egg, start the corpus luteum and begin progesterone secretion. The surge is now slowed to every four or five hours, not too strongly, and the pituitary secretes LH every four or five hours...and the ovaries make progesterone. The same hypothalamic hormone triggers different pituitary responses based on AMPLITUDE and FREQUENCY.

LYMPH Pertaining to the lymph system or lymph tissue, the "back alley" of blood circulation. Lymph is the alkaline, clear intercellular fluid that drains from the blood capillaries, where the arterial blood separates into thick, gooey venous blood and lymph. It bathes the cells, drains up into the lymph capillaries, through the lymph nodes for cleaning and checking against antibody templates, up through the body, and back to recombine with the venous blood in the upper chest. Blood in the veins is thick, mainly because part of its fluid is missing, traveling through the tissues as lymph. Lymph nodes in the small intestine absorb most of the dietary fats as well-organized chylomicrons. Lymph nodes and tissue in the spleen, thymus, and tonsils also organize lymphocytes and maintain the software memory of previously encountered antigens and their antibody defense response. Blood feeds the lymph, lymph feeds the cells, lymph cleanses the cells and returns to the blood.

LYMPH NODES The central drainage and metabolic organs strung along the lymph vessels. The mesenchymal structure is native, being present at birth. The functional cells have all migrated there, some recently from the marrow, spleen, thymus or blood, others have resided since a few months after birth. Much of the antibody memory is stored in these nodes, and having only venous blood supply, lymph nodes are constantly shunting metabolized substances back into the blood, so the final lymph drainage from the thoracic duct into the left subclavian vein (or the right subclavian) contains fluid already screened and cleansed by many nodes.

LYMPHADENITIS Inflammation or swelling of one or more lymph nodes. It may

be an acute response or chronic, but signals the drainage into those nodes of microbes, their waste products, or the immuno-complexes produced upstream, whether from infection or allergy. A few infections can target or inhabit lymph nodes such as typhoid and EBV. Some people, with a past history of infection in a specific tissue (such as chronic sore throat as a kid) will have developed a LARGER sized node, hard and permanently palpable. These are hypertrophic or "shotty" nodes, and of no more importance than pumped-up muscles or old scar tissue.

LYMPHANGITIS Inflammation of one or more lymph nodes and/or lymph vessels, usually part of an acute infectious condition.

LYMPHATIC Pertaining to the lymph system...sometimes more broadly to include immunity.

LYMPHOMA A neoplasia of the lymph tissue, such as Hodgkin's Disease. Although it is frequently useful to stimulate immunity when a person is undergoing chemotherapy for cancer, since the resultant immunosuppression is a major side effect of the treatment, in lymphatic cancer this the POINT of the therapy...let it be.

M

MACROPHAGE This is a mature form of what is released from the marrow as a monocyte. A macrophage lives long, can digest much detritus, and is able to wear particles of odd food on its outer membrane. This allows T-cell and B-cell lymphocytes to taste the particle (an epitope) and form an antibody response. Further, these macrophages, traveling as monocytes, will take up permanent residence in many tissues, providing them with immunity. They line the spleen, form the cleansing Kupffer cells in the liver, make up the "dust cells" that protect the lungs, protect the synovial fluids of the joints, and form the microglial cells that provide protection to the brain and nerve tissues. On and on, the macrophages clean up messes and acting as the intermediates between innate and acquired immunity.

MALABSORPTION Improper utilization of needed and available nutrients, either from impaired digestive function (such as B12 being unabsorbed because of gastritis), impaired absorption (poor Vitamin E absorption because of an inflamed ileum) or impaired transport (the diminished blood proteins of the advanced alcoholic). There are other causes as well, but you get the idea.

MALAISE A fretful and low energy state, often considered an early sign of infection or low fever. Ask someone with Chronic Fatigue Syndrome or Multiple Chemical Sensitivities...they'll tell you how it feels.

MAO INHIBITION The suppression of monoamine oxydase (flavin-containing amine oxydase). MAO is critical in modifying nerve-ending storage of certain mono-amines (in this case, epinephrine, norepinephrine and dopamine...another type of MAO works on histamines), and MAO inhibitor drugs were, along with tricyclics, the first wave of anti-depressants. The problem was that if you ate brie cheese or chopped chicken livers while taking the drugs you could get a nosebleed or cerebral aneurysm...a double adrenergic whammy, since some foods are also strongly MAO-inhibiting (at least functionally). Although most current manuals (Merck's and Harrison's among others) consider these first generation drugs as safer and preferable to the recent Prozac and such, fashion am fashion, with docs as much as patients. Most of the patients a doctor sees are People That See Doctors (most Americans have infrequent medical contact).

Some come with clippings in hand, a few find out about new stuff before their doctor does (they only have ONE patient..themselves) and the pressure for gilt-edged newness is hard to resist all around. The only herb I know of with any consequential MAO inhibition is ***Hypericum***, and its effect, although not to be ignored, is less than French semi-soft cheeses.

MAST CELLS These are a group of cells that line the capillaries of tissues that come in contact with the outside, like skin, sinuses, and lung mucosa. They, like their first cousin basophils, are produced in the red bone marrow and migrate to the appropriate tissues, where they stay. They bind IgE, supply the histamine and heparin response that gives you a healing inflammation, and cause allergies.

MATRIX The intercellular substance of a tissue. It forms the primary mass in some cartilage, bones, and the lens of the eye...where living cells are so separated they communicate with e-mail.

MENARCHE The beginning of the reproductive phase of a woman's life. It usually begins withy night sweats, continues a few months later with estrogen, followed by ovulation, then the full cycle and the growth of secondary sexual characteristics...in various order. Also called adolescence or puberty, it is mirrored in reverse at the end of the reproductive years as menopause.

MENOPAUSE The several years, in the late forties or early fifties, when the great birth reservoir of potential ovarian follicles has been reduced to only a few, many with innately poor hormone-sensitivities (which is perhaps why they are still remaining...they never heard the clarion call of FSH). As fewer follicles are capable of fully- programmed function, corpus luteal fragilities start to show as diminished progesterone levels...later, even the pre-ovulatory estrogens start to diminish. The pituitary, sensing first the progesterone wobbles, then, maybe a year later, the erratic estrogens, tries to jump start the ovaries, sending increasing levels of Luteinizing Hormone (LH)...with diminishing results. Since the brain (hypothalamus) is actually controlling things, it is sending out higher levels of pituitary stimulating hormones, which the pituitary matches with its blood-carried trophic or gonadotropic hormones...in this case, LH.

What the pituitary hears from the hypothalamus is TYPE of brain chemical, MAGNITUDE, and, as much of this is being pulsed, FREQUENCY of chemical. At a certain point, the gonadotropic-releasing-hormone sent out by the hypothalamus is so loud and frequent that the pituitary starts sending out things like TSH (thyroid-stimulating hormone) and somatotropins (growth hormone) as well ...hot flashes, changes in food cravings, sleep cycles...whatever. Like old partners in an ancient dance whose music is ending, the hormonal imbalances are the reverse of those experienced years ago in menarche. As above, so below. When the dust settles, the metabolic hormones have found a new interaction, anabolic functions have been transferred from the ovaries to the adrenal cortex, and that reservoir of stored estradiol present in the "Womanly Flesh" of the breasts, thighs, hips and Page 31buttocks, started many years ago, maintains a low blood level, diminishing over the following years, easing some of the estrogen-binding tissue into the change.

MENOPAUSE, SURGICAL A term rather callously used to describe the cessation of ovarian hormones as a result of a radical hysterectomy...or what the British more honestly refer to as castration.

MENORRHAGIA Excess bleeding at menses, in duration or amount. Causes are many, although chronic menorrhagia and PMS is usually the result of deficient progesterone secretions (days-per-month) or constant adipose-released estradiol from obesity or recent substantial weight loss. Uterine fibroids can contribute, as can

menopausal breakthrough bleeding or flooding, coagulation disorders, and most serious metabolic disease can produce menorrhagia as one of many symptoms. My rule of thumb as an herbalist is, if botanicals fail to control the bleeding directly (hemostatics) or attempting to reestablish a good folliculization for the next month's corpus luteum does not help, there may be a metabolic problem or an overt reproductive pathology. In menopausal menorrhagia, however, the conditions are transitional and in flux...it is hard to use such absolute statements.

MENSTRUUM The solvent used in extraction. For a dry tincture, the menstruum might be 50% alcohol and 50% water. The menstruum for mint tea is hot water.

MESENCHYMAL CELLS Literally, those derived from embryonic mesoderm; practically, those in a tissue that give it structure and form. The opposite of parenchymal.

MESENTERIC Pertaining to the great fold that holds the small intestines, blood vessels and lymph in a great curtain, connected with the back of the abdominal wall.

MESOMORPH In somatotyping, a mesoderm-muscle-structural dominant person. The Incredible Hulk syndrome.

METABOLISM The sum total of changes in an organism in order to achieve a balance (homeostasis). Catabolic burns up, anabolic stores and builds up; the sum of their work is metabolism.

METABOLITES A by-product, waste product, or endotoxin produced as the result of metabolism, both normal and defensive.

METRORRHAGIA Uterine bleeding at times other than menstrual

MITOSIS The classic four-phased cellular division of somatic cells, wherein (when the dust settles) two new daughter cells contain full chromosomal information of the parent, complete nuclei, and half the cytoplasm. This is distinct from cloning (as in the bone morrow) and the chromosome splitting of miosis (ovum and sperm).

MITTELSCHMERZ Abdominal pains that occur midway between menstrual periods and which are caused either by ovulation or the normal short pre-ovulatory surge of estrogen.

MONONUCLEOSIS Properly, infectious mononucleosis, a viral infection of the lymph pulp most frequently caused by the Epstein-Barr virus. The spleen, lymph nodes, and (sometimes) the liver are involved. The general symptoms are fever, sore throat, exhaustion, and abnormal white blood cells.

MS Multiple Sclerosis

MUCOEPITHELIAL Tissues with mixed characteristics of both mucous membranes and epidermis, found around the entrances into the body.

MUCOPURULENT A discharge of mixed mucus and pus, usually from congested and moderately infected membranes.

MUCOUS MEMBRANES (MUCOSA): The mucus-secreting skin that lines (and protects against the environment) all openings, cavities or entrances into the body, such as the intestinal tract, lungs, urinary tract, sinuses, vagina, etc.

MUCOUS COLITIS A form of colitis that is less inflammatory and closer in nature, if not identical with Irritable Bowel Syndrome, with cramps, intestinal guarding followed by soft or hard stools and various amounts of mucus. There are usually periods of constipation

MULTIPLE SCLEROSIS A chronic, usually progressive disease of the central nervous system, with the gradual patchy disorganization of the protective myelin cells. It is almost certainly an auto-immune disorder, although viral infections sometimes seem to initiate the condition, and physical trauma is often seen to anomalously precede the first symptoms.

MUMPS An acute infectious disease, caused by a ***paramyxovirus***, and most common in children. Although it usually infects the parotid glands, and is often only a mild condition, it CAN spread to the testes or ovaries, particularly when contracted by unresistant adults, and a mild child's infection that is not properly honored by R&R always holds the potential for pancreatic or meningeal complications.

MYALGIA Tenderness or pain of the muscles themselves; muscular rheumatism.

MYENTERIC PLEXUS Broadly, the several neuron masses, ganglia, and nerve fiber plexus that lie in the walls of the intestinal tract, particularly the small intestine. They monitor and stimulate local muscle and glandular functions as well as blood supply, with little interface or control by the central nervous system or the autonomics. Each synapse away from the CNS gives greater autonomy, and these nerves only listen to God ... and food. This means the small intestine is relatively free of stress syndromes.

MYOCARDIUM The middle, muscular layer of the heart.

MYXEDEMA Puffiness and fluid retention resulting from thyroid hypofunction, either organic (serious, and often complicated by pituitary or adrenalcortical deficiencies) or functional (often a bipolar depressive thyroid phase).

N

NARCOLEPSY A chronic neurologic condition characterized by reoccurring and inexplicable drowsiness and sleep. There is no organic cause and no seeming changes in EEG readings.

NARCOTIC A substance that depresses central nervous system function, bringing sleep and lessening pain. By definition, narcotics can be toxic in excess.

NDGA Nordihydroguaiaretic acid, a substance found in abundance in the oleoresins of ***Larrea*** (Chaparral) and the ***Guaiacum*** genus (Lignum Vitae). It is strongly antioxidant to lipids and is antifungal, antimicrobial and antibacterial. Both plants contain a constellation of related compounds and do not have the potential kidney toxicity found in pure NDGA...and the reason it is no longer used as an EDTA-type edible oil stabilizer in food manufacturing.

NECROSIS Death of tissue or cells, either from infection or the loss of normal circulation and autotoxicity.

NEOPLASIA The presence of abnormal cells forming a growth or tumor, unable to

perform their normal functions, and replacing healthy cells.

NEPHRITIS Inflammation or infection of the kidneys, as opposed to lower urinary tract inflammations such as cystitis or urethritis, which are usually comparatively mild. Nephritis can be a far more serious condition, and usually requires medical care.

NEURALGIA Pain, sometimes severe, that manifests along the length of a nerve and arises within the nerve itself, not in the tissue from which the sensation seems to arise.

NEURASTHENIA Tiredness or exhaustion, often in excess of what would seem appropriate from purely physical causes.

NEURITIS Nerve inflammation, usually with an abnormal amount of pain, and often part of a degenerative process.

NEUROGENIC Sensations or conditions derived solely from the nervous system

NEUROPATHIES A disease of the central or peripheral nervous systems. In more common reference, a neuropathy is primarily a disorder of peripheral nerves. CNS diseases are often life threatening; neuropathies are generally disorders of the control and sensory nerves out in the body.

NEUTROPHILS Another name for polymorphonuclear leukocytes, the most common type of blood-carried white blood cell, and the first mobile resistance cell to come to the rescue in injury.

NITROGENOUS A compound or molecule that contains nitrogen; in my context, a substance that is or was a part of protein metabolism.

NUCLEOPROTEIN A molecule that is formed from a structural protein that is combined with nucleic acid, and generally found in cell nuclei and other proliferative points in cells. Upon cell death, nucleoproteins, unlike others, cannot be catabolized and recycled efficiently; instead, part of the protein is degraded to purines, and thence to uric acid. Uric acid, unlike urea, is an excretory dead end.

NURSE LOGS In old-growth forests, these are ancient downed trees that rot so slowly that they themselves become the fundus and growth media for new and growing trees and other life-forms.

O

OIL, FIXED These are lipids, esters of long-chain fatty acids and alcohols, or generally related oily stuff. If you drop some fixed oil on a blotter, it just stays there-forever. (Example: olive oil.)

OIL, VOLATILE The aromatic, oxygenated derivatives of terpenes that can be obtained from plants (in our case), usually by distillation. Unlike a fixed oil that has no scent (unless rancid), volatile oils are all scent. (Example: oil of Peppermint.)

OPHTHALMIA Severe eye inflammation, including conjunctivitis, iritis, severe hay fever, etc.

OPTHALMALGIA Very simply, eye pain.

OPPOSITE Plant parts, usually leaves, that form pairs at nodes.

ORBITAL HEADACHE A headache around the eyes. There are supra-orbital headaches and suborbital headaches as well...the difference escapes me.

ORCHITIS Inflammation of the testes, manifested by swelling and tenderness, usually infectious, sometimes the result of trauma.

ORGANIC DISEASE A disease that started as, or became, impairment of structure or tissue. The smoker may have coughing and shortness of breath for years, and suffer from functional disorders; when the smoker gets emphysema, it is an organic disease.

OSTEOPOROSIS The softening of bone mass and the widening of the bone canals. This occurs with both age and diminished physical activity. Since women live longer, they are more likely to show such signs. (WARNING! Tirade Ahead!) There is little doubt that the condition is increasing among American women, and is starting to show itself at an earlier age. This is called "improved diagnostic methods" (harumph). The statistics that show the rise to be strongest in women that have used steroid hormone therapies in their earlier years seems to have escaped the notice of current Medical Conventional Wisdom. This states that ALL women need medical care against osteoporosis going into menopause, and the primary treatment is...steroid hormones (this year, at least).

I know this may sound smarmy, coming from some long-in-the-tooth hippy male, but I would be far more impressed if SERIOUS attention was given to carefully defining the parameters of a woman's risks.

The road of medicine is strewn with four decades of well-intended universal hormone approaches to women's health...embarrassedly forgotten. The idea of universal HRT for a whole generation of menopausal women seems like a frightening experiment in medical fascism and band-wagon hubris. There is no attention given as to WHY our future elders are suddenly stricken with a medical problem.

Were birth-control pills, made up of synthetic digestion-proof steroid analogues, a major cause? Has our food become simply inadequate and over-pocessed? Have the decades of exposure by women to xeno-estrogens that are derived from degraded insecticides had more effect than the ones claimed by environmental watch-dog groups...the rise in breast and prostate cancer, the halving of the sperm count in Caucasian males and little-dicked alligators reported from Florida? Is the synthetic flavor in that pink bubble gum to blame? Perhaps its the fumes released from the early Barbies? FDS? There must be some reason, but the present medical answer is only HRT and (if politics allow) Jane Fonda tapes.

OTITIS MEDIA Inflammation, infectious or sterile, of the middle ear. In children this is often complicated by fluid buildup behind the eardrum. This raises the anxiety levels of conscious parents, debating the three-decade-old question, "Antibiotics?". They may fear the realistic (and unrealistic) effects of the drug, weighed against the anguish of a center-of-attention complaining child and the knee-jerk agitation they feel (particularly the mother...see OXYTOCIN). Then, when three months of antibiotic therapy doesn't work for some children (and they now show the brand-new signs of having become allergic..."No connection with the antibiotics at all" sez the pediatrician), the parents have descended to another level of Parent Bardo..."Tubes in his ears?!"

You can guess my feelings. I am not, however, suggesting ignoring your pediatrician. There are presently strong, if minority, medical currents against these approaches...you may have a Ped. that starts with antibiotics the first day and practically pre-schedules a three-month-away intubation visit...Let Your Fingers Do The Walking (see YELLOW PAGES). Another BabyDoc may not want to use antibiotics UNLESS

other measures have failed and there is the extended presence of pus behind the eardrum. Turning away from such conservative an approach can hurt the kid...and is giving the careful physician a session in Negative Reinforcement Therapy. "Antibiotics über alles!" proclaims a banner in the waiting room next visit, and there may be a case displaying the newest line of Swatch Eartubes.

OXYTOCIN A short-lived, fast acting hormone, made by the hypothalamus of the brain, along with its close relative vasopressin (anti-diuretic hormone), stored in the posterior pituitary, and released into the blood as needed. It stimulates certain smooth muscle coats, constricts certain blood vessels and facilitates the sensitivity of some tissues to other hormones and nerves. The main tissues affected are the uterus, including endo- and myometriums, vagina, breasts (both sexes), erectile tissue (both sexes), seminal vesicles, and with special-case effects on uterine muscle contractions in both birth and orgasm, the vascular constriction that lessens placental separation bleeding, and the let-down reflex that nursing mothers have when babies cry (or kittens mew...or husbands whine)

P

PANCREAS This is a gland situated above the navel in the abdominal cavity that extends from the left side to the center, with its head tucked into the curve of the duodenum. It is 6-8 inches long, weighs 3 or 4 ounces, secretes pancreatic enzymes and alkali into the duodenum in concert with the gallbladder and liver, and secretes the hormones insulin and glucagon into the blood. Insulin acts to facilitate the absorption of blood glucose into fuel-needing cells, and glucagon stimulates a slow release of glucose from the liver, primarily to supply fuel to the brain. That most cherished organ uses one-quarter of the sugar in the blood and has no fuel storage. Pancreatic enzymes are basically those that digest fats, carbohydrates and proteins into their smaller components of fatty acids+glycerol, maltose, and amino acids...as well as curdling milk (thought you might want to know).

PANICLE A compound flower head that forms a raceme.

PAPILLAE Small raised bumps or nipples on a tissue surface. Lingual papillae are taste buds.

PARASYMPATHETIC A division of the autonomic (involuntary) nervous system that controls normal digestive, reproductive, cardiopulmonary, and vascular functions and stimulates most secretions. This subsystem works as a direct antagonist to the sympathetic division, and organ functions balance between them.

PARASYMPATHOMIMETIC Mimicking major aspects of parasympathetic function. EXAMPLES: ***Amanita muscaria*** mushrooms, Pilocarpine, ***Lobelia***.

PARATHYROIDS These are several minute glandular masses embedded in the lower edge of the thyroid gland. They produce Parathyroid Hormone (PTH), part of the calcium-phosphorus control system. Calcium levels in the blood MUST be within a narrow band of safety. If free calcium drops too low, PTH acts on the kidneys and blocks calcium loss in urine, amplifies calcium absorption into the portal blood (from food and from submucosal storage) and stimulates release of calcium from bone storage. When levels are back up, the hormone backs off. Oddly enough, the thyroid gland secretes its virtual antagonist, calcitonin, which, when calcium levels are too high, stimulates the urine excretion, bone retention and digestive resistance to calcium, and

when the blood levels drop, recedes. The body finds calcium levels to be so critical that it has in place TWO separate, mutually antagonistic negative feedback systems,,,like a binary star system. (Be thankful I didn't bring in the calcium maintenance of minerocortical steroid hormones or vasopressin)

PARENCHYMAL These are cells in a tissue or tissues in an organ that are concerned with function. These are the characteristic cells or tissues that do the actual stuff. The importance to us is that parenchymal tissues expend much vital energy in their functions and are less tolerant of a degraded environment than the structural mesenchyme. A congested and impaired organ like the liver of a heavy drinker has so much regular dysfunction that eventually the more tolerant and metabolically less particular mesenchymal cells become more common, and the distressed, overworked, and metabolically compromised parenchymal cells become a minority. The structural cells can multiply with ease in a poor environment, the more delicate functional cells cannot-and you end up with the type of cirrhosis sometimes termed mesenchymal invasion disease.

The point of this is that the sooner you return an organ or tissue back to the healed state, the more likely you are to have a healthy balance between the structural and functional.

PARESTHESIA Numbness, prickly sensations without point specificity, or abnormal hypersensitivities, all local to one part of the body, and without an obvious cause. Your foot falling asleep is paresthetic, but not paresthesia...the cause is you sat funny.

PAROTID A pair of salivary glands tucked into the notch in front of each ear and emptying through parotid ducts by each upper 2nd molar. Although the fluid has some of the thick viscous lubricant nature of saliva from the glands in the floor of the mouth, the parotids secrete high levels of ptyelin and amylase (starch-digesting enzymes) lysozymes (antimicrobial enzymes) and a group of proteins loosely called parotin that stimulate epithelial and nerve cell growth...a lot more here than just spit.

PATHOLOGY Disease, particularly one with clear and obvious changes in structure or function; the study of same.

PEDICEL The stem of a flower within a floral cluster.

PEDUNCLE The stem or stalk of a single flower or a whole floral cluster.

PELVIC INFLAMMATORY DISEASE (PID) Also called salpingitis, the term is applied to infections of the fallopian tubes that follow or are concurrent with uterine and cervical infections. Gonorrhea and ***Chlamydia*** are the most common organisms, and the infection is usually begun through sexual contact, although metabolic imbalances, subtler systemic infections like a slow virus, the local insult of herpes or candidiasis, the sequela of medication or recreational drugs, birth control pills, even an IUD...all can alter the vaginal flora and induce inflammation sufficient to allow an endogenous organism to start the infection. PID after birth, on the other hand, is usually the result of staph or strep infections infecting injured membranes.

PEMPHIGUS An acute or chronic disease of adults, with a singular or constant series of skin eruptions. The causes are not known, although both viruses and auto-immune reactions can be implicated. There are so many distinct types that it is probably not a distinct pathology but a symptom, like nausea, that occurs from many causes. Pemphigus of the mouth, lips and throat is rather common in the aged, particularly in those taking many management medications, and reduced to the spiritual poverty of “rest homes”. These need constant treatment (herbs work as well as medications), else

the difficulty of eating, what with dry mouth, sore gums, gas and chronic constipation (from medications and adrenergic stress) coupled with SLBF (Soft Light Brown Food) and NOW the added insult of mouth sores can start the subtle downwards spiral of entropy and asthenia.

PEPTIC ULCER A stomach or duodenal ulcer, caused by excess or untimely secretions of gastric acid and pepsin, poor closure of the pyloric sphincter and digestive acid leakage into the duodenum, or poorly mucin-protected membranes resulting from infection or allergen irritation

PERIAPICAL ABSCESS An abscess or pus pocket around the apex of the root of a tooth...sometimes called a gumboil

PERIODONTITIS see **PYORRHEA**

PERIPHERAL At the edges, especially circulation or nerves. Peripheral functions are usually controlled and modified more by local conditions than systemic (central) controls.

PETIOLE A leafstalk or stem, or an unexpanded section.

PG INHIBITOR Exogenously, a PGE inhibitor like aspirin, and usually intended to lessen joint inflammation and uterine spasms.

PGE Short for Prostaglandin E, presumably the fifth subtype discovered, and usually separated into PGE1 and PGE2. These two, if made by the kidneys, slow sodium reabsorption; if within in the uterus, induce a stronger response to less stimulus; if made in the stomach lining inhibit gastric secretion; if secreted by macrophages, target tissues become more accessible to infiltration...and inflammation. These are the two prostaglandins whose levels are meant to be stabilized by gamma-linolenic acid (GLA) supplements. See **PROSTAGLANDIN**

pH The potential of hydrogen. A "neutral" pH is expressed as 7.0 (water), with greater being alkaline and lesser being acidic. Expressed logarithmically like the Richter's Scale, 6.9 pH is twice as acidic as 7.0. 9.0 is ten times as alkaline as 8.0, etc., all based on the presumed amount of hydrogen ion (acidity) present. This is a chemical literality, not to be confused with the vitalist and cyto-hologrammic implications of Acid and Alkaline metabolism or foods. A complex protein has a literal pH close to neutral. Run it through your body and it gets broken down into an incredible array of amino acids, ending up as nitrogenous acid waste products. The more rapid the metabolism, the more acids are produced...the ashes of life are acids. The literal pH of the life media, such as blood, lymph and cytoplasm...and most food, is alkaline. This acid/alkaline is a concept only applicable "*in vivo*"; pH defines acid/alkaline "*in vitro*".

PHAGOCYTOSIS The act of absorbing and digesting fragments, detritus, or whole organisms, as an amoeba does. Granulocytes do this in the body.

PHARYNGITIS Inflammation of the pharynx, either from irritation or infection. A sore throat.

PHLEGM Mucus in the throat or bronchi.

PHOSPHATURIA The presence of excess phosphates in the urine. This occurs in...and can even cause, alkaline urine (it's normally acidic), resulting in cloudy urine, small particle sedimentation, and the more common kinds of kidney stones.

PHOSPHOLIPIDS Fats containing phosphorous, and, along with cholesterol, the primary constituents of cell membranes.

PHOTOSENSITIVE Reacting poorly to sunlight, either by skin reactivity or by forming abnormal sunlight-mediated serum metabolites

PHYTOSTEROLS Plant lipids, with little other than dietary value, but often excitedly referred to as "Hormone Precursors" with incorrect but well-meaning pseudo-science. See: STEROIDS, PLANT

PHYTOTHERAPY Botanical or herbal medicine, often with a heavy emphasis on studies and monographs and their medical implications (with virtually none from North America), and with a philosophy of "little drug" medical uses and the reliance on the European phytopharmaceutical industry (where the studies came from). No judgment here; this approach is of great value to physicians, since it offers clear implications for medical use. This approach is, however, medical and mechanistic, not vitalist and wholistic

PILOCARPINE A plant alkaloid and the primary bioactive substance reducible from ***Pilocarpus*** spp. (Jaborandi leaves). It is an almost pure parasympathomimetic (cholinergic), inducing lowered blood pressure and stimulating glandular secretions...EVERYWHERE. It stimulates sweating as well, a sympathetic cholinergic response.

Anyway, it is used in eye drops these days to contract the pupil, lower ocular fluid pressure and take some of the stress off glaucoma. The refined alkaloid is better in the eyes, but the dried leaves are the usual complex agents of herb use and have some therapeutic values in low doses.

Good ***Lobelia*** or ***Asclepias*** will work similarly and are both safer, fresher and more predictable as botanicals.

PINNAE The leaflets or primary division of a pinnate leaf.

PINNATE A compound leaf, having the leaflets arranged on each side of the stem.

PINNATIFID A leaf that is pinnately cleft, but into lobes that do not reach the midrib, and not into separate leaflets.

PINNULE A division of a pinna.

PINWORMS Also Threadworm, this is a widespread parasitic nematode, usually benign, but having a rural, white trash, skanky stigma. It mates and reproduces in the intestines of several mammals (including us) and the female exits the anus, usually at night, to shed its eggs and expire. The eggs become like dust motes, kids and puppies scratch their butts, the eggs spread into other mammals, until only a thermonuclear device or burning/razing/earth-salting will clear out a heavy infestation.

It's also the only worm likely to be encountered in temperate zones and the high country.

PISTILLATE A female flower that has pistils but no stamens.

PITUITARY An endocrine gland somewhat behind the eyes and suspended from the front of the brain. The front section, the anterior pituitary, makes and secretes a number of controlling hormones that affect the rate of oxidation; the preference for fats, sugars, or proteins for fuel; the rate of growth and repair in the bones, connective tissue,

muscles, and skin; the ebb and flow of steroid hormones from both the gonads and adrenal cortices. It does this through both negative and positive feedback.

The hypothalamus controls these functions, secreting its own hormones into a little portal system that feeds into the pituitary, telling the latter what and how much to do. The hypothalamus itself synthesizes the nerve hormones that are stored in the posterior pituitary, which is responsible for squirting them into the blood when the brain directs it to. These neurohormones act quickly, like adrenalin, to constrict blood vessels, limit diuresis in the kidneys, and trigger the complex responses of sexual excitation, milk let-down in nursing, and muscle stimulus in the uterus (birthing, orgasm, and menstrual contractions), prostate, and nipples.

PLATELET AGGREGATION Platelets are the small, rather uniform fragments of large bone marrow cells that aid the blood in coagulation, hemostasis, inflammation, and thrombus formation. Mild subclotting and sticking is a common early condition that can lead to thrombosis, atherosclerosis, and strokes, and can be helped by an aspirin a day, better fat digestion, and ***Ceanothus***.

PLEURISY An inflammation of the serous membranes that both surround the lungs and line the inside of the chest cavity; the two membranes supply fluid lubrication between the expanding and contracting lungs and the body. Most pleurisy (and usually the milder form) follows or accompanies bronchitis or late winter chest colds...sort of pulmonary cabin fever. It may be dry pleurisy (with few secretions and sharp sticking pain that prevents any but moderate inhalation), or acute or effusive pleurisy (with fever, coughing, and built up serous fluids...usually tossed off as bronchitis). Some types are part of serious cardio-pulmonary disorders and/or chronic disease.

PMS Premenstrual Syndrome. This is STARTED by some predictable neurohormonal imbalances. On the other hand, the individual woman's symptoms are very idiosyncratic, since the neurohormonal interplay CAN effect virtually any tissue. What it DOES effect is a matter of constitution, lifestyle, and the other collateral stresses of that PARTICULAR woman.

The most common imbalance occurs when progesterone, the temporary hormone made by the post-ovulatory ovaries, is unable to sustain adequate levels for the "normal" 11-12 days.

This is all an ornate adagio dance: when estrogen is the dominant hormone (from just after menses to ovulation), some of the cells effected by it are enabled to become progesterone sensitive. When progesterone is present and dominant (from ovulation to shortly before menses), some of the cells effected by it are then enabled to become estrogen-sensitive when IT comes around. There are always moderate sources of estrogen during the progesterone weeks, but healthy progesterone levels suppress their effect. If progesterone drops too early, these sources start to "show" before menses. Some functions are ALWAYS estrogen-sensitive...others need the normal length of progesterone stimulation to THEN become sensitive. A premenstrual estrogen rise will always cause an unbalanced constellation of effects.

Progesterone helps prevent water retention, inflammation, blood sugar yo-yos and excess prolactin, while stimulating growth hormone and thyroid levels to maintain a generally anabolic-dominant metabolism. Withdraw it too early and you MAY get inflammatory and edemic and need an IV maple syrup drip, while prolactin rises and dopamine/adrenergic energy dominates. You might get migraines, increased cerebrospinal fluid pressure, feel variously aggressive, nervous, weepy/anxietous, or like an inflated pig bladder.

It seems that, whatever your personal metabolic weakness, PMS will find it. PMS is an almost purely constitutional reaction, and holds an exciting potential wherein a woman can have a clear window for viewing her working strengths and weaknesses.

DISCLAIMER: A guy is writing this.

dis-DISCLAIMER: M.D. guys used to say it was all in your head, that you secretly were mourning an infertile month, that it made you unsuitable for a serious profession (like becoming an M.D. guy)...etc. after ugly etc.

PNEUMONIA Inflammation, usually infectious, of the lungs. Unless the result of only moderate chemical or smoke irritation, it is a potentially life-threatening condition. There are so many defenses against an infection this deep in the body that the very presence of pneumonia signals a pathogen of great virulence or impaired or exhausted immunity...or all three.

PNEUMONITIS Inflammation of the lungs, from whatever cause. It may be concurrent with pneumonia or pleurisy...or the result of a defensive lineman knocking the air out of the quarterback...two days later.

POLYURIA Excess urination. The excreted wastes may stay unchanged but they are dissolved in a far higher volume of water. The causes range from diabetes, kidney disease, elevated thyroid function and the aftermath of diuretic-treated heart failure to booting a half keg of generic beer at a frat blowout

PORTAL CIRCULATION This is a type of circulatory bypass used when substances in blood or fluid need to be kept out of the general flow. A portal system begins in capillaries and ends in capillaries, and nothing leaves it undocumented. The hypothalamus sends hormones into the portal system between it and the pituitary, and the pituitary responds to it by secreting its own hormones, but dissolving the hypothalamus ones. Blood that leaves the intestinal tract, spleen, and pancreas (partially) goes into the liver's portal system and does not leave that organ until it has been thoroughly screened and altered.

POSTPARTUM After birthing.

PRESSOR An agent, neurologic or hormonal, that increases blood pressure.

PROGESTERONE This is the hormone secreted after ovulation by the corpus luteum. It is a steroid (a cholesterol with a funny hat), enters receptive cells to stimulate their growth, and acts as an anabolic agent. Estrogen should be viewed as the primary coat underneath all the cycles during a woman's reproductive years, with progesterone, its antagonist, surging for ten or twelve days in ovulatory months. Most of the actions of progesterone cannot occur without estrogen having previously induced the growth of progesterone-receptive binding sites.

In the estrus cycle, estrogen stimulates the thickening of membranes (the proliferative phase), and progesterone stimulates their sophistication into organized and secreting mucosa (the secretory phase). The new secretions contain anticoagulants, antimicrobials, and rich mucus fluids. If there is pregnancy, the uterine membranes are fully structured for the long haul; if menses occurs, the thickened tissues can erode away without clotting, becoming infected, or flowing poorly. If there is not enough estrogen, the corpus luteum will not mature. If the corpus luteum is weak, menses becomes disorganized, clotty, and painful. It is also the first part of the cycle to become disorganized in early menopause, since the available ovarian proto-follicles have been reduced over the years to only a few. In earlier years, dozens of potential follicles may attempt maturity each month, with only the strongest one able to reach dominance, form a corpus luteum and an ovum...the rest disintegrating.

In a manner of speaking, the better the follicle, the better the corpus luteum and (presumably) the sounder the ovum. Since the number of potential follicles is fixed at birth, by early menopause those that still remain contain a high number of hormone-resistant and unsound protofollicles, resulting in more and more cycles having less

predictable estrogen and especially progesterone levels.

PROSTAGLANDIN A group of a dozen or more fatty acid derivatives made by many tissues for paracrine (local) hormone use. Because they are only meant for local use, the same compound may serve opposite purposes in different tissues...inhibiting inflammation in the stomach lining while increasing uterine irritability.

PROSTATE This is a walnut-sized gland that surrounds the beginning of the urethra in men. It secretes the alkaline transport fluid that mixes with sperm from the testes to form semen. The prostate needs adequate anabolic steroid stimulation for its health and growth, especially testosterone. Because of diminished healthy hormone levels, pelvic congestion, and decreased blood (and hormone) circulation, or because of sexually transmitted or urinary tract infections, a male may get prostatitis. (See **BPH**.)

PROSTATITIS Inflammation of the prostate. The causes may be varied, ranging from infection to portal congestion to cancer to increased adipose estradiol release in the middle-aged male...to over-use.

PROTEINURIA The presence of protein in the urine, sometimes a symptom of kidney compromise. See **ALBUMINURIA**

PROTEOLYTIC An enzyme or agent that speeds up the breaking down or digestive hydrolysis of proteins into smaller proteins, peptides, polypeptides, oligopeptides, amino acids, and all that delicious nitrogenous slurry-stuff.

PSORIASIS A chronic skin condition with dull red lesions of the skin that come and go for many years. Usually painful or itchy, they tend to be worse in the winter and are often helped by increased exposure to the sun or moderate UV treatment. It is, at least to some degree, an inherited condition, auto-immune, and sometimes accompanied by joint pain.

PULPITIS Inflammation, usually infectious, of the pulp of a tooth.

PURINES These are waste products or metabolites of nucleoproteins. They are not recyclable and are broken down further to the primary excretable form, uric acid. High purine presence in a tissue signifies a recent high turnover in nucleoproteins from injury or cell death, which is why some purines, such as allantoin, will stimulate cell regeneration. Many plants contain allantoin, most noticeably Comfrey. Some foods are heavy purine producers and can elevate serum uric acid levels. These include organ meats, seafood, legumes, and such politically correct foods as spirulina, chlorella, and bee pollen. Caffeine and theobromine are purine-based alkaloids and can mildly increase uric acid, but they pale beside algae, pollen, and glandular extracts from the chiropractor.

PYELITIS An inflammation of the kidney pelvis, the interface between the urine-secreting inner surface of the kidney and the muscular ureter that drains into the bladder. It can be caused by kidney stones or an infection that has progressed up from the lower urinary tract. It alone is a serious condition...the next stage, pyelonephritis, since it involves the whole kidney, is still worse.

PYORRHEA Broadly, any discharge of pus, but usually referring to periodontitis or Pyorrhea alveolaris, with inflammatory and degenerative conditions in the gums, jaw bone and cementum. There may be alveolar bone resorption, teeth loss and receding gums...and hefty dental and oral surgery bills. These costs may be valid, but there is some thought in some radical dental circles that there is overdiagnosis of the condition.

PYOGENIC MEMBRANE The membrane that lines and isolates abcesses.

PYRROLIZIDINE ALKALOID A type of alkaloid found in many plants of the Composite and Borage families, once termed a ***Senecio*** alkaloid. Some of the pyrrolizidine group have been shown to cause several types of liver degeneration and blood vessel disorders. Several deaths have been attributed to improperly identified plant usage of a ***Senecio***, and some of the desert ***Boraginaceae*** annuals and ***Senecio*** annuals are overtly toxic. Young leaves and spring roots of Comfrey hybrids should be avoided as well. Not all PAs are toxic, but those that are can produce spontaneous necrosis in the liver hepatocytes of a perfectly healthy person.

R

RACEME A flowering spike or cluster where the flowers are borne along the peduncle on pedicels of similar length.

RALES Abnormal sounds in the lungs, either from excess secretions or the narrowing of the bore by inflammation or congestion.

RAY FLOWERS The margin flowers on a composite head, usually sterile, that resemble single petals. (Example: the white "petals" of a Daisy.)

RAYNAUDS either **SYNDROME** or **DISEASE**. The first is less severe, characterized by blanching spasms of blood vessels leading to the hands and feet, initiated by cold, moisture, even emotional stress and low blood sugar. Sort of a finger migraine. After the spasm relaxes, the tissue distal becomes red, hot, even painful. R. Disease is more serious and perhaps deriving from different causes as well. The spasms may not subside, the effected tissues can become purplish, and in extreme cases, gangrenous.

RBC Red blood cells or erythrocytes

REGRANULATION Granulation is the forming of connective tissue fibroblasts, epithelium and inflammatory cells around the nucleus of new capillaries in tissues that have been burned or scraped. This delicate tissue is often reinjured, and regranulation becomes a slower process, with more formation of scar tissue. Some plant resins will quickly stimulate the process, increase the complexity of healing, and lessen fibroblast scar formation.

REGURGITATIONS, MITRAL Backflow of blood from the left ventricle of the heart (pumping arterial blood outwards to the aorta) into the left atrium (receiving oxygenated blood from the lungs) because of faulty closure of the mitral (bicuspid) valve that guards between the two chambers.

REGURGITATIONS, TRICUSPID Backflow of blood from the right ventricle (pumping deoxygenated thick venous blood into the lungs) into the right atrium (receiving used blood from the rest of the body) because of faulty closure of the tricuspid valve that guards between the two chambers.

RENAL Pertaining to the kidneys

RESINS These are wax-containing plant oils, often secreted to fill in injured tissues, much like a blood clot, sometimes used to protect leaves from loss of water through evaporation or to render them unpalatable. (See **BALSAMICS**.)

RHEUMATISM Used broadly, rheumatism is a term meant to describe subjective sensations and not a specific disease, such as chronic joint inflammation, osteo- or rheumatoid arthritis...almost any chronic dull ache associated with the aging process

RHEUMATOID Broadly, having dull aching in joints, muscles, eyes, and so forth. In a more literal sense, it is having an autoimmune response, usually between certain IgM and IgE antibodies, that may have started as a bacterial infection or as some autoimmune reaction. The severity is increased under emotional, physical, dietary, and allergic stress- or any stress.

Hans Selye showed a few years ago that once a chronic disease response occurs, any stress above metabolic tolerance will aggravate the chronic disease, which is why some people, stressed by cold, wet weather, must avoid it; but someone else is stressed by legumes, still another person gets upset (and stressed) by watching too much CNN. You know best what stresses you; it's not fair to ask a doc to find it out for you. Rheumatoid arthritis is so named because it somewhat resembles the joint inflammations that can occur in rheumatic fever, a completely different disease caused by a strep infection.

RHINITIS Inflammation of the sinus membranes, sometimes extending to the eyes and ears. It may be caused by a head cold, hay fever, or a chemical irritant.

ROULEAU A group of red blood cells arranged together like a roll of coins, usually only noticed on a slide under a microscope. Since red blood cells in a reasonably healthy person should have a mutually repelling membrane charge, this means that something like an inflammatory response or an elevation of liver-synthesized lipids (LDLs and VLDLs) is occurring. Inflammation makes the blood "sticky," and the lipids from the liver lower the charges. Remember, of course, that I am talking about subclinical imbalances...such things as rouleau can accompany some pretty gnarly diseases. Our kind of rouleau can give you a headache or make your hands and feet cold because it's hard to push rolls of coins through little bitty capillaries.

S

SACRAL NERVES These are five pairs of CNS nerves that exit through the sacral foramen and sacral hiatus, and bring information in and out of the spinal cord. Much of their function relates to the sciatic nerve, and they bring information in from the skin sensory zones (dermatomes) of the heel, back of the legs, buttocks, and the pelvic floor.

SALICYLATES Esters or salts of salicylic acid, such as aspirin, and including glycoside forms such as salicin. They are widely used as topical irritants and (especially) as anti-inflammatory and analgesic agents and prostaglandin inhibitors.

SALMONELLA A widespread genus of gram-negative motile-rod bacteria, some of them can cause moderate GI infections, while several can produce metabolites in food that cause serious toxic reaction when the food is eaten

SALPINGITIS Inflammation of the fallopian tubes. (See **PELVIC INFLAMMATORY DISEASE**.)

SAPONIN Any plant glycoside with soapy action that can be digested to yield a sugar and a sapogenin aglycone. Many (but not all) saponins can be toxic and speed up hemoglobin degradation. Some herbs with important saponin constituents are ***Yucca***

and ***Agave***.

SCAPE A long flower-bearing stem or peduncle that arises from the ground. It is leafless, or the leaves are reduced to bracts.

SCIATICA This is neuralgia of the sciatic nerve. These are the two largest nerves in the body, composed of the tibial and common perineal nerves, bound together and containing elements of the lowest two lumbar and upper three sacral spinal cord nerves. Sciatica is felt as severe pain from the buttocks, down the back of the thighs, often radiating to the inside of the leg, even to the point of parasthesia or prickly numbness. Although tumors can cause the problem, far and away the most common causes are a lower back subluxation (responding to adjustment) or pelvic congestion and edema (responding to laxatives, exercise, and decreasing portal vein and lymphatic congestion).

SEBACEOUS GLAND Oil secreting glands, mostly clustered around hair follicles. The oil, sebum, is released into the oil glands from the disintegrated cytoplasm of shedding holocrine cells that line the alveolar surfaces. The nature of the secretion is a direct reflection of the state of the body's lipid metabolism.

SEBORRHEA A disorder of the sebaceous glands, with changes in the amount and quality of the oils secreted. Although it can occur in any part of the body, seborrhea of the scalp (dandruff) is most common.

SEMINAL VESICLES These are a couple of spongy glands, l.5 to 2 inches long, that secrete high-sugar, acidic, and thick, ropy colloid into the ductus deferens (containing sperm from the testes) during ejaculation. The two fluids empty into the prostate, where they are mixed with alkaline prostatic fluids to form semen.

SENSORS cells or tissues that monitor the internal and external environment, either neurologically or chemically, and can initiate compensatory action or communicate to other parts that can react.

SEPAL A leaf or segment of the calyx.

SEPSIS Like septicemia, an infection that has moved deeply into the body, involving the subcutaneous or submucosal layers, connective tissue, lymph system...or blood

SEPTICEMIA The presence of pathogenic bacteria or other microbes in the blood stream...a serious business, since most defenses are focused outside the bloodstream and the infection has bypassed them either due to its virulence, the depth and severity of the original focal infection or the weakened state of the body's immunity and life energy. Blood poisoning.

SEPTUM A membrane wall separating two or more cavities, such as the one between the nasal fossae and those separating the air sacs (alveoli) of the lungs.

SEROUS MEMBRANES Membranes that line many internal organs and cavities, secreting a thin, lymph-like fluid, that lubricates and slowly circulates.

SGOT and **SGPT** Liver enzymes that are normally only present in minute quantities in the blood, they become elevated under a variety of circumstances, particularly hepatitis.

SHIGELLOSIS An acute, self-limiting intestinal infection, with diarrhea, fever, and abdominal pain, caused by one of the ***Shigella*** genus of gram-negative bacteria. The

infection is contracted through food prepared by infected individuals or by direct contact with them. Raw sewage contamination can also be a source.

SHINGLES Also called Herpes zoster. It is caused by the chickenpox virus, and usually occurs in middle-age, beginning as inflammation, sharp pain and finally vesicles, erupting at the edges of posterior ganglia of the trunk or face. Usually lasting two or three weeks, it is often triggered by stress or a concurrent viral infection, and can return again in some individuals.

SINUSITIS Inflammation of the sinuses, with causes ranging from dust to hay fever. Obstinate cases can be caused by chronic sinus infections or the continued exposure to allergens from food, pets or environmental irritants.

SPLEEN The large organ lying to the left of, below, and behind the stomach. This organ is partially responsible for white blood cell formation (red blood cells in childhood), and it is lined with resident macrophages that help it filter the blood, remove and recycle old and dead red blood cells, and send this all up to the liver in the portal blood.

The liver, in fact, does most of the recycling of splenic hemoglobin derivatives. The spleen initiates much resistance and immunologic response, being made mostly of lymph pulp, and it stores and concentrates a large number of red blood cells. These can be injected into the bloodstream for immediate use under flight or fight stress, since the spleen is covered with capsule and vascular muscles that constrict in the presence of adrenalin or sympathetic adrenergic nerve stimulus.

SPLENITIS Inflammation of the spleen, caused by a variety of conditions ranging from exposure to hemolytic chemicals, systemic infections lodged in the spleen, even cancer.

SPLENOMEGALY For practical purposes a term interchangeable with splenitis, since neither will have the usual symptoms associated with inflammation. Splenomegaly is often associated with viral hepatitis, mononucleosis, typhoid fever and abnormally high levels of red blood cells or platelets.

STAMENS The male, pollen-producing organs in flowering plants. A staminate flower is only male, with pistillate (female) flowers on the same or different plants. Most flowering plants have both parts on the same flower, although they may mature at different times to avoid self-pollination.

STAPH This is short for ***Staphylococcus***, a genus of micrococci bacteria with many members that can cause disease. They are gram-positive, nonmotile bacteria that are aerobic-(unless they need to be anaerobic). Staph of various types are responsible for boils and carbuncles; they may be involved in impetigo, toxic shock syndrome, endocarditis, osteomyelitis, and urinary tract infections, as well as some food poisoning.

They stay around hospitals and veterinary clinics waiting to get you. They are also a normal part of the mouth, throat, and skin flora in a third to a half of all of us, causing no problems, but just waiting. Staph has always been with us. Some even eat our antibiotics for breakfast.

STASIS Static, atonic, unable to resolve or initiate change, resulting in lympatic and venous stasis, congestion or stagnation...such as an intestinal blockage.

STEATORRHEA The presence of undigested fat in the feces. This may be the result of failing to inoculate fatty foods with enough surfactant (biliary “soap”) to digest them, the failure of the lower small intestine to absorb them, or simply too much fat for even normal digestion to handle. Sometimes this can indicate liver, gall bladder or lipid

metabolism diseases. Usually the causes are subclinical and treatable with less invasive approaches...like herbs.

STEROID HORMONE These are fats similar to, and usually synthesized from, cholesterol, starting with Acetyl-CoA, moving through squalene, past lanosterol, into cholesterol, and, in the gonads and adrenal cortex, back to a number of steroid hormones. Nearly all of the classic hormones are proteins or smaller peptides; they don't get inside a cell (the membrane keeps them out); instead, they bind to, and initiate, cell changes from the outside. The exceptions are the thyroxines (from the thyroid) and the steroid hormones. They move into the cell, bind with receptors, and initiate changes in the way a cell regenerates itself or synthesizes new compounds. Because the steroid hormones stimulate cell growth, either by changing the internal structure or increasing the rate of proliferation, they are often called anabolic steroids. Estrogen, an ovarian steroid, when secreted into the bloodstream, will be bound within a short time by internal receptors inside those cells that need estrogen for their growth; the unused portion is partially broken down, mostly in the liver, and partially stored in a less active form by adipose tissue. Since luteinizing hormone from the pituitary is surged in pulses an hour apart, the estrogen is also surged from the reacting ovaries, and by the time more estrogen is available, the binding cells need more; their program of synthesis has run out and needs to be started again. Of course, most steroid hormone reactions are less measured than this, but you get the idea.

STEROIDS, PLANT The previous subject is obviously an endless one, but as this is the glossary of an herbal nature, let me assure you, virtually no plants have a direct steroid hormone-mimicking effect. There are a few notable exceptions with limited application, like Cimicifuga and Licorice. Plant steroids are usually called phytosterols, and, when they have any hormonal effect at all, it is usually to interfere with human hormone functions. Beta sitosterol, found in lots of food, interferes with the ability to absorb cholesterol from the diet. Corn oil and legumes are two well-endowed sources that can help lower cholesterol absorption. This is of only limited value, however, since cholesterol is readily manufactured in the body, and elevated cholesterol in the blood is often the result of internal hormone and neurologic stimulus, not the diet. Cannabis can act to interfere with androgenic hormones, and Taraxacum phytosterols can both block the synthesis of some new cholesterol by the liver and increase the excretion of cholesterol as bile acids; but other than that, plants offer little direct hormonal implication.

The first method discovered for synthesizing pharmaceutical hormones used a saponin, diosgenin, and a five-step chemical degradation, to get to progesterone, and another, using stigmasterol and bacterial culturing, to get to cortisol. These were chemical procedures that have nothing to do with human synthesis of such hormones, and the plants used for the starting materials-Mexican Wild Yam, Agave, and Soy were nothing more than commercially feasible sources of compounds widely distributed in the plant kingdom. A clever biochemist could obtain testosterone from potato sterols, but no one would be likely to make the leap of faith that eating potatoes makes you manly (or less womanly), and there is no reason to presume that Wild Yam (Dioscorea) has any progesterone effects in humans. First, the method of synthesis from diosgenin to progesterone has nothing to do with human synthesis of the corpus luteum hormone; second, oral progesterone has virtually no effect since it is rapidly digested; and third, orally active synthetic progesterones such as norethindrone are test-tube born, and never saw a Wild Yam.

The only "precursor" the ovaries, testes and adrenal cortices EVER need (and the ONLY one that they can use if synthesizing from scratch) is something almost NONE of us ever run out of...Low Density Cholesterol. Unless you are grimly fasting, anorectic, alcoholic, seriously ill or training for a triathlon, you only need blood to make steroid hormones from. If hormones are off, it isn't from any lack of building materials...and any product claiming to supply "precursors" better contain lard or butter (they don't)...or

they are profoundly mistaken, or worse.

The recent gaggle of "Wild Yam" creams actually do contain some Wild Yam. (Dioscorea villosa, NOT even the old plant source of diosgenin, D. mexicana...if you are going to make these mistakes, at least get the PLANT right) This is a useful and once widely used antispasmodic herb...I have had great success using it for my three separate bouts with kidney stones...until I learned to drink more water and alkalizing teas and NEVER stay in a hot tub for three hours. What these various Wild Yam creams DO contain, is Natural Progesterone. Although this is inactive orally (oral progesterone is really a synthetic relative of testosterone), it IS active when injected...or, to a lesser degree, when applied topically. This is pharmaceutical progesterone, synthesized from stigmasterol, an inexpensive (soy-bean oil) starting substance, and, although it is identical to ovarian progesterone, it is a completely manufactured pharmaceutical. Taking advantage of an FDA loophole (to them this is only a cosmetic use...they have the misguided belief that it is not bioactive topically), coupled with some rather convincing (if irregular) studies showing the anti-osteoporotic value of topical progesterone for SOME women, a dozen or so manufacturers are marketing synthetic Natural Progesterone for topical use, yet inferring that Wild Yam is what's doing good.

I am not taking issue with the use of topical progesterone. It takes advantage of the natural slow release into the bloodstream of ANY steroid hormones that have been absorbed into subcutaneous adipose tissue. It enters the blood from general circulation the same way normal extra-ovarian estradiol is released, and this is philosophically (and physiologically) preferable to oral steroids, cagily constructed to blast on through the liver before it can break them down. This causes the liver to react FIRST to the hormones, instead of, if the source is general circulation, LAST.

My objection is both moral and herbal: the user may believe hormonal effects are "natural", the Wild Yam somehow supplying "precursors" her body can use if needed, rejected if not. This implies self-empowerment, the honoring of a woman's metabolic choice...something often lacking in medicine. This is a cheat. The creams supply a steady source of pharmaceutical hormone (no precursor here) , but they are being SOLD as if the benefits alone come from the Wild Yam extract, seemingly formulated with the intent of having Wild Yam the most abundant substance so it can be listed first in the list of constituents. I have even seen the pharmaceutical Natural Progesterone labeled as "Wild Yam Progesterone" or "Wild Yam Estrogen precursor" or, with utter fraud, "Wild Yam Hormone". To my knowledge, the use of Mexican Yam for its saponins ceased to be important by the early 1960's, with other processes for synthesizing steroids proving to be cheaper and more reliable. I have been unable to find ANY manufacturer of progesterone that has used the old Marker Degradation Method and/or diosgenin (from whatever Dioscorea) within the last twenty years.

Just think of it as a low-tech, non invasive and non-prescription source of progesterone, applied topically and having a slow release of moderate amounts of the hormone. Read some of the reputable monographs on its use, make your choice based solely on the presence of the synthetic hormone, and use it or don't. It has helped some women indefinitely, for others it helped various symptoms for a month or two and then stopped working, for still other women I have spoken with it caused unpleasant symptoms until they ceased its use. Since marketing a product means selling as much as possible and (understandably) presenting only the product's positive aspects, it would be better to try and find the parameters of "use" or "don't use" from articles, monographs, and best of all, other women who have used it. Then ask them again in a month or two and see if their personal evaluation has changed. If you have some bad uterine cramps, however, feel free to try some Wild Yam itself...it often helps.

Unless there is organic disease, hormones are off is because the whole body is making the wrong choices in the hormones it does or doesn't make. It's a constitutional or metabolic or dietary or life-stress problem, not something akin to a lack of essential amino acids or essential fatty acids that will clear up if only you supply some mythic plant-derived "precursor". End of tirade.

STHENIC Strong of body or function, even to an excess.

STIPULES A leafy appendage formed at the juncture of leaf and main stem.

STOLONIFEROUS A plant that tends to form lateral roots, sometimes green and potentially stemming, sometimes blanched and tending to root from the nodes...or both.

STOMATITIS Inflammation of he mouth, usually with sores or ulcers. The causes are many.

STRANGURY Painful, sporadic and drop-by-drop urination, caused by the presence of kidney stones, chronic inflammation such as interstitial cystitis, or urethral scar tissue. This is not a specific disease, but a symptom, like nausea or a sore joint.

STREP A genus of gram-staining chain-forming cocci bacteria. Some are responsible for common and potentially serious human infections, ranging from scarlet fever and strep throat to bacterial endocarditis and pus pockets. Most of the disease-potential streps are also a normal part of the skin, mouth and upper respiratory flora.

SUBACUTE Having characteristics of both acute and chronic. This is the state in a disease when most of the aches and pains have subsided and you are likely to overdo things and not completely recover. The chest cold that lingers for weeks as a stubborn cough is a subacute condition, as is the tendonitis that lingers because you won't stop playing tennis long enough to completely heal.

SUBCLINICAL This is our turf, the period of time when a potential disease is still potential, and a functional imbalance or tendency has not caused any organic disruption. Years of poor digestion, heartburn, and systematic suppression of upper GI function by adrenalin stress have not become overt gastritis, ulcers, or IBS. You have symptoms of distress (subclinical) but no real, ripened clinical disease.

Some medical authorities (usually administrative docs from the “spokesman” and “quack-patrol” ranks of industry, academia or agency) actually insist that there is no such thing as a subclinical condition...you are either SICK or NOT SICK and presumably well. Sort of like the mechanic saying that the car works or doesn’t work...four quarts low on oil, but it WORKS. Only when it is five quarts low and has a siezed-up engine is there a need for a mechanic.

SUBCUTANEOUS Below the surface of the skin, but probably above the following term...well anyway, definitely lower than the TOP of the skin

SUBDERMAL Below the surface of the skin, and probably below the previous term, which should really be suprasubdermal...higher up than the muscles.

SUCCUS ENTERICUS Intestinal Juice. These are enzyme-rich secretions produced by the lining of the upper small intestines. Apparently the enzymes produced compensate for any pancreatic enzymes that are deficient for that particular meal.

SYMPATHETIC A division of the autonomic or involuntary nervous system that works in general opposition to the parasympathetic division (q.v.). Many of the sympathetic functions are local, specific, and involve secretion of acetylcholine, like any other of your normal nerves...stimulating or suppressing a specific muscle, gland, or whatever. A certain number of these nerves, however, unlike any others in the body, secrete epinephrine (adrenalin) and norepinephrine (noradrenalin). These are called adrenergic.

Since the adrenal medulla also secretes the same substances into the bloodstream as hormones, all the muscles or glands that are affected by the adrenergic sympathetic nerves also react in toto to the epinephrine secreted into the blood. This forms the basis for a potentially lifesaving emergency fight or flight response and is meant for short, drastic activities.

A chronic excess of the adrenergic response, however, is a major cause of stress- and a major contributor to many types of chronic disease. The more you use a particular nerve pathway or induce a particular group of functions, the more blood, fuel storage, and mitochondria are produced to strengthen that group of actions.

Using adrenergic energy excessively gives literal dominance to those things that are stimulated or suppressed, and the effects of adrenalin stress linger in the body after the adrenalin is long gone. Since one of the first subjective symptoms of subclinical malnutrition, metabolic imbalances, and environmental pollution is irritability of the central nervous system, hypersympathetic function acts as an intermediate between poor diet, pollution, and disease.

SYMPATHOMIMETIC A substance that mimics at least part of adrenalin or catecholamine responses. The term is a little biased towards the minority of sympathetic functions that are adrenergic. A better name might be adrenalomimetic, epinephromimetic, catecholamimetic...or speedomimetic. Examples: coffee, ephedrine, amphetamines.

SYSTOLIC The measurement of arterial blood pressure at the point of heart contraction (greatest pressure); the higher of the two BP numbers, with diastolic (q.v.) being the lower.

T

TACHYCARDIA Abnormally fast heartbeat.

TANNINS A group of simple and complex phenol, polyphenol, and flavonoid compounds, bound with starches, and often so amorphous that they are classified as tannins simply because at some point in degradation they are astringent and contain variations on gallic acid. Produced by plants, tannins are generally protective substances found in the outer and inner tissues, often breaking down in time to phlebotannins and, finally, humin. All of the tannins are relatively resistant to digestion or fermentation, and either decrease the ability of animals to easily consume the living plant, or, as in deciduous trees, cause shed parts of the plant to decay so slowly that there is little likelihood of infection to the living tree from rotting dead material around its base. All tannins act as astringents, shrinking tissues and contracting structural proteins in the skin and mucosa. Tannin-containing plants can vary a great deal in their physiological effects and should be approached individually.

TENESMUS The painful expelling cramps of the tubular smooth muscles and ducts. Normal peristalsis of various types produce no pain or sensation (except for the dreaded borborygmies); only the energetic expulsion contraction can induce referred pain. Examples: Nausea, gas pain, uterine cramps, gall bladder pain.

TERNATE Divided into threes.

TESTOSTERONE The principal reproductive androgen of males, largely responsible for sexual maturation, some libido, and a range of metabolic reactions that, while supplying short-term strengths, creates a long-term fragility and brittleness if not in

balance with less garish but more sustainable metabolic buffers. It is secreted by the Leydig cells of the testes, as well as smaller amounts in the adrenal cortices of both sexes. It is made under the direction of LH from the pituitary, and, if oversecreted, can be inhibited by sperm-producing cells, diminished pituitary support, and a rise in blood levels of its waste-product, stored in adipose tissues...estradiol

TERPENES Any of a group of hydrocarbons that are made up of building blocks of isoprene (C5H8) or similar five-carbon units, with a monoterpene made up of two units (example: limonene and pinene), a sesquiterpene made up of three units (example: humulene, a Hops aromatic), and a diterpene made up of four units. The terpenes, in our context, are the primary constituents in the aromatic fractions of our scented plants.

T4 Also termed tetraiodothyronine, nicknamed is thyroxine. Secreted by the thyroid along with T3 (triiodothyronine...also called thyroxine), this thyroxine is mostly conjugated in the blood by TBG (thyroxine-binding globulin), whereas the more active T3 tends to float free. T4 is broken down to T3 and forms a stable feeder reserve, preventing rapid shifts in its more labile relative

THOMSONIAN MEDICINE That school of medical philosophy and therapy founded by the American messianic nature therapist Samuel Thomson (b. 1769). Thomson's great axiom was, "Heat is life, and cold is death." He lived in New England, which explains some of this. He and the later Thomsonians made great use of vomiting, sweating, and purging to achieve these ends...crude by present standards, but saner than standard medicine of the times (mercury, lead, bleeding, etc.). The Thomsonians split vehemently from the early Eclectics before the Civil War; the latter, larger group preferred to train professional physicians as M.D.s. The first group disavowed any overt medical training ("physicking") although the small medical sect of Physio-Medicalists, with several medical schools and some east-coast physician converts, used Thomsonian precepts within an otherwise orthodox armamentarium.. Their training, however, became less rigorous and more charismatic in time, and, unlike the Eclectic Medical Schools that, with one exception, chose to change to an A.M.A-supported curriculum to stay in business (thereby selling their souls), the Physio-Medicalist schools were too radical and erratic, and faded into history as their graduates were left, finally, with only Michigan allowing them to practice.

Many of the practices of Jethro Kloss (Back to Eden) and John Christopher are neo-Thomsonian, and much of what still goes on in the old guard of alternative therapy is what Susun Weed calls the "Heroic Tradition" (no compliment intended). Rule of thumb: If you see ***Lobelia*** and ***Capsicum*** together in a formula, along with recommendations for colonics, it's probably something Sam Thomson did first.

THORACIC DUCT This is the bodies' main lymph collecting vessel. It starts in the little collecting bladder in the abdomen (the cisterna chyli), moves up the center of the body in front of the spinal chord, alongside the esophagus and aorta to the neck, where it drains into the left subclavian vein. It drains the lymph from the entire body, except the head, right thorax and arm, which collects lymph separately and drains into the right subclavian vein. Lacking the ability to contract and expand, the thoracic duct relies on its valves and the kinetic energy of breathing and nearby arterial pumping to drain lymph upwards.

THROMBOSIS The formation of a blood clot within the circulatory system. It may form in the roughened vein wall in a varicosity, form around arteriosclerotic plaques, or result from trauma and surgery. The tendency rises with thick blood, age, obesity and in those once physically active and now sedentary.

THYROGLOBULIN The iodine-containing protein that is stored in the thyroid

gland. It is converted into circulating thyroxines when the thyroid is stimulated by TSH (Thyroid Stimulating Hormone) from the pituitary (in turn stimulated by the hypothalamus, where thyroxine levels are actually monitored). See: T4

THYROTOXICOSIS A pathologic thyroid hyperfunction. It is sometimes referred to as exophthalmic goiter. An overt disease, sometimes life-threatening, it is very different from the moderately elevated basal metabolism some constitutional types manifest under stress.

TINCTURE An extract, usually herbal, and usually made with a mixture of water and alcohol, although there were official tinctures that also used acetic acid, chloroform and glycerin. Only a few tinctures are still official in the U.S., including Tincture of Arnica and Compound Tincture of Benzoin. In herb commerce, the term should really only be appropriate when the extract at least RESEMBLES the formerly official methods for making plant extracts. The strength should be listed, usually as a ratio (1:5 being the most common) or a percentage (20%...the same strength as 1:5). Green Tinctures of fresh plants, are usually appropriate when defined as 1:2 or 50%. The alcohol percentage should be given, and, if below 45%, is made incorrectly. Dry plant tinctures, the norm, are official when percolated (usually), although maceration was and is allowed as an alternative method.

The term Tincture is still pharmaceutical in implication, so the FDA periodically objects to its use in the herb industry. Nonetheless, if it is IMPLIED, it should reasonably resemble the former pharmaceutical media. Glycerin, although a vary inferior solvent, is used as a substitute for moral reasons by some manufacturers, and others try to make do with low percentages, like 25%...others use Vinegar for making their "tinctures"..There are many alternative methods for preparing herbs inconcentrated forms, in ours and other cultures. (the Unani honeys, the pills used in Ayurveda and TCM), but trying to emulate a tincture with other media results in inferior products...and a moral waste of Plant Energy. Methods and recommended strengths are outlined in my pamphlet ***HERBAL MATERIA MEDICA*** See: **FLUIDEXTRACT, MENSTRUUM**

TINEAS A dermatomycosis; various skin fungus infections, such as ringworm, athlete's foot, and so forth. It is generally slow to acquire and hard to get rid of.

TINEA VERSICOLOR A chronic skin fungus, often without symptoms...except the light skin splotches of infected surfaces that don't tan. It seems easily transmitted from one part of the body to another or one person to another. It is also called Pityriasis Versicolor.

TINNITIS A ringing in the ears. It may be caused by viral infections of the middle and inner ear, allergies, stress, even drugs or environmental agents. Tenacious for some people, it often seems to occur when you have lots of things to do and little tolerance anyway.

TMJ The temporomandibular joint. These are the two joints that connect the jawbone to the skull under the zygomatic arch. TMJ syndrome involves pain in the joint, clicking in the joint from degradation of the sinovial fluids, and sharp, shooting pain when chewing. The two main causes are malocclusion (improper tooth alignment) and tension. Some people grind their teeth, others clench their jaws, perhaps from the inability to say what is felt. Chiropractors and osteopaths love helping these folks, some even specializing in TMJ work.

TOMENTOSE Having woolly hairs.

TONIC A substance taken to strengthen and prevent disease, especially chronic

disease. Formerly, tonics were widely available both as over-the-counter and prescription formulas. Unfortunately, the increased sophistication of medicine has led to the abandonment of preventative or strengthening approaches that utilize the innate abilities of an organism (like ourselves) to right itself with a little prodding in the correct direction. The last several decades have seen increased focus on disease-at-a-time medicine, with more and more patients receiving treatment at acute care facilities like hospitals and clinics, circumstances that delegate against preventative or tonic approaches. Tonics tend to stimulate deficient functions, therefore are best suited for functional disorders, not organic ones.

TRACHEA The cartilage tube that brings air from the larynx to the two bronchi of the lungs. It is lined with mucus membranes and ciliated epithelia.

TRIFOLIATE Having three leaflets in a compound leaf, like a clover.

TRIGEMINALNEURALGIA Facial neuralgia or tic doulourex. This is pain of the gasserian ganglion or one or more branches of the trigeminal nerves. It is felt as pain along the side or top of the head, the scalp and around the eyes...a “skin headache”...and sometimes accompanied by facial muscle cramps. It is usually initiated by trigger points, with blood sugar irregularities and substance sensitivities often lowering their threshold of irritation.

TRIGONE This is the triangular basement muscle of the urinary bladder. It differs in structure and nerves from the top of the bladder, the detrusor muscle, which expands as the bladder fills, and contracts during urination under parasympathetic nerve stimulus. The trigone does not expand, is under sympathetic nerve stimulus, and supplies the rigidity and sphincter support for the urethra in front and the ureters in back.

TRIMESTER The three three-month sections of a pregnancy.

TRIPINNATE Thrice pinnately compound leaf.

TUBER A fleshy, underground part of a stem or root. Example: potato, ***Paeonia***.

TURBINATES The three nasal conchae, bone ridges that help spiral and flutter inhaled air, increasing the efficiency of heating, moistening and cleansing

U

UMBEL A flowering head where the pedicels (individual flower stems) all spring from one point, usually the end of the peduncle. Compound umbels, found in some ***Umbelliferae***, have umbels branching from peduncle umbels that themselves are branching from the main stem.

UNIPOLAR Having only one polarity; primarily in reference to individuals who only manifest a manic or depressive phase in personality or thyroid bipolarity.

URATE The salts of uric acid, found in the urine, some kidney stones, and (unfortunately) in gouty joints.

URETERALGIA Spasm or pain of the ureters, the ducts that milk urine from the kidneys to the bladder.

URETHRITIS Any inflammation of the urethra, whether from external irritation, overly acidic or scalding urine, passage of stones, or an active infection of the canal. (See **CYSTITIS**.)

URIC ACID The final end product of certain native or dietary proteins, especially the nucleoproteins found in the nucleus of cells. Unlike the much smaller nitrogenous waste product urea, which is mostly recycled to form many amino acids, uric acid is an unrecyclable metabolite. It is a bent nail that won't restraighten, and it must be excreted: nucleoprotein to purine to uric acid to the outside in the urine or the sweat. (See **GOUT, PURINES**.)

URINARY TRACT (UT) The kidneys and the lower urinary tract, which includes the ureters, bladder, and urethra.

U.S.P.-N.F United States Pharmacopoeia and National Formulary. The U.S.P. was first published in 1820 and ever ten years thereafter until the Second World War, after which it has been revised every five years. It has always been meant to define the physical, chemical, and pharmaceutical characteristics of the most accepted and widely used drugs of the time, and to set the standards for purity. The N.E was first published in 1888, and, up until 1980, in the same year as the United States Pharmacopoeia. Since 1980, both have been issued in the same volume. The National Formulary was originally intended as a list of the official recipes for pharmaceutical formulas; characteristics of those drugs or plants used in the formulas or that were still recognized as secondary drugs; and the substances needed for the manufacturing of drugs but that were not active, like gelatin or pill binders.

With the decreased use of tonics and less invasive medications after the Second World War, the National Formulary became primarily a text defining the inactive substances used in drug manufacturing; the United States Pharmacopoeia now lists the active substances; and all the rich heritage of tonics, elixirs, bitters, syrups, and alternate preparations has disappeared from the short memory span of Standard Practice Medicine. If an herbalist wanted to practice as a pharmaceutical antiquarian, the U.S.P.s and N.F.s of the years between 1890 and 1950 would supply virtually every needed formula and herbal preparation that a Western herbalist would ever need—it's all there (—and all forgotten). To a great degree, the contemporary herbal renaissance is reinventing the wheel.

UTI Urinary Tract Infection.

V

VAGINITIS An inflammation of the vagina, either from simple tissue irritation or from an infection

VAGINOSIS A vaginal infection characterized by a smelly discharge and the presence of ***Gardnerella, Mycoplasma***, and other anaerobic bacteria, with the lack of ***Lactobacillus*** species.

VAGUS NERVE Also called the pneumogastric nerve, this is the tenth cranial nerve, with many fibers leading to parasympathetic ganglia in internal organs, and can be considered the presynapse starter for the upper parts of the parasympathetic functions.

VARICOSITIES Enlarged veins or an engorged complex of smaller vessels.

VASCULAR Pertaining to blood vessels

VASCULITIS Inflammation of one or more blood vessels

VASOCHOLINERGIC An agent that stimulates blood flow to the viscera, and more closely mimicking the balance of circulation induced by parasympathetic states. This is one way to oppose excessive adrenergic circulatory states.

VASOCONSTRICTOR A nerve, agent or substance that narrows blood vessels.

VASODILATION, PERIPHERAL The increase of blood into the skin, resulting from the relaxation of the small arterioles that lead into the capillary beads at the edges of the body. This is a gentle way to lessen early high blood pressure, decreasing the difficulty of pushing columns of arterial blood through miles of capillaries.

VASODILATOR Nerves, hormones or substances (like herbs) that induce the relaxation of blood vessels.

VASONEUROSIS Spasms and cramps of blood vessels that are caused by neurologic factors. Also called angioneurosis

VENEREAL WARTS Caused by human papillomavirus (HPV) and also known as condylomata acuminata, anal warts, and genital warts. It is nearly always transmitted from person to person by sexual contact, can increase the risk for women of cervical cancer, and occurs in near epidemic proportions in sexually active teenage women.

VENOSITY An area where there is a buildup of excess venous blood, with enlarged veins and tissue congestion

VENOUS Pertaining to the veins, or more broadly to include both venous AND lymphatic circulation.

VENOUS STASIS Having congested venous blood and lymph. Usually a larger condition effecting tissue or organ function, as opposed to the more vascular implications of venosities and varicosities.

VESICAL IRRITATION In my context, irritation of the bladder and urethra.

VINCENTS INFECTION Trench Mouth or NUGS. It is usually a symptom of extreme physical stress, nutritional deficiencies and heavy metal poisoning (but not of the type accrued from excess exposure to Metallica or Scorpion)

VLDL Very Low Density Lipids. These are blood transport fats, consisting mainly of triglycerides (made from sugar by the liver) and loosely covered in specialized proteins and phospholipids so they don't dissolve in the blood and the target tissues can recognize them. Chronic elevation occurs when the tissues cannot absorb them or the liver is overwhelmed by carbohydrates...such as in alcoholism, some hepatitis, and diabetes.

❦WXYZ❦

WBC White Blood Cells, including those of innate immunity, including basophils, neutrophils, eosinophils, monocytes, macrophages (and others) and those of acquired immunity, the various types of lymphocytes. Also called leukocytes.

WHEAL An inflammatory response to mild skin irritation, with a well-defined, raised redness, lasting for perhaps an hour and then disappearing. The cause is usually atopic allergies in an IgE-excess person, although mild, subclinical adrenocortical deficiency can be another factor.

XEROPHYTE A plant that is adapted to, and needs, dry desert climate or is particularly hardy in periodic droughts.

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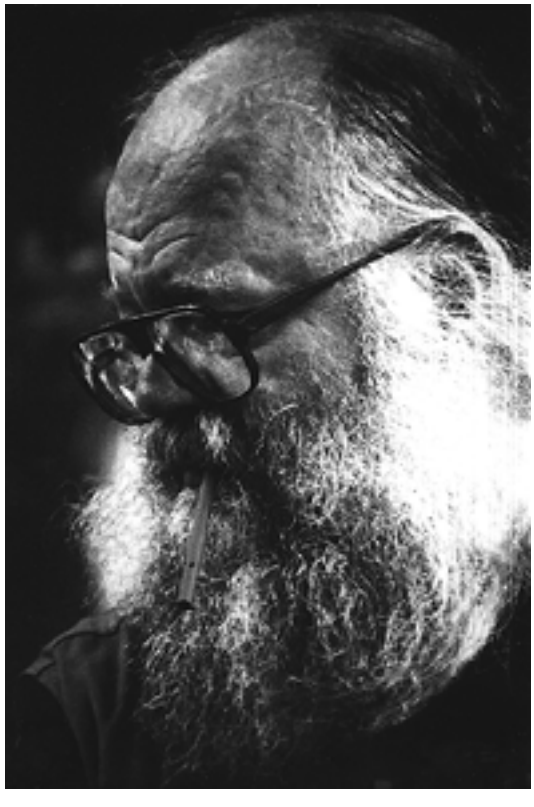
(**WWW**)
http://www.swsbm.com

All the SWSBM teaching and clinical manuals, JPEGs of Medicinal Plant photographs and class announcements can be obtained at these sites.



The author in a carefully staged populist mood,
originally intended for a cowboy poetry flyer
Photograph by Michael Cottingham