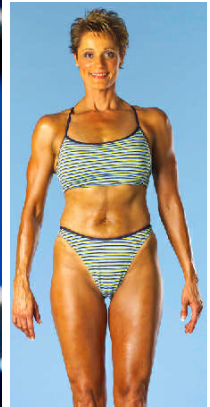
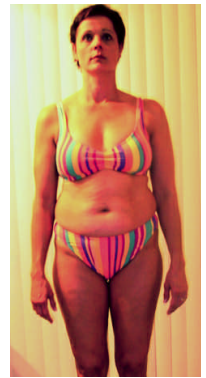


IRON MAN Training & Research Center Presents

X-TREME LEAN



Fat-Burning Diet and Nutrition Guide

by Steve Holman and Jonathan Lawson

X-treme LEAN was written to help you get closer to your physical potential with sensible bodybuilding and fat-loss strategies. Weight training and dieting can be demanding activities, however, so it is highly recommended that you consult your physician and have a physical examination prior to beginning. Proceed with the suggested diets, exercises and routines at your own risk.

Photography by Michael Neveux

Cover models: Steve Holman, Jonathan Lawson
and Becky Holman

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CONTENTS

Introduction.....	4
Chapter 1—Eat More, Lose Fat.....	7
Chapter 2—No Carb, Low Carb or Slow Carb?.....	15
Chapter 3—X-citing Transformations.....	23
Chapter 4—Cheat Your Way to Leanness.....	35
Chapter 5—X-treme Lean Diets.....	39
Chapter 6—Feminine X-ploits.....	45
Chapter 7—X-treme Lean Nutrients.....	57
Chapter 8—X-treme Lean Training.....	67
Chapter 9—X-treme Lean Q&A.....	81
Appendix A—Exercises.....	93

Introduction

What can you learn from us that will get you the eye-popping, jaw-dropping, cut physique you're after? Plenty! After all, we've been training together for more than 10 years at the *IRON MAN* Training & Research Center, and almost every summer during that time we've taken our bodies to their limits—attempting to get into our leanest, most muscular shapes



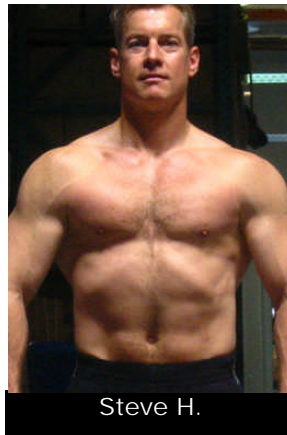
Jonathan L.



possible. We've experimented with countless fat-loss programs and theories during that decade—learning lessons along the way. That trial and error (there were

lots of errors!) helped us hone our fat attack to principles that work fast, and we're positive that you can follow our lead and accelerate fat loss to the extreme (that's why we wrote this book).

No question, you'll feel great when you're in hard shape, but that's only part of it. Visible abs have sex appeal and grab attention like nothing else. That's a big reason you want that X-treme Lean look, and we want to help you get it. Lots of men *and* women are already using our body-transformation programs with great



Steve H.



success. The fact that women have produced rapid results says a lot because women are notorious for having a much more difficult time losing bodyfat than men. A big reason: They have less testosterone, a male hormone that accelerates fat burning, and more estrogen, a female hormone that promotes fat storage. (Incidentally, the fatter a man gets, the lower his testosterone and the higher his estrogen, so



Becky H.

adding fat becomes easier and easier the fatter he gets. How's that for a cruel turn of events? Talk about a snowball effect!)

One of our female subjects was Becky Holman, Steve's wife, and the success she had with our X-treme Lean principles and diet were even better than we imagined (and getting there was much easier than she thought; she and Steve hardly argued—and they were both on X-treme Lean diets at the same time!). You'll see exactly how she did it later in this book.

As for us, our last ripping phase was the most spectacular we've experienced. We got in incredible shape, our most muscular and cut conditions ever, and most of those results came within a one-month window. The really exciting discovery we made is that it's possible to burn fat quickly while packing on lean muscle. Most experts say that you'll have a difficult time even holding on to your muscle while losing fat. They insist that muscle loss on a diet is inevitable. Not from our experience. We transformed ourselves, building pounds of muscle as we dropped ugly fat in a mere 35-day period—and no drugs were involved. The quick results we achieved were unprecedented in our many years of ripping up. Even we were stunned when we saw our before and after photos!

But like we said, our latest success came after lots of trial and error over the years. In other words, we made plenty of mistakes, which is good news for you. It means this book can help you sidestep those pitfalls—and there are plenty. Here are some of the biggest blunders people make when they try to drop bodyfat (yep, we've made most of them):

- Eating only one or two meals a day (you'll burn loads of muscle and teach your body to hoard fat; not good!)
- Making a drastic calorie cut all at once (another muscle-burning, fat-hoarding strategy; bad idea—think gradual!)
- Staying strict at all times (you need to cheat—yes, cheat!—to keep fat-burning hormones active)
- Not using weight training correctly—or at all (lifting convinces your body not to burn muscle for fuel; plus, training your muscles stokes your metabolism—better than aerobics—and having more muscle on your frame forces your body to burn more fat, even at rest)
- Stepping on a scale (your body can build muscle, lose fat and change drastically without a bodyweight fluctuation; you can't gauge progress by the number on the scale)
- Eating almost no carbohydrates (your body can start burning muscle tissue for energy, which produces toxins and makes fat loss much more difficult; you'll also give in to binges due to repressed cravings)
- Eating almost zero fat (various types of fat can help you burn bodyfat as well as fortify your anabolic hormones)

We'll discuss all of those in the coming pages, as well as outline loads of critical body-transformation info, so you'll know exactly what to do to shed pounds of bodyfat and pack on muscle at the same time. You want abs? We'll show you how to let 'em rip! And you can do it faster than ever with your health intact and with no drugs whatsoever (well, maybe a little caffeine). Ready? It's time for you to get X-treme Lean!

—*Steve Holman and Jonathan Lawson*
IRON MAN *Training & Research Center*

CHAPTER 1

Eat More, Lose Fat

How can you possibly eat more and still strip away fat? No, bulimia isn't the answer. It has to do with eating more often—five to six times a day—and the composition of each of those meals. Hmm, maybe a different term is in order because if you're used to gorging on two or three big meals a day, you won't really consider these smaller, more frequent feedings "meals." They're more like mini-meals designed to keep your blood sugar steady (no cravings or energy dips), your muscle tissue intact (you won't burn it for energy) and your fat stores shrinking (Eureka!—I see abs!)

That's in direct contrast to how most of us were raised to eat—the three-square-meals-a-day approach. Take a look at what happens when you follow that classic American eating schedule and you'll see why you can get fatter and fatter if you're not careful. A big part of the problem is insulin, a hormone that can shuttle excess calories right to your fat cells (excess energy consumption—eating more calories than you can burn off—is also a big part of the problem):

- Meal 1: At 7:00 a.m. you eat a big breakfast and trigger insulin so that excess carbs and fat are stored as bodyfat; the rest increase your blood sugar to fuel activity and prevent fat burning for a few hours. (If you skip breakfast, you begin burning muscle immediately.)
- Three hours later—at 10:00 a.m.—insulin has done its job and your blood sugar is low. The starvation mechanism kicks in—ignore that growling stomach; you're too busy to eat—and you start burning muscle for energy as your body conserves fat.
- Meal 2: At noon you eat a big lunch, trigger another insulin surge, blunt fat burning and store bodyfat—the same scenario as breakfast.
- Three hours later—at 3:00 p.m.—the starvation mechanism kicks in again, and you burn more muscle and conserve bodyfat.
- Meal 3: At 7:00 p.m. you eat a big dinner, trigger an

insulin surge, blunt fat burning and store more bodyfat.

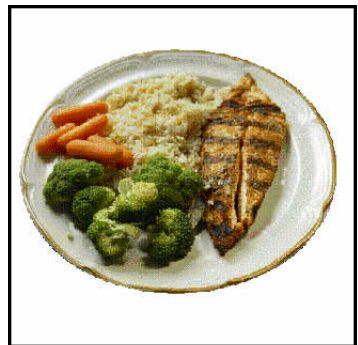
- At 9:30 p.m. the starvation mechanism rears its ugly head, and you either burn more muscle or binge on carbohydrates and feed your fat cells.

That type of eating schedule, along with excessive refined-carbohydrate intake (Coke—it's the real thing!), is the reason people are so fat! People don't eat often enough or the right foods. And when they do, it's usually excessive. The big three—or big two if you skip breakfast (don' do it!)—even prevents high-level athletes from getting that X-treme Lean look. The best example is pro basketball players. You'd think those athletes would be ripped to the bone like pro bodybuilders considering all of the calories they burn during games and the endless hours of practice. Sure, most of them are thin, but shouldn't they be shredded beyond belief? For some reason almost every player has a layer of fat and very little muscle definition—and that reason is diet and meal scheduling.

Most pro basketball players eat the normal three meals a day, and pretty much gorge at each of those to make up for the calorie deficit they create with all that running around. As you can see from the above scenario, gorging promotes fat deposition, so they retain a layer of fat. (Can you imagine how intimidating Shaq would be if he were more muscular and ripped? Whoa!)

But even if you don't stuff yourself at each feeding, eating three big meals a day is not conducive to getting ripped. It's the way to continually burn muscle and conserve fat. If you don't spread out your food intake so you keep your blood sugar levels stable, that's what happens—burn muscle, build fat. On top of that,

Eating three big meals a day keeps your bodyfat intact.



you get cravings due to stress hormone release. Oh, and one big meal a day is worse, as your body hordes even more bodyfat because it thinks it's starving all day long. When the starvation mechanism kicks in, your body shovels muscle into the energy furnace continually. As far as your body is concerned, muscle is expendable; it's denser than fat, so off it goes. You must do things—like lift weights and get plenty of protein—to convince your body that it needs to hold onto muscle and jettison the fat like the excess baggage that it is.

Having five to six smaller protein-based meals a day is the best way to do that. Sure, you've probably heard that, and you may even believe it, but do you do it? You have to make it a priority. Understand that it's the only way to continually provide your body with the elements it needs for building muscle, and that it will keep your blood sugar stable to prevent cravings. Do it! And if those meals are the right percentages of carbs, protein and fat, insulin will be held in check so there's very little, if any, fat storage and you'll have that X-treme Lean look faster than you can say *six-pack* (we're talking abs here, not Budweiser).

Notice that we said every meal should include some protein. Why? Well, it keeps muscle-building amino acids circulating. That will protect muscle tissue, keeping it in a building mode instead of a burning one—for energy. It also signals your body

that more muscle is okay. You probably figured that out. But did you know that it also has a higher energy cost? That recent discovery explains why higher-protein diets are so effective at burning fat as well as building muscle.

A "higher energy cost"



More protein in your diet helps you burn more calories.

means that it takes more energy to digest protein. So you burn extra calories without doing a darned thing. Therefore, increasing your protein intake at the expense of carbs will be like a calorie reduction. Yep, more protein in your diet means you burn more calories. In fact, research indicates that a high-protein meal boosts postmeal thermic activity by 100 percent over what you get with a high-carb meal (*Am Col Nutr*, 21(1):55-61; 2002). You're actually stoking your metabolism by including protein foods (water can do that to; more on that later). And, as you know, protein also helps you build and maintain more muscle. But here's something you may not know: The more muscle you have, the more calories you burn, even at rest. Plus, you get another metabolic boost as higher-protein diets help maintain thyroid hormone. It all adds up to more metabolic momentum that converts bodyfat to energy (*J Nutr*, 133:411-417; 2003).

Wow! That all sounds great, but don't fall into the trap of trying to eat all protein all the time. Carbs are important too, very important. If you eat too much protein and not enough carbs, your body has to convert protein to glucose for energy. Glucose helps your muscles function as well as your brain, so it's absolutely critical! If you limit your carbs too much, your body must convert protein to fuel, which is called gluconeogenesis, and that results in waste products, many of which are toxic. Can you guess where your body stores a lot of those toxins? Yep, fat tissue.

So too much protein can make it more difficult to burn fat. But so can too many carb calories because that's excess fuel. And what about fat? Believe it or not, it can be an ally in your battle to burn bodyfat and increase lean tissue—as long as you don't get too much. (Don't worry, we'll show you how to get the perfect X-treme Lean percentages of all the macronutrients later.) When you supply your system with fat—around 25 percent of your total calories—you stoke the fat-burning furnace even more. One reason is that when a little fat is available as a fuel source for daily activity, it teaches your body



Many women think *muscle* is dirty word. Far from it. Becky Holman shows that muscle can give the female body curves in all the right places. (More on Becky's sensational transformation in Chapter 6.)

to burn fat—not only what you eat but also the bodyfat you have stored—if you create a calorie deficit and don't overdose on carbohydrates.

By creating a calorie deficit, getting just enough protein and carbs and providing your system with some fat, you prime your body to use fat as fuel. In other words, having some fat in your diet sets the

stage for optimal fat burning throughout the day. It also helps your body build essential anabolic hormones, like testosterone, and it keeps your thyroid healthy for a smooth-running metabolism. (You should be having visions of your new, ripped physique about now.)

The bottom line is that you don't want to reduce your fat intake to extremely low levels. No-fat diets are wrong, wrong, wrong! If you take your fat intake down near zero, you deprive your body of vital hormone-building omega-3s, -6s and -9s, and you coax it into using only protein and carbs for its daily energy needs. In other words, you teach it to burn muscle for energy, which is not something you want (muscle is made of protein and it's also where carbs are stored, as glycogen).

Muscle is good! We don't have to tell bodybuilders that. They strive for it at every turn; however, many women think *muscle* is a dirty word. Not true. It gives the female body a metabolic boost and more curves in the right places. Women don't have to be concerned with building too much muscle

thanks to their female hormone balance—more estrogen, very little testosterone. Women should train just as hard as men do, using weight training to sculpt their bodies. (More on that in Chapter 6 when Becky Holman tells her transformation story.)

So what are the keys to an X-treme Lean physique? We've covered a few; let's review:

1) Eat small, frequent, protein-based meals, and never miss breakfast. Remember, you want to keep your blood sugar level steady and minimize insulin, which promotes fat storage (except after a workout). A recent study showed that men who ate at least five meals a day had an average body-mass index that was 13 percent lower than those who ate only one or two meals a day. The frequent eaters also had a 4 percent lower waist-to-hip ratio, which indicates less bodyfat (*Int J Obesity*, 26:1476-1483; 2002). Eat right, eat often.

As for skipping breakfast, here's why it's a bad idea: In 1993 researchers at the University of Colorado and the University of Pittsburgh studied people who'd lost 30 pounds or more and kept it off for at least one year. They were looking for clues as to what helps people reduce bodyfat permanently. One thing they found was that four out of five ate breakfast every day of the week. If you don't eat breakfast, your body starts burning muscle immediately and hangs onto bodyfat.

Some fat in your diet can teach your body to burn fat for energy. It's also a building block of testosterone, a hormone that helps target abdominal fat.



2) Increase your protein and reduce carbs—but not too much. It takes more energy to digest protein, and that burns extra calories. Extra protein also boosts your metabolism by maintaining thyroid hormone and building more muscle—the more muscle you have the more calories you burn at rest. However, too much protein can force your body to use it as an energy source, which produces toxins that slow fat burning. You need the right balance of protein and carbs for your specific energy and rebuilding needs. (More on that later, plus diets with the exact macronutrient balance that can help you strip away bodyfat fast.)

3) Include fat in your diet. Especially the so-called good kind, essential fatty acids found in nuts and fish. Studies show that diets in which less than 20 percent of total calories come from fat can cause a decrease in testosterone—and testosterone not only helps you build muscle but also helps you burn bodyfat, especially in the abdominal area. Don't associate dietary fat with bodyfat. In fact, diets rich in omega-3 fats not only *don't* promote bodyfat accumulation but may protect against obesity as well. Omega-3s are known to change the characteristics of cellular membranes in a way that favors increased insulin receptor effectiveness. In other words, they help prevent excess fat gain.

One fat you *should* avoid like the plague, however, is trans fatty acids. Look for the words *partially hydrogenated* in the ingredients list on food labels. That means there are trans fats present and you shouldn't eat it. Trans fats have been associated with many diseases, especially cardiovascular disease, because they raise serum cholesterol levels even more than saturated fat (the kind found in bacon). They also elevate production of low-density lipoprotein. If that's not enough to keep you from eating foods with trans fats, how about this: They can cause muscle loss (*Nut Res*, 23:651-658, 2003). That's right, the muscle you work so hard to build in the gym. Now that's evil!

CHAPTER 2

No Carb, Low Carb or
Slow Carb?

We already explained why a no-carb diet is a bad idea—it can increase the use of muscle tissue for energy, which, in turn, produces toxins that make fat loss more difficult. Here’s another reason directly related to your muscle mass: No-carb and low-carb diets can cause your bodyparts to look flat because of dehydration. Without enough carbohydrates your muscles have a hard time filling with glycogen, and glycogen is what helps the muscles hold more water so they’re bigger. It also provides the muscles with energy for high-intensity muscle contractions in the gym. If your muscles aren’t glycogen loaded, your workouts are going to suck! Are you convinced yet that carbs aren’t evil? There’s more...

How about the health consequences of no-carb or extremely low-carb diets? If you cut your carbs to low levels you can’t possibly get enough fruits and vegetables, which contain phytonutrients that are necessary for optimal body functions (citrus fruits alone contain more than 170 of those newly discovered, very important nutrients). Oh, and not to mention your diet will lack fiber that keeps the digestive tract moving (constipation and hemorrhoids are no fun!). You probably won’t enjoy the cloudy thinking that low-carb diets produce either. (Remember, carbs also fuel brain function. In fact, Sylvester Stallone said that to become his slow, mumbling Rocky Balboa character, he would go on a low-carb diet. “Adrian! Where’s the fruit?”)

The detrimental affects of extreme low-carb diets on the brain also can cause depression. Low-carb eating reduces levels of serotonin, the hormone in the brain that keeps you happy—so say researchers at MIT. Symptoms of depression can appear in as little as two weeks when carbs are severely restricted.

In general, decreasing one of the macronutrients—fat, protein or carbohydrates—to abnormally low levels isn’t the way to go for fat loss. You may lose weight, but in the case of low carbs some of it may be muscle, which will just add to your depression. (“I beat Mr. T, Adrian. Why am I so melancholy?”)

Now to throw a monkey wrench into the mix: If you eat carbs and have glucose circulating in your bloodstream, your body has no reason to burn bodyfat; it chooses the circulating glucose for energy first. After all that talk about how necessary carbs are, now we tell you that every time you eat them, fat burning stops. Now what?

One solution is carb stacking, in which you eat the majority of your carbs in the morning and around your workout, when they're shuttled to muscle tissue rather than stored as bodyfat. Combining carb stacking with a six-meals-a-day eating strategy can help minimize insulin and decrease fat storage fast. Plus, you still get enough carbs for health and muscle building, keeping those bodyparts full and powerful.

You gotta remember that carbohydrates increase blood glucose levels, and that provides immediate energy for your body, so there's no reason to burn fat. The solution is to tailor some of your meals later in the day so they're low in carbohydrates, stacking the majority of your carbs in the

Sample Carb-Stacking Diet

Meal 1, 6 a.m.
Raisin Bran, 1 cup
All Bran, 1/2 cup
Orange juice, 1/2 cup
Lowfat milk, one cup, poured on cereal
Coffee, 1 cup
Supplements: vitamin-and-mineral caps, 1; Omega Stak, 2; fruit-and-vegetable caps, 2

Meal 2, 9 a.m.
Muscle Meals meal replacement, 1 packet
Apple, 1

Meal 3, 11:45 a.m.
Broiled chicken, 8 ounces
Vegetables
Boiled egg, 1
Supplements: antioxidants, 2; Omega Stak, 3

Meal 4, 2:30 p.m.
Pro-Fusion protein powder, 2 scoops in water
Caffeine-based fat burner, 1 cap
Cort-Bloc, 4 caps

Workout, 4 p.m.

Meal 5, 5:30 p.m.
Postworkout shake
RecoverX, 1 serving
CreaSol, 1 serving

Meal 6, 6:30 p.m.
Cottage cheese, 10 ounces
Salad with veggies, light dressing
Pro-Fusion, 1 scoop in water
Supplements: Omega Stak, 3

Calories: 2,060
Protein: 205 grams (40 percent)
Fat: 65 grams (30 percent)
Carbs: 144 grams (30 percent)

morning and immediately after you train, when your muscles are primed to pull in the glucose and store it as glycogen. (Studies show that even 100 grams of carbohydrates after a hard weight-training workout does *not* promote fat storage—it all goes to the muscles.)

The sample diet on the previous page (adapted from the book *Fat to Muscle 2*) accomplishes that. By the way, it works even better if you can train in the morning, thus getting your high-carb postworkout drink in the a.m. too. That's impossible for most people, but just remember that the carbs you get in the late afternoon right after you train will be absorbed by your muscles, not by your fat cells.

And don't think that just getting all protein after your workout is the way to go. A University of Washington study showed that postworkout drinks that have both carbs and protein are nearly 40 percent more effective than protein alone at repairing muscle tissue after a workout. It's why we use the X Stack after workouts (Meal 5 above). We'll have more on that in the supplement chapter. For now, just remember: Don't cut out the postworkout carbs! Just keep other afternoon meals low in that macronutrient so fat burning isn't stopped in its tracks.

What About Slow Carbs?

So too many carbs at one meal can stop fat burning and perhaps increase fat storage. Once your muscles are glycogen loaded and your energy needs are met, excess carbs are simply excess calories that are stored as energy—bodyfat. Some experts will say that the amount of fast or slow carbs can make a difference in how much is stored as fat. Fast carbs are those that cause a spike in insulin from your pancreas, such as processed sugar foods like candy, as well as some high-sugar fruits and juices. Because insulin is considered a storage hormone, it will shuttle carbs that you don't need for immediate energy to your fat cells if your muscles are already full of glycogen. That means that high insulin levels can knockout your fat-loss efforts—except after a workout.

So, yes, fast carbs can result in more fat storage—if you eat them alone. However—and this is a big however—when you combine them with other foods, specifically fat and/or fiber, the speed at which your blood sugar is increased is significantly reduced. You get more of a trickle effect into your bloodstream, and a slower release of glucose means less insulin. Because of that fact, we suggest you never eat carbs alone, especially processed carbs like candy. If you have to have sweets, eat them with nuts or other fat-and-fiber food. Make them part of a balanced meal. Even then, however, don't eat too much. Small meals are best—no more than 350 calories—and limit insulin output. An insulin surge is only part of the problem with fast carbs, however. The other is that many are more calorie dense, usually because of significantly more carbs and/or fat. In other words, you'll get more potential fat storage from eating a candy bar than an apple due to excess energy intake. Here's proof: A two-ounce milk chocolate bar has about 300 calories, while an apple has about 75 calories, but because of its fiber content, an apple is more filling (and healthier, of course). Do you still want the candy? With more than three times the calories (energy), you're going to store more fat. But there is a way to indulge with damage control.

If you have to have processed sugar, save it for your cheat day. You'll actually improve your ability to burn bodyfat instead of impair it by easing up on your diet once a week, as you'll see in Chapter 4 (like we said, cheating is good—to a degree).

Your Best Carb Count to Banish Bodyfat

Keep in mind that the carb-stacking diet that's listed is one you would gradually move to, as around 2,000 calories is the lowest level for safe, healthy fat loss (that total is around 1,700 for a woman). We'll have more on how to gradually reduce your calories for continuous fat burn in the next chapter. At this point understand that it's not enough to get the right macronutrient percentages and stack your carbs. You also have to create a calorie deficit—expend more energy than you take in—to lose

fat. Also keep in mind that your body is always adapting to that deficit, which requires gradual calorie reduction—up to a point.

Your next questions may be, “So how many grams of carbs do I need?” That ideal amount is activity dependent—as is the percentages of protein and fats you should eat. For example, the body stores 300 to 400 grams of glycogen (carbs). The amount of carbohydrates you should eat each day depends on how much you burn. If you lift weights and/or perform cardio, you may need to eat up to 200 grams of carbs in a 24-hour period to replenish what you burned and keep your body functioning normally, but probably no more than that. Any amount you take in above what you burn is considered excess energy and can be stored as bodyfat. (Remember, your body also stores carbs as bodyfat if you eat too much at one sitting. Keep your meals small and frequent.) And if you do zero intense glycogen-burning activity (couch potato), your carb intake should be significantly lower, as what you take in that isn’t used for immediate energy will be stored as—you guessed it—ugly bodyfat. Think of carbs as energy for activity, but also consider that you need fruits and vegetables for health, so you can’t restrict them too much. You can, however, eat them when your metabolism is highest, like before noon and after your workout, and eat only enough to partially fuel between-meal activity so your body is forced to dip into its bodyfat stores.

What About Protein and Fat?

Protein intake, like carbs, is also activity dependent. If you do lots of work that breaks down muscle tissue—like lifting weights or wrestling alligators—you need many more grams of protein than sedentary individuals. A good rule of thumb is about one gram per pound of bodyweight, and you want to spread it out over the course of your day. Try to get about 20 to 40 grams at each meal so that the building blocks are readily available at all times for muscle growth.

Fat is also activity dependent, although less so than the other two macronutrients, carbs and protein, because it’s used

to build hormones and keep bodily functions running smoothly. Nevertheless, if you do hard labor, your fat needs increase. Also, eating enough fat keeps your body burning fat, as it knows there's not a shortage of that important nutrient.

You're reading this book, so you know the importance of lifting weights for a lean, muscular physique. And we hope you're working out regularly to build muscle and stoke your metabolism. If you are, that means you're going to need 30 to 40 percent of your calories from carbs, about the same percentage from protein and about 25 to 30 percent from fat—mostly good, essential fatty acids found in fish and nuts. Those are the totals in the carb-stacking diet outlined earlier. With that strategy you also get the majority of your carbs in the morning and limit carbs in meals later in the day so your body has to at least partially rely on bodyfat for its energy.

We've covered a lot of information in this chapter, so there's a summary on the next page. After that, we'll give you a real-world example. What the heck. How about two? The next chapter will show how we ate up to and through our one-month body transformation experiment. (The training we used is described at www.x-rep.com. We'll also have more on training,

How to Figure Your Macronutrient Percentages

Say you eat a meal that contains 360 calories, 32 grams of carbs, 40 grams of protein and 8 grams of fat. What are the percentages? Here's how to figure that out:

1) Convert grams to calories. There are four calories in every gram of protein and carbohydrate and nine in every gram of fat.

$$32 \text{ g. of carbs} \times 4 \text{ calories} = 128 \text{ calories}$$

$$40 \text{ g. of protein} \times 4 \text{ calories} = 160 \text{ calories}$$

$$8 \text{ g. of fat} \times 9 \text{ calories} = 72$$

2) Now divide each of those figures by the calorie total:

$$128 \text{ carb calories} \div 360 = .35 \text{ (or 35\%)}$$

$$160 \text{ protein calories} \div 360 = .44 \text{ (or 44\%)}$$

$$72 \text{ fat calories} \div 360 = .21 \text{ (or 21\%)}$$

X-treme Lean Tip Sheet

- 1) No-carb or extremely low-carb diets are bad ideas. They can cause everything from low energy to flat muscles to impaired workout performance to depression to ill health.
- 2) Carb stack, if possible. That means putting the majority of your daily carbs in the morning, can increase fat burning later in the day.
- 3) Think of carbs as energy. Getting fewer at a meal than the energy you need before your next meal can force your body to burn stored bodyfat for fuel.
- 4) Always include plenty of carbs—and protein too—in the meal immediately following a workout. If you don't, your muscle repair and growth may be impaired. Shoot for 60 grams of fast carbs and 40 grams of fast protein (whey).
- 5) Never eat carb-only meals. Combination (carb/protein/fat) meals slow down the speed at which glucose enters your bloodstream. In other words, combining carbs with other foods can prevent insulin surges that can increase bodyfat storage—as long as you don't eat too much at one sitting (each meal should be no more than 350 calories, except postworkout).
- 6) Try to choose natural carbs—like fruits and vegetables—over processed carbs like sugary candy, cake and so on. Processed carbs are calorie- and carb-dense and can stop fat burning and cause fat deposition because of the excess energy they supply. Getting your carb allotment from processed carbs as opposed to fruits and vegetables can also cause health problems due to lack of vitamins, minerals and phytonutrients.
- 7) Get 20 to 40 grams of protein at each of your five to six meals a day. That will insure that muscle building blocks are always readily available and signal your body that it's a-okay to add more muscle.

CHAPTER 3

X-citing Transformations

We usually start revving the X-treme Lean machine around late March. Yes, it's a little difficult at that time because it's still chilly out. Cold weather means our physiques are rarely uncovered, so that leaves our motivation still groggy from its winter hibernation. Nevertheless, we try to pound it into our heads that summer is just around the corner, so we'd better get with it—unless we want to resemble a couple of glazed doughnuts when warm weather arrives. (Did we say doughnuts? Sorry.) And just to hammer home that point, we shoot some before photos. Seeing our digital images on our computer screens forces us to admit to ourselves just how far off peak condition we are. It instills a sense of urgency. Put it this way: We've never looked at those first photos and said, "Oh, we don't look so bad." It's usually more like, "Oh, crap! We'd better kick it up a few notches."

What we're saying is that, if you're serious about getting into your best shape ever (why else would you be reading this book?), you should definitely take before photos. They're real eye-openers. You can take relaxed front, side and back views, or you can shoot those standard before photos along with a variety of bodybuilding-type poses (put the camera on a tripod, if possible, at about waist height so you get a balanced top-to-bottom assessment). Be sure to keep a list of the shots you take—the poses you hit—and the camera settings you use. Three to six weeks later, take photos again and *use the same poses and camera settings*. Also—and this is important—be sure the lighting is the same. Take the pictures in a room with a fairly bright overhead light and don't use the flash on your



camera or your muscularity will be washed out. (We have a specific spot in the *IRON MAN* Training & Research Center where we take our photos. Some of those photos are included below so you can get an idea how we do it.)

Help, I'm Shrinking

We should warn you that it can be frustrating at the beginning of your X-treme Lean program, especially for men, because the first fat that starts to go is visceral fat—that is, the fat that's stored in the muscles. So, as much as we don't like it, when you start losing bodyfat, you'll feel as though you're shrinking somewhat and not getting leaner. That can really mess with your head if you have a muscle-building mind-set.

Stick it out! Eventually, the subcutaneous fat, which is under the skin, will start to melt away, and that's when you'll feel like you're hitting your stride—you'll actually create the illusion that you're getting bigger as you get leaner. To keep that effect moving forward, you have to do one of two things:

- 1) slightly reduce your daily calories every few weeks
- 2) slightly increase your activity

Of course, you can do both, but you have to be very careful not to get carried away or you'll get the opposite effect—your body will hoard fat and burn muscle because it will think it's starving. Big calorie cuts or excessive cardio all at once is the wrong way to go—if you don't want to lose muscle, that is. To keep the starvation mechanism in check, and keep shrinkage



to a minimum, you have to make changes gradually.

Calorie Purge vs. Activity Surge

As far as our preferences go, Jonathan uses only one or two calorie cuts during our entire ripping phase (about 12 weeks). He prefers to gradually ramp up his cardio work. He has an exercise bike in his living room, and he's pretty diligent about doing it daily as our target date for our final photo shoot approaches. He begins by riding his exercise bike about twice a week in April and increases his time and frequency from there. When the shoot is about a month away, he will be riding his bike twice a day for 30-minute stints. New research, however, shows that walking a treadmill burns more calories than an exercise bike because walking is a weight-bearing activity—you have to move your bodyweight as opposed to sitting on your duff and pedaling. That research has Jonathan considering outdoor walking or treadmill walking along with exercise-bike work to speed up his fat burning. (Bonus: Walking also helps improve calf development, as discussed in *The Ultimate Mass Workout* e-book.)

Steve, on the other hand, has a faster metabolism—he has a leaner, ectomorphic structure—so he likes to rely more on calorie decreases. For him, cardio tends to burn muscle tissue. He uses four or five calorie cuts throughout his 12-week ripping phase, and he usually doesn't start cardio until mid May—and even then it's only two or three times a week. At 45 years old, however, he's realizing that burning off the last bit of fat is getting harder and harder. The older you get, the slower your metabolism becomes, so that may mean more cardio for Steve if he wants to get into X-treme Lean shape on schedule. He will continue to use gradual calorie reductions as well. There are examples of how he does that on pages 30 and 31.

Notice that most of Steve's calorie cuts usually come from carbs or slight reductions in overall portions of a meal. For example, at breakfast he will drink a half glass of orange juice instead of a full glass, and at night he will reduce his wine

consumption. One of his major calorie reductions comes when he moves from a Muscle Meals meal-replacement packet to Pro-Fusion protein as his between-real-food-meals feedings. Here's how those two protein supplements compare:

Muscle Meals meal replacement (1 packet in water)
324 calories, 12 grams carbs, 40 grams of protein

Pro-Fusion protein powder (2 scoops in water)
220 calories, 6 grams carbs, 45 grams protein

When he goes from one packet of Muscle Meals to Pro-Fusion, he reduces his calories by more than 100. Plus, he cuts his carb grams in half and actually increases his protein by five grams for that meal. He usually makes that reduction at one meal, holds that calorie total for two to three weeks, then makes the switch at his other powder-based meal. Once again, it's gradual calorie reductions that work best, not massive calorie slashes. It takes patience!

All of that isn't meant to imply that carbs are bad. On the contrary, they are your body's most efficient fuel, supplying your muscles with the glycogen they need to contract hard to stimulate muscle growth; however, you have to remember that getting just enough to replenish glycogen shortfalls is the key. Too many carbs, and you get spillover into fat cells because



you simply have too much of a good thing—an abundance of energy substrates without the necessary activity level to burn it off. (That’s one reason getting most of your carbs early in the day is a good idea—it ensures that you don’t have much of that energy substrate in your bloodstream as the day wears on, so your body has to resort to fat for its activity late in the day.)

Jonathan gradually increases his activity to make sure he burns off excess calories. Riding his exercise bike helps push his body into the fat-burning zone. Steve chooses to do that later in his ripping cycle, but keep in mind that he is more of a hardgainer type (ectomorph) with a faster metabolism, while Jonathan is more of a muscular body type (mesomorph) with a tendency to hold onto bodyfat. Jonathan appears to be more carb sensitive; that is, his fat cells suck up extra carb calories, which is why he tends to keep his carb percentage on the low side—around 30 percent. (Like proper training, a results-producing diet isn’t the same for everyone. You’ll have to experiment to find out how your body reacts to carbs and different calorie levels—but extremely low-carb eating is never the healthy answer.)

No matter how fast your metabolism, you will almost always have to up your activity as your body adapts to different calorie deficits on the road to an X-treme Lean look, even if it’s only with brisk walks two to three times a week. As both of us move toward our leanest physiques, we’re taking in between 2,000 and 2,400 calories and doing additional cardio work—oh, and our carbs don’t drop below 140 grams a day.

Carb Countdown

Right around 150 grams of carbs a day *on training days* appears to be an adequate amount that keeps our bodies functioning in a healthful manner, with enough glycogen to replenish muscle-tissue deficits created by hard weight training. (Remember, your body holds a total of 300 to 400 grams of carbs, so a weight-training workout depletes less than 100 grams—400 calories.) On nontraining days, you should

substitute a meal replacement drink or a lower-carb meal for your postworkout drink. That will keep your carbs over 100 grams so you continue to fill glycogen stores, but not so much that you blunt fat burning. With that strategy we always had plenty of energy for training—in fact, we got stronger on many exercises as we got closer to our shoot date—and we never got the cloudy mental condition associated with severe low-carb diets, and rarely did we ever get cravings for sweets.

The most interesting thing is that during our last month, our photos show that we gained muscle as we continued to lose fat. As we said, the first phases of a diet tend to burn visceral fat, which is in muscle tissue. That last month, as the remaining fat came off from below the skin, our muscle size appeared to increase—and we got stronger. Many experts believe it's impossible to build muscle on a low-calorie diet. Look at our last two photos in the sequence and you be the judge.

Of course, during that last month, when we took the final two photos in the sequence, we began using X Reps. We're sure that had something to do with building more muscle as we continued to drop fat. Using power partials at the end of a set at the max-force-generation point in the stroke does everything from increase muscle-fiber recruitment to stimulate anabolic hormones, such as growth hormone and testosterone. (Those two hormones are potent fat burners, so you'll definitely want to use X Reps!) We'll have more on X Reps later in this book. They can supercharge your fat-burning and muscle-building efforts, getting you to X-treme Lean condition faster! Even we were stunned with how fast they worked in combination with our other X-treme Lean strategies.

By the way, the last two photos in each of our series at the beginning of this chapter drive home another point: Just how much your appearance can change without a fluctuation in bodyweight. Jonathan's bodyweight was the same in both photos, about 204, and Steve's stayed at about 194. Obviously, if you gain muscle as you lose fat, the scale won't register a fluctuation. Don't use the scale to gauge your progress.

Steve's X-treme Lean Calorie-Reduction Schedule

X-treme Lean Diet Weeks 1 & 2

Meal 1, 6 a.m.

1 cup Raisin Bran
1/2 cup All Bran
1 cup orange juice
Pro-Fusion, 1 scoop in water,
poured on cereal
1 cup coffee
Supplements: multivitamin- and-
mineral cap, 1; Omega Stak, 2;
fruit-and-vegetable caps, 2

Meal 2, 9 a.m.

Muscle Meals, 1 packet
Cort-Bloc, 4 caps

Meal 3, 11:30 a.m.

Postworkout shake
RecoverX

Meal 4, 1 p.m.

8 ounces cottage cheese with
pineapple
Apple
Supplements: Omega Stak, 3

Meal 5, 3:30 p.m.

Muscle Meals, 1 packet

Meal 6, 7 p.m.

Broiled chicken or tuna or steak
Vegetables
1-2 glasses wine
Dessert
Pro-Fusion, 1 scoop in water
Supplements: Antioxidant, 2;
Omega Stak, 3; fruit-and-
vegetable caps, 2

Calories: 2,400
Protein: 210 grams (37 percent)
Fat: 75 grams (26 percent)
Carbs: 210 grams (37 percent)

X-treme Lean Diet Weeks 3, 4 & 5

Meal 1, 6 a.m.

1 cup Raisin Bran
1/2 cup All Bran
1/2 cup orange juice*
Pro-Fusion, 1 scoop in water,
poured on cereal
1 cup coffee
Supplements: multivitamin- and-
mineral cap, 1; Omega Stak, 2;
fruit-and-vegetable caps, 2

Meal 2, 9 a.m.

Muscle Meals, 1 packet
Cort-Bloc, 4 caps

Meal 3, 11:30 a.m.

Postworkout shake
RecoverX

Meal 4, 1 p.m.

8 ounces cottage cheese with
pineapple
Apple
Supplements: Omega Stak, 3

Meal 5, 3:30 p.m.

Muscle Meals, 1 packet

Meal 6, 7 p.m.

Broiled chicken or tuna
Vegetables
1-2 glasses wine
Eliminate dessert*
Pro-Fusion, 1 scoop in water
Supplements: antioxidant, 2;
Omega Stak, 3; fruit-and-
vegetable caps, 2

Calories: 2,150
Protein: 209 grams (39 percent)
Fat: 68 grams (28 percent)
Carbs: 180 grams (33 percent)

*Indicates calorie reduction.

X-treme Lean Diet
Weeks 6, 7 & 8

Meal 1, 6 a.m.

1 cup Raisin Bran
1/2 cup All Bran
1/2 cup orange juice
Pro-Fusion, 1 scoop in water,
poured on cereal
1 cup coffee

Supplements: multivitamin- and-
mineral cap, 1; Omega Stak, 2;
fruit-and-vegetable caps, 2

Meal 2, 9 a.m.

Muscle Meals, 1/2 packet*
Pro-Fusion, 1/2 scoop***
Cort-Bloc, 4 caps

Meal 3, 11:30 a.m.

Postworkout shake
RecoverX + CreaSol**

Meal 3, 1 a.m.

8 ounces cottage cheese with
pineapple

Apple
Supplements: Omega Stak, 3

Meal 4, 3:30 p.m.

Muscle Meals, 1/2 packet*
Pro-Fusion, 1/2 scoop***

Meal 7, 7 p.m.

Broiled chicken or tuna or steak
Vegetables
Pro-Fusion, 1 scoop in water
Supplements: antioxidant, 2;
Omega Stak, 3; fruit-and-
vegetable caps, 2

Calories: 2,050
Protein: 200 grams (40 percent)
Fat: 64 grams (29 percent)
Carbs: 155 grams (31 percent)

*Indicates calorie reduction.

**Indicates supplement addition.

***Substituted for its lower calorie
content.

X-treme Lean Diet
Weeks 9, 10, 11 & 12

Meal 1, 6 a.m.

1 cup Raisin Bran
1/2 cup All Bran
1/2 cup orange juice
Pro-Fusion, 1 scoop in water,
poured on cereal
1 cup coffee

Supplements: multivitamin- and-
mineral cap, 1; Omega Stak, 2;
fruit-and-vegetable caps, 2

Meal 2, 9 a.m.

Pro-Fusion, 1 1/2 scoops*
Cort-Bloc, 4 caps
Tight, 1 cap**

Meal 3, 11:30 a.m.

Postworkout shake
RecoverX + CreaSol

Meal 4, 11 a.m.

8 ounces cottage cheese with
pineapple

Apple
Supplements: Omega Stak, 3

Meal 5, 3:30 p.m.

Pro-Fusion, 1 1/2 scoops*

Meal 7, 7 p.m.

Broiled chicken or tuna
Vegetables
Pro-Fusion, 1 scoop in water
Supplements: antioxidant, 2;
Omega Stak, 3; fruit-and-
vegetable caps, 2

Before bed**

L-carnitine capsules, 1-3 grams;
ZMA-T, 4 caps; Cort-Bloc, 2
caps

Calories: 1,950
Protein: 170 grams (37 percent)
Fat: 64 grams (31 percent)
Carbs: 155 grams (32 percent)

*Indicates calorie reduction.

**Indicates supplement addition.

Jonathan's X-treme Lean Diet-and-Cardio Schedule

Jonathan begins by gradually eliminating any junk food and alcohol consumption and eating cleaner the first three to four weeks. He considers that his first calorie cut, which leaves him with this diet (at right) with nine weeks left till peak day.

In order to create an energy deficit, he prefers to gradually ramp up his activity via cardio sessions. He begins with two to three 20-minute sessions a week, and he adds a session or time to his existing sessions every other week until he is doing at least one 30-minute session every day. The last three weeks he is often doing two 30-minute cardio sessions a day (that's excessive unless you're peaking for a photo shoot or bodybuilding competition where you need to be under 5 percent bodyfat).

Making gradual calorie cuts is Steve's method. Increasing activity is Jonathan's preference. Which way is best? It's up to the individual. Whatever suits your personality and lifestyle. Either way you create an energy deficit, which forces your body to burn bodyfat if the circumstances are right. The key: don't create an overwhelming deficit all at once, one that's so large that fat burning stops dead in its tracks. That can trigger the starvation mechanism and your body will start hoarding fat and burning muscle. The key words to remember are *gradual* and *patience*. Oh, and don't forget to cheat...

Note: We'll have more on what each of the specific supplements are in Chapter 7.

Before cardio

Supps.: Tight (fat burner), 1 cap; Cort-Bloc, 2 caps;
amino acid caps, 4

Meal 1 (after cardio)

Egg whites, scrambled, 1 cup

Cream of Rice, 1 serving

Peanut butter, 1 tbsp.

Pro-Fusion, 1 scoop in water

Supps.: T3 (metabolism booster), 1 cap;

Omega Stak, 4 caps; multivitamin

Meal 2 (before training)

Pro-Fusion, 2 scoops in water

30 minutes before training

Supps.: Tight, 1 cap; Cort-Bloc, 2 caps;

L-carnitine liquid, 2 grams

Meal 3: (after training)

X Stack shake (in water)

RecoverX, 3 scoops + CreaSol, 1 scoop

Meal 4

Chicken breast

Broccoli, 1 cup

Pro-Fusion, 1 scoop in water

Supps.: T3, 1 cap; Omega Stak, 4 caps

Meal 5

Protein shake (in water)

Muscle Meals, 1 packet

Pro-Fusion, 1/2 scoop

Supps.: Tight, 1 cap (last few weeks only)

Meal 6 (two hours before cardio)

Pro-Fusion, 2 scoops in water

Supps.: T3, 1 cap

30 minutes before cardio

Supps.: Cort-Bloc, 2 caps

Meal 7 (after cardio)

Egg whites, 1 cup plus 1 whole egg, scrambled

Cashews and almonds, 1 handful

Pro-Fusion, 1 scoop in water

Supps.: T3, 1 cap; psyllium-husk powder, 1-2 tbls.

Before bed

Supps.: ZMA-T (testosterone booster), 4 caps

Calories: 2,500

Protein: 320 grams (46 percent)

Fat: 65 grams (26 percent)

Carbs: 160 grams (28 percent)

Jonathan's X-treme Lean Cardio Surge

Weeks 1, 2, 3

Two to three cardio sessions, 20 minutes each

Weeks 4, 5, 6

Five cardio sessions, 20 minutes each

Weeks 7, 8, 9

Six cardio sessions, 30 minutes each

Weeks 10, 11, 12

10 to 14 cardio sessions (often twice a day), 20 to 30 minutes each



CHAPTER 4

Cheat Your Way to Leanness

It may go against your moral upbringing, but you have to cheat to get lean. (We're talking food here, not running around behind your significant other's back—although that does burn calories.) If you don't have a cheat day during the week, you can sabotage your fat-loss efforts in a big way. That's true from a psychological standpoint (you will feel deprived, and you're more likely to binge) and from a physiological standpoint. It has to do with a specific hormone called leptin.

Leptin is known as the antistarvation hormone. If you have enough, your body doesn't panic. If you don't take precautions as you reduce calories, however, your body can produce less and less. When your leptin levels fall, the starvation mechanism shifts into high gear, and your body halts fat burning and triggers a voracious appetite (you start having dreams about giant chocolate sundaes). Studies show that increasing calories, primarily with carbs, only one day a week during a diet can help normalize leptin levels, keeping the starvation mechanism in check and speeding the fat-burning process.

We verified that, inadvertently, through a miscalculation Steve made during our last peaking phase (we just keep learning from our mistakes!). Right up until the last few weeks before peak day Steve thought he was carbing up one day during the weekend, his cheat day, but he was actually carbing down—and it almost stopped his fat burning cold.

Here's how it happened: When Saturday rolled around, he stayed on the same meal schedule he was using during the week, upping his carbs slightly. So far, so good. What he forgot was that since he wasn't training on the weekends, he didn't include his postworkout drink in his calculations. Whoops! RecoverX, our postworkout drink of choice, contains 60 grams of carbs, which he wasn't getting on the weekends. So while he added 40 grams of carbs on Saturday, he already had a deficit of 60 grams. He was actually taking in fewer carbs and calories instead of more, which severely hampered his fat burning. In fact, he didn't know what was going wrong for weeks. He thought that because he was approaching his 45th birthday, age

was finally slowing everything down, including his ability to burn fat. His body refused to let go of that last bit of blubber that was blurring his muscularity.

While age may have had a little something to do with his slowing metabolism, it was mostly due to his plummeting leptin levels. His body was hoarding that last bit of fat.

Luckily, he figured it out in time and carbed up enough every few days over the course of about two weeks before peak day, and he showed up in ripped shape; however, he could've been even more shredded had he cheated on Saturdays instead of actually lowering his carbs. (He should've realized what was going on when he started having wild fantasies about Betty Crocker.)

As for Jonathan, he did it right. He upped his carbs on the weekends—remembering to include those in his postworkout drink in his calculations—and he even increased his carbs on Wednesdays. That calorie-and-carb zig-zag maintained his leptin levels and tightened up his physique quickly—he was shredded on peak day. His Wednesday carb-up was especially important due to his low-end carb intake—25 to 30 percent as opposed to 35 to 40 percent for Steve. Jonathan increased his carbs by about 50 to 80 grams on Wednesday; while Steve rarely took in more carbs midweek.

Jonathan upped his carbs two days a week to stabilize his leptin levels, and he peaked perfectly. Steve miscalculated, accidentally lowering his carbs one day per week, and almost blew it. Luckily, he realized his mistake in time—but he could've been leaner.



Here are the lessons you should learn from this (so you don't have to learn the hard, frustrating way as Steve did):

X-treme Lean Lessons

- 1) Set aside one day per week as a cheat day. If your carbs are below 30 percent on your noncheat days, you may want to also up your carbs midweek, say, on Wednesday (as Jonathan does).
- 2) On cheat day, have your favorite dessert or food at one or two meals. Eat enough to get extra carbs to increase your daily total by 50 to 100 grams (don't forget to include your postworkout drink—or lack of one—in your calculations).
- 3) Don't go berserk—no binging. Think of cheat day as a reward for all of your diligence during the week. You get one or two treats—three slices of pizza (that's about 75 grams of carbs) at one meal and a bowl of ice cream (that's about 50 grams) at another—then it's back to strict days. In other words, cheat day is not a license to clean out your local Baskin-Robbins or eat an entire wedding cake (that's about 2,000 grams of carbs!).
- 4) Up your carbs slightly on Wednesday. Eat about 50 extra grams of carbs midweek if your usual daily carb intake is at the low end—30 percent or below.

CHAPTER 5

X-treme Lean Diets

Okay, you've seen how we do it, and you've got lots of X-treme Lean fat-attack facts bouncing around in your head, so let's put it all together. You want to know where to start and the exact steps to follow, and that's what this chapter is all about.

As we said previously, everyone responds to a diet differently. You may have a faster metabolism than your friend (Steve's metabolism tends to be faster than Jonathan's) and you may be more carb sensitive than the next guy or gal (Jonathan needs fewer carbs than Steve to get in X-treme Lean condition). Nevertheless, you need a place to start, so let's outline a diet.

What are the basics?

- 1) Carb stacking. Try to keep most of the carbs in the morning.
- 2) At least 20 grams of protein at each meal. That will keep the muscle-building wheels in motion.
- 3) A fast-carb, fast-protein drink after your workout.
- 4) Daily macronutrient percentages of about 30 to 40 percent carbs, the same for protein and about 25 percent fat.
- 5) Gradual calorie reductions.

On the following page is a good diet to start with. Or you can try following one of our diets from Chapter 3. Keep in mind that you may not be able to jump right in. As we've said, you can't make a giant calorie cut, or your body will think it's starving and hold onto bodyfat. If your current diet contains more than 3,000 calories, which it probably does, you'll need to first break it up into six meals and then gradually pare down your calories till you're below 3,000. The Higher-Calorie Beginning Diet on page 44 is a good starting point. Make the calorie cut suggested, then move to the diet at right.

X-treme Lean Diet

Meal 1

Milk (2%), 8 oz.

Protein powder, 1 scoop stirred into milk

3 rice cakes or 2 slices of whole-wheat bread
with peanut butter (2 tbsp.)

Meal 2

Meal replacement (like Muscle Meals),
1 packet in water

Meal 3

Tuna Sandwich on whole-wheat bread

Apple

Nuts (handful)

Meal 4 (about an hour before training)

Meal replacement (like Muscle Meals),
1 packet in water

Meal 5 (immediately after training)

Postworkout drink (like RecoverX), in water
Creatine

Meal 6

Chicken breast, 1 large

Broccoli, 1 cup

Salad with light dressing

Calories: 2,596

Protein: 249 grams (38 percent)

Fat: 69 grams (26 percent)

Carbs: 223 grams (36 percent)

So you've looked over the diet and thought, "Man, is that boring!" There are some meals you can use as replacements that will keep your macronutrient percentages in the ballpark:

X-treme Lean Meal Options

Meal 1 Options

Option 1

High-fiber cereal
with milk (2%)
Piece of fruit
Protein drink

Option 2

Oatmeal with raisins
Boiled eggs, 2
Orange juice

Option 3

(Quick Blender Breakfast 1)
Lowfat yogurt (any flavor), 9 oz.
Milk (2%), 8 oz.
Protein powder, 1 scoop
Ice cubes for texture (optional)
Water to thin (if necessary)

Option 4

(Quick Blender Breakfast 2)
Labrada Nutrition's Lean Body
Instant Breakfast Shake

Meal 3 Options

Option 1

Cottage cheese, 8 oz.
Pears (canned in own juice),
4 halves

Option 2

Yogurt, 6 oz.
Pecans or walnuts (handful
stirred into yogurt)

Option 3

Lean beef or turkey burger, 8 oz.
Banana, 1

Option 4 (On-the-Road Lunch)

Turkey jerky, 4 oz.
Raisins, 1 small box

Meal 6 Options

Option 1

Wolfgang Puck's Chicken and
Egg Noodle soup, 1 serv.
or other soup with less
than 15 g. carbs
Cheese, 28 g. (1 oz.)

Option 2

Chicken tacos, 2
Sliced tomato, 1

Option 3

Egg omelet
5 egg whites, 1 whole egg,
green peppers, onions,
mushrooms

Option 4

Chicken salad with light dressing

Option 5

Lean beef patty, 6 oz.
Green beans, 1 cup
Small green salad with light
dressing

X-treme Lean Diet: Your Next Step to Ripped

You now have a starting point. Where to from here? You can follow Jonathan's lead and begin to gradually ramp up your activity. Start with two 20-minute cardio sessions a week and build on that (see his X-treme Lean Cardio Surge schedule in Chapter 3). Or you may want to follow Steve's lead and begin cutting calories, primarily from carb sources.

What do we recommend? A little of both. Here's how we suggest you make this diet work as quickly as possible:

Weeks 1 and 2: Stay on the diet as it's written, with one cheat day on the weekend. (Keep the cheat day throughout your fat-loss phase.)

Weeks 3 and 4: At meal 2 substitute two scoops of protein powder (low in carbs) for the meal-replacement packet. For example, if you use Muscle Meals meal replacement and move to two scoops of Pro-Fusion protein powder instead, you reduce your calories by more than 100 and cut your carb intake. Also introduce low-intensity 20-minute cardio sessions (walking or light jogging) two times a week.

Weeks 5 and 6: At meal 4 substitute two scoops of protein powder (low in carbs) for the meal-replacement packet.

Weeks 7 and 8: Add one 20-minute cardio session per week or increase your current cardio work (two sessions per week) to 30 minutes each.

Weeks 9 and 10: Add one 20-minute cardio session per week.

Weeks 11 and 12: Add one 20-minute cardio session per week or extend one or two of your sessions to 30 to 40 minutes.

Once you reach your desired leanness level, you can loosen up your diet somewhat and rotate in more fruits and vegetables.

The above is how Becky Holman made her startling transformation. Her primary calorie cuts were via protein powder to substitute for her meal-replacement feedings. She also gradually ramped up her cardio activity, running or walking two miles every few days. You saw her before and after photos on the cover and in the introduction, which are very impressive. Whether you're a man or woman, you can learn from how she approached her X-treme Lean program, so let's let her tell it in her own words...

Higher-Calorie Beginning Diet

Meal 1

Milk (2%), 8 oz.
Protein powder, 1 scoop
stirred into milk
3 rice cakes or 2 slices of
whole-wheat bread with
peanut butter (2 tbsp.)

Meal 2

Meal replacement, 1 packet
in water
Banana

Meal 3

Chicken breast, 1 large
Broccoli, 1 cup
Rice, 1 cup
Salad with light dressing

Meal 4

Cottage cheese
(lowfat), 8 oz.
Pears (canned in own juice)
4 halves

Meal 5 (about an hour before training)

Meal replacement, 1 packet
in water

Meal 6 (immediately after training)

Postworkout drink (like
RecoverX), in water

Meal 7

Tuna Sandwich on
whole-wheat bread
Apple
Nuts (handful)

Calories: 3,100

Protein: 260 grams (38%)

Fat: 73 grams (26%)

Carbs: 250 grams (36%)

Calorie cut: Stay on this diet as is for two to three weeks, and then make your first calorie reductions: Delete the rice from meal 3 and eat only half a tuna sandwich at meal 7. That will drop your daily calorie count by about 300. Stay at that count for two weeks, and then move to the X-treme Lean Diet on page 41 or one of our diets in Chapter 3.

CHAPTER 6

Feminine X-ploits

by Becky Holman

The old saying is, "A picture is worth a thousand words." In my case my before picture evoked a thousand emotions—primarily disgust and depression. I didn't realize I looked like that till I saw those awful photos. It's amazing how your mind can play tricks on you when you look in a mirror. On top of that, clothes can help reinforce the denial. Throw on a baggy shirt and some jeans, and, see, you don't look fat at all. Amazing. It's so easy to hide it—even from yourself. And men do it too. It's hard to deny it, however, when you see a photograph of yourself in a bathing suit head-on. Now, that's a slap of reality—and in my case the reality was worse than anything the folks at "Fear Factor" could dream up.

I felt so terrible after I saw my before photos that the idea of changing my appearance seemed almost hopeless. And to make me feel even worse, my daughters, Chelsea, 11, and



Lindsey, seven, kept saying, "Mommy, you're fat; go on a diet," but my husband, Steve Holman, *IRON MAN*'s editor in chief and co-author of this book, did his best to put a positive spin on things. He encouraged me and told me that

changes would start to happen fast if I buckled down. I knew he was right, but I just couldn't find the motivation to be persistent. I knew I could do it because I'd get a spark, but then it would quickly be extinguished by thoughts of how far I had to go. I felt overwhelmed!

Those false starts were disheartening, and I had a number of them. My before pictures were taken in September, and that's when I decided to begin a transformation program. The problem was I couldn't commit completely. I went to the gym a few times in September, but I didn't stick with it. I decided that Thanksgiving would be my starter pistol, and right after the holiday I'd go full force. Nope, it didn't happen. I put it off till Christmas, New Year's and, finally, my birthday, which was my 41st, at the end of February.

Birthdays are milestones, and turning 41 finally ignited my enthusiasm to more than a flicker. I'd gone through my first year in my 40s in perhaps my worst shape ever—not a good way to enter the prime of life. It was time to change that and prove to myself that I could achieve my best shape ever and be a happier, healthier person. Steve was beginning his annual cutting phase, so that helped my mind-set. (I strongly recommend having a partner or friend go through the process with you. Steve and I ran and walked together a lot—and ate a lot of the same things.)

How I Trained

I started with some easy full-body sessions for a few weeks, training two days a week (see the Phase 1 Break-in Workout), and then Steve created a split routine for me, using his Positions-of-Flexion training method (more on POF in Chapter 8). I started going to the gym three days a week and training more intensely. The first two days I did a split routine, and then on Friday I did a full-body workout with slightly higher reps on each exercise.

If you look at my Phase 2 routine that begins on page 50, you may notice that there's direct and indirect work for every

bodypart on Monday and Wednesday. In other words, I really trained every bodypart on both of those days. For example, I did chest on Monday and triceps on Wednesday—pressing for chest also trained my triceps and flat-bench dumbbell presses with my arms angled into my torso for triceps also trained my chest.

On Friday I did one or two sets of higher reps, around 12, for key exercises, and I did only one exercise per bodypart—although there was direct and indirect work for almost every bodypart within that day’s routine. For example, I did feet-forward Smith-machine squats for my hamstrings, but they also work quads, which I trained directly with the next exercise, leg presses, which also hit hamstrings. It may sound a bit confusing, but trust me, it works, and you’ll know you’ve given every muscle the once over (and usually twice-over if you count the indirect hits). With direct and indirect work on Monday and Wednesday and a full-body workout on Friday, I was essentially training every bodypart three days a week. (Steve and Jonathan

Phase 1 Break-in Workout (Four Weeks)

Tuesday and Friday

Poundage

Smith-machine squats	1-2 x 10	_____
Leg curls	1-2 x 10	_____
Hyperextensions	1-2 x 10	_____
Standing calf raises	2 x 15	_____
Bench presses	1-2 x 10	_____
Machine flyes	1 x 10	_____
Lateral raises	1-2 x 10	_____
Machine presses	1-2 x 10	_____
Cable rows	1-2 x 10	_____
Pushdowns (optional)	1 x 10	_____
Cable curls (optional)	1 x 10	_____
Ab machine	1-2 x 10	_____

explain the direct/indirect approach more thoroughly in *The Ultimate Mass Workout* e-book.)

Steve went with me to the gym a couple of times to answer questions I had, and I also read through the exercise section—Appendix B—of *Train, Eat, Grow: The Positions-of-Flexion Muscle-Training Manual* to make sure I was doing all the movements correctly. (Those exercise illustrations and descriptions also appear in Appendix A of this book for your convenience.)

For extra calorie burn I walked a couple of days a week, but that was it for cardio the first six weeks. I introduced running twice a week after that, doing one to two miles a session.

If you'd like to follow my programs, they are included in a form that you can print, cut out and take to the gym on a small clipboard. There is space to the right to log your poundages.



Oh, and if you'd like to add X Reps, which I highly recommend for the muscle-building and fat-burning effects, see Chapter 8 for how to incorporate them, how to perform them and how and why they can significantly improve your results.

Phase 2 Workout: Monday
Quads, Chest, Back, Abs

Exercise, Sets, Reps	Poundage
Leg presses* 2 x 10-12	_____
Feet-forward Smith-machine squats 2 x 8-10	_____
Leg extensions (drop) 2 x 8(6)	_____
Leg press calf raises* 3 x 18, 14, 12	_____
Standing calf raises (drop) 2 x 10(6)	_____
Bench presses* 2 x 8-10	_____
Machine flyes (drop) 2 x 8(6)	_____
Machine incline presses* 2 x 8-10	_____
Superset (same weight on both)	
Incline flyes 2 x 8-10	_____
Incline dumbbell presses 2 x 8-10	_____
V-handle pulldowns* 2 x 8-10	_____
Dumbbell pullovers 1 x 12	_____
Undergrip cable rows (drop) 1 x 8(6)	_____
One-arm dumbbell rows 2 x 8-10	_____
Bent-over lateral raises 2 x 8-10	_____
Close-grip cable upright rows 2 x 8-10	_____
Incline kneeups 3 x max	_____
Crunches 1 x max	_____

***Do one light warmup set with about 75 percent of the work weight.**

Note: Drop set means to do one set to failure, decrease the weight, and then immediately do another set to failure.

Phase 2 Workout: Wednesday
Hamstrings, Delts, Triceps, Biceps, Abs

Exercise, Sets, Reps	Poundage
Feet-forward Smith-machine squats*	2 x 10-12 _____
Hyperextensions	2 x 8-10 _____
Leg curls (drop)*	2 x 8(6) _____
Dumbbell upright rows*	3 x 10-12 _____
Incline one-arm laterals	1 x 8-10 _____
Dumbbell presses*	2 x 8-10 _____
Flat-bench dumbbell presses (arms close to torso)*	2 x 8-10 _____
Overhead dumbbell extensions*	1 x 8-10 _____
Kickbacks (drop)	2 x 10(6) _____
Undergrip pulldowns*	2 x 8-10 _____
Incline curls	1 x 8-10 _____
Cable curls (drop)	2 x 8(6) _____
Crunches	3 x max _____
Reverse crunches	1 x max _____

***Do one light warmup set with about 75 percent of the work weight.**

Note: Drop set means to do one set to failure, decrease the weight, and then immediately do another set to failure.

Phase 2 Workout: Friday Full Body

Exercise, Sets, Reps

Poundage

Leg presses*	2 x 10-12	_____
Feet-forward Smith-machine squats	2 x 10-12	_____
Leg curls (drop)*	1 x 8(6)	_____
Hyperextensions	1 x 8-10	_____
Butt Blaster machine	1 x 15	_____
Standing calf raises (drop)*	1 x 12(6)	_____
Bench presses*	1 x 12	_____
Machine flyes (drop)	1 x 8(6)	_____
Incline dumbbell presses	1 x 12	_____
Dumbbell upright rows (drop)*	1 x 8(6)	_____
Machine presses*	1 x 12	_____
V-handle pulldowns*	1 x 12	_____
Straight-bar cable rows	1 x 12	_____
Bent-over laterals (drop)	1 x 8(6)	_____
Pushdowns (drop)*	1 x 8(6)	_____
Cable curls (drop)*	1 x 8(6)	_____
Incline kneeups	2 x max	_____
Crunches	2 x max	_____

***Do one light warmup set with about 75 percent of the work weight.**

Note: Drop set* means to do one set to failure, decrease the weight, and then immediately do another set to failure.

How I Ate

As for eating, the first thing I did was stop having anything after 8:00 p.m. That took some weight off me immediately, as I often had ice cream or other goodies late—which is how I got in that horrible before shape in the first place. I think most people's metabolisms slow down in the evening, and they tend to sit around anyway, so adding extra calories during that time does nothing but feed fat cells. If I got a craving, I'd have a big glass of water with lemon squeezed in. That was refreshing and usually killed the urge to splurge.

My next step was to add protein to every meal. In the beginning I was having one or two Muscle Meals meal replacements during the day to supplement my regular food intake, but as I progressed into month two, I replaced each MRP with one or two scoops of Pro-Fusion protein powder to reduce my calories. One Muscle Meals has about 340 calories, while two scoops of Pro-Fusion has 220. That's Steve's favorite way to make gradual calorie reductions, as you saw in Chapter 3. Chocolate Pro-Fusion is my favorite, and sometimes I'd put a tablespoon of peanut butter in the drink to give it that Reese's Peanut Butter Cup flavor (that's when I'd only use one scoop of protein—I was good about keeping my calories in check). It was delicious and satisfied my sweet tooth without spiking my insulin.

Another strategy I used was what Steve and Jonathan call carb stacking. I tried to get most of my carbohydrates before noon, with the remainder of my meals being mostly protein and cruciferous vegetables, like broccoli and asparagus. I trained in the morning, so my last higher-carb meal was around 11:30, which was my postworkout RecoverX shake. That supplement has fast whey protein and fast high-glycemic carbs, just what you want after an intense workout to replenish and build muscle.

Yes, I was trying to build muscle because I've learned that the more muscle I add to my frame, the more calories I burn. Was I afraid of getting too big? Of course not. As a woman I

know my hormones won't allow it, so I trained as hard as I could—and it worked!

I did my after photos in mid-July—about four months after I got serious—and even I was impressed. Getting there wasn't as difficult as I thought it would be, and I kicked myself for all those false starts caused by my feelings of being overwhelmed. The “thousand words” my after photos are worth include pride, accomplishment and satisfaction. I've taped my before and after pictures together side by side and placed them in my closet so I can see them every morning as I get dressed. That before shot is a constant reminder to stay the course.

Becky Holman's X-treme Diet

Meal 1

High-fiber cereal or two
scrambled eggs
One piece fruit
1 cup coffee
Vitamin-and-mineral
capsule
Desiccated fruit capsules, 2
SAN's T3 metabolic
stimulator
Antioxidant capsule

Meal 2

Muscle-Link's Muscle
Meals meal replacement,
1 packet, or Pro-Fusion
protein powder, 2 scoops
in water
SAN's Tight, 1 cap

Meal 3 (postworkout)

Muscle-Link's RecoverX
postworkout supplement,
2 scoops in water

Meal 4

Vanilla lowfat yogurt with
pecans stirred in or lowfat
cottage cheese with
banana

Meal 5

Pro-Fusion protein powder,
1 scoop in water

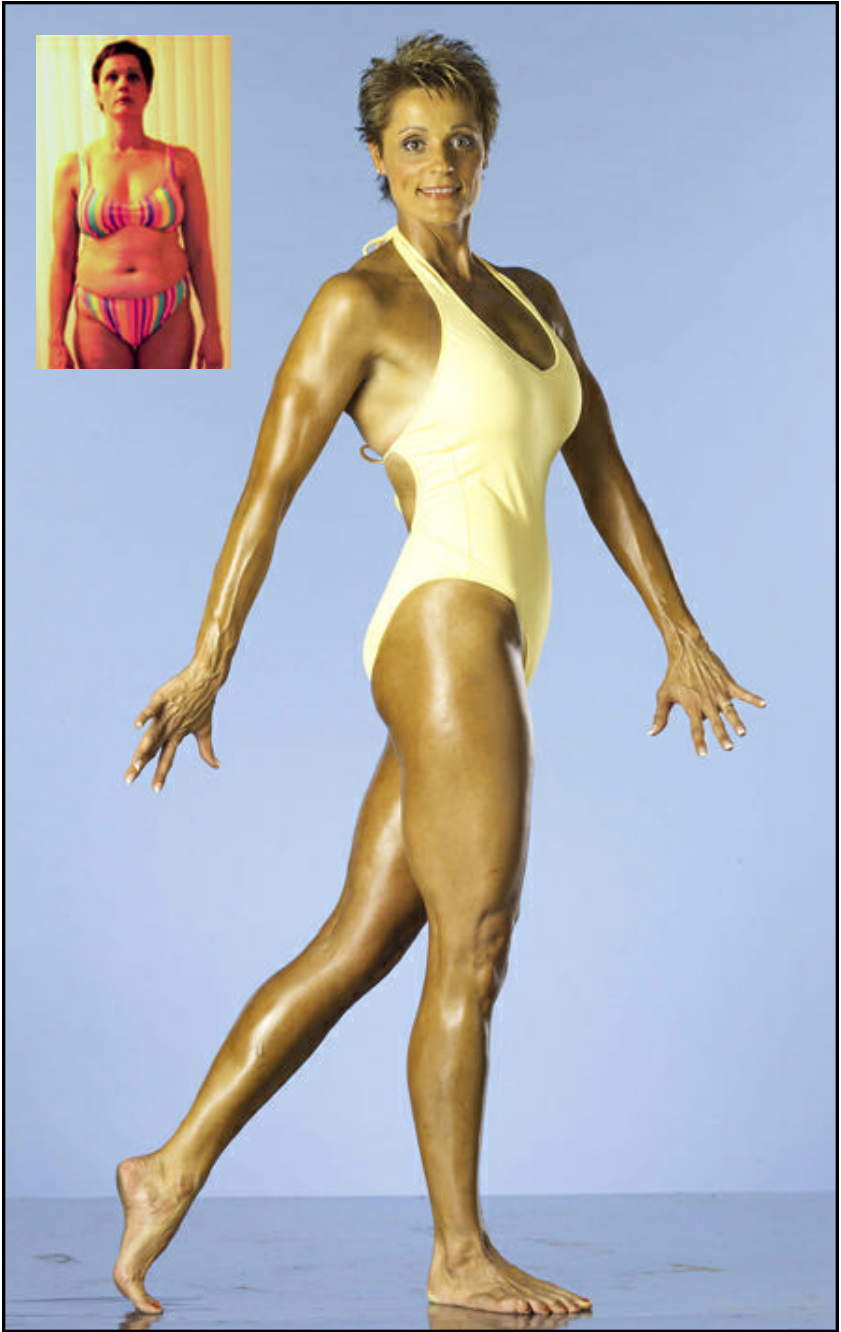
Meal 6

Chicken with green veggies
(usually broccoli)
Desiccated vegetable
capsules, 2
T3 metabolic stimulator

Before bed

Pro hGH growth hormone
booster supplement

Note: All supplements are
available from Home Gym
Warehouse, 1-800-447-
0008 or [www
.home-gym.com](http://www.home-gym.com).



Becky Holman's X-treme Lean Tips

- 1) Stop eating after 8:00 p.m. Your metabolism slows down at night, and you also have a tendency to binge after a day of reduced-calorie eating. Don't give in to that urge.
- 2) Have at least 15 grams of protein at every meal and never eat carbs alone. That will keep your blood sugar stable, reduce hunger and prevent insulin surges, which can promote bodyfat storage. If a meal lacked sufficient protein, I'd have one scoop of Muscle-Link's Pro-Fusion in water for an additional 20 grams of micellar-casein-and-whey protein.
- 3) Get most of your carbs in the morning. I ate fruit in the morning, mostly protein in the afternoon and protein with green vegetables at night.
- 4) Don't be too strict. I'd have a beer or two, usually on my weekend cheat day, and even ice cream, but I never binged. Control is the key—stay strict most of the time.
- 5) Eat at least five meals a day. Once again, that keeps blood sugar stable and prevents insulin surges. (On nonworkout days have a meal replacement or lower-carb meal—300 calories, 20 grams of carbs—in place of your postworkout drink.)
- 6) Gradually increase activity. I added running to my exercise regimen after six weeks. I ran once or twice a week, usually on days I didn't go to the gym.
- 7) Don't weigh yourself. Muscle weighs more than fat, so if you gain muscle and lose fat, your bodyweight will hover around the same number. That can frustrate people who don't understand that a lower bodyweight doesn't necessarily mean a better body. I weighed myself at the beginning of my program, and then near the end; however, I knew I was making steady progress because my pants were getting looser and I had to tighten my belt regularly.

CHAPTER 7

X-treme Lean Nutrients

We're all looking for that magic pill or powder we can take to double or triple our fat-burning, muscle-building efforts. We've gone through much of the latest research, and here are our picks for the best X-treme Lean nutrients and compounds available. Are any of them magic? You'll have to be the judge. Most have helped our bodyfat disappear faster than you can say *flab-ra-cadabra*.

1) L-carnitine. This amino acid is directly responsible for transporting long-chain triglycerides, or fat, into the cells for energy production. Sounds like a winner so far. It works with an enzyme called CPT-1, which results from omega-3 fatty acid intake, to shuttle fatty acids into the cell mitochondria, where fat is oxidized in a process called beta-oxidation. (We told you good fat was important, so don't neglect getting your EFAs.)

Carnitine not only transports long-chain fats into the mitochondria but also helps you recover from killer lifting sessions. (Are you starting to see why it's at the top of our list?) A study at the University of Connecticut had 10 healthy men who were recreational lifters take two grams of L-carnitine daily (a divided dose at breakfast and lunch) for three weeks. The subjects performed a squat protocol consisting of five sets of 15 to 20 repetitions. They repeated that under placebo and carnitine-supplemented conditions. Growth hormone increased above resting levels during the first 30 minutes after exercise, and testosterone increased during the first 15 minutes, but there were no differences between the carnitine and placebo groups.

The real difference was in the muscle-damage area: 16 to 23 percent in the carnitine group vs. 29 to 39 percent in the placebo group.

In another muscle-related study L-carnitine improved the contractile force in the latissimus dorsi of dogs by 34 percent and overall force production by 31 percent (*J Strength Cond Res*, 17:455-462; 2003). (That means it may give your X Reps more firepower!) So it can improve fat burning, muscle power and muscle recovery, but there's more.

Scientists reported still another unexpected effect from

supplementing L-carnitine tartrate. This study examined the effects of carnitine on testosterone responses and androgen receptors after heavy weight training and a postexercise carb-and-protein meal. Ten men, average age 21, took either a placebo or two grams of L-carnitine tartrate for 21 days.

Baseline androgen-receptor content was higher in the carnitine group. That's what anabolic steroids do—increase the number of androgen receptors! We've obviously very excited about L-carnitine.

How we use L-carnitine: You saw how Steve's carb miscalculation on the weekends—not getting more, but less—slowed his fat-burning results. One thing that lessened the severity of that mistake was L-carnitine. He began using one gram per day before bed about four weeks out, increasing it to three grams per day as panic set in. Once he realized his miscalculation mistake and upped his carbs every few days, fat began melting off his physique, no doubt accelerated by his L-carnitine supplementation. His strength also improved right up till his peak day, which is unheard of on a calorie-restricted diet. Carnitine could also be partially responsible for that power factor. Jonathan used a liquid form of L-carnitine before workouts, and he also got stronger right up till shoot day.

2) Caffeine. Okay, caffeine isn't a nutrient, it's a drug, albeit a naturally occurring one. Nevertheless, if you're strictly antidrug, then stay away from it. Keep in mind, however, that it is fairly innocuous if it's used infrequently and in moderation, and it does have some powerful fat-burning, muscle-building properties. Research indicates that not only does caffeine give you an energy boost, but it can also help you contract your muscles harder because it stimulates your central nervous system—and it can help you burn more fat during exercise.

While you don't burn much fat during a bodybuilding workout because high-intensity work is fueled by glycogen (carbs), caffeine may help you burn a little more fat during your lower-intensity work, such as your warmup sets. How? Caffeine coaxes your body to use more fat during your low-intensity

warmup work, which spares glycogen for your high-intensity sets. True, even with caffeine the fat burning that occurs during your weight workout is minimal, but anytime you can create a situation in which you use even small amounts of fat as energy, you should take it. Considering the central nervous system stimulation that caffeine provides, you can see how a little may go a long way toward making your resistance workouts more intense and that much more effective for burning fat as you build muscle.

Here's another bonus: According to new studies, coffee can make your workouts less painful. Caffeine appears to lessen exercise-induced muscle pain, which means you can push your sets hard, get more X Reps and stimulate more growth. There's a desensitizing effect, however: The pain-reduction effects were less significant among heavy caffeine users because their pain receptors had been altered. Researchers don't know whether the caffeine acts on the muscles or the brain to reduce pain.

How we use caffeine: For best results you should consume caffeine 30 minutes before your workout so that it's in your system and taking effect prior to your first work set. About 150 milligrams, the amount of caffeine in one cup of coffee, will do the trick for most people. During the last eight weeks of our ripping phase, we used SAN Corporation's Tight. It's considered a fat burner because it contains caffeine and other metabolic stimulators like synephrine, guggulsterones and yohimbine (more on that last one in a moment). We took one Tight capsule about 15 minutes before our weight-training sessions and sometimes another capsule before cardio, depending on when it occurred. If we did cardio in the evening, we avoided caffeine because of its sleep-disruption effects. We found that any caffeine after 2 p.m. made it more difficult to fall asleep at night. Caffeine's nervous system-stimulation effects are said to peak about an hour after you take it, but it isn't out of your system for another six to eight hours. Keep that in mind. Also, don't use it if you have any cardiovascular problems, as it

may amplify them.

3) Yohimbine. Your body won't burn much lower-body fat until nearly all upper-body fat is eliminated. That has to do with certain receptors in lower-body fat. There is evidence, however, that shows using an alpha-2 adrenergic blocker can allow you to tap into lower-body fat stores faster (women and those who have trouble getting cut quads take note). The fat cells in the lower body, unlike those in the upper body, have a predominance of alpha-2 adrenergic fat cell

receptors, which make for slower fat release. You may be able to short-circuit that problem with the alpha-adrenergic blocker yohimbine, which is a natural plant derivative. It's been shown to be especially effective for women.

How we use yohimbine: The Tight supplement we mentioned above contains a very potent form of yohimbine, so we were getting a dose once or twice a day to enhance our fat-burning efforts.

4) Phosphatidylserine. PS is not a drug. It's a natural cortisol-suppressing substance. Why would you want to suppress cortisol? You've probably seen the TV ads that say cortisol is a stress hormone that causes bellyfat to accumulate. That's correct. It's a hormone your body secretes when it's under stress, such as from an intense workout, and it literally forces your body to eat its muscle tissue for emergency energy and build up fat deposits. In other words, if you're training hard, you're not only stimulating a growth response but activating a muscle-wasting emergency response that can make bodyfat more difficult to burn.

Research has shown that a high-carb diet can help control cortisol, but that's not the optimal eating plan for you if you're looking to get in X-treme Lean condition. To get the same, or



better, cortisol-control effects than a high-carb diet can produce, you may want to try phosphatidylserine, a soy-based lipid. PS can help you get a better muscle-growth response from your workouts by blocking some of the catabolic effects of cortisol without your having to resort to eating a higher-carb, insulin-stimulating diet.

Professor Thomas Fahey, Ed.D., of California State University, Chico, established the ability of PS to reduce blood cortisol during and after bodybuilding-type workouts. The study builds on prior Italian studies that found that PS lowers cortisol produced as a result of endurance exercise (cardio). It's a breakthrough bodybuilding supplement along the same lines as creatine monohydrate, especially for hardgainers, who are usually genetically challenged because of high levels of cortisol in the first place.

Bonus: Gary A. Martin, Ph.D., says that supplementation with PS can benefit cognitive functions. "Some 25 human studies have been performed with PS, of which 12 were double-blind studies. Palamieri, et al. (1987), stated that PS benefited the cognitive effects of vigilance, attention and short-term memory. Heiss, et al. (1993), conducted a study on 40 subjects and found significantly greater brain activation."

So PS will not only help you ward off the muscle-wasting, fat-storing effects of cortisol, but it may also help your mental sharpness during your workouts as well—and who couldn't use a little more laser focus in the gym? Count us in!

How we use PS: One of our favorite supplements when we're in our X-treme Lean ripping phase is Cort-Bloc, a PS supplement by Muscle-Link. We take three or four capsules before we train and two capsules before bed. We don't use it as often in the winter, as our intensity is generally lower, but when spring rolls around, we pull out all the stops and Cort-Bloc accelerates our results.

5) Zinc. The body requires the trace mineral zinc for conversion of the inactive thyroid hormone T4 into T3, which is five to seven times more metabolically active. A lack of zinc in

the diet leads to a 30 percent drop in T3 levels, and that means a slower metabolism and more fat-burning plateaus. If you want to jack up your metabolism, think zinc—on second thought, don't just think it, supplement it. Zinc also helps the body build testosterone, the key muscle-building hormone and one that has been shown to burn bellyfat.

How we use zinc: Studies suggest that you should get about 50 milligrams of zinc a day and no more than 100 milligrams. Check your meal replacement to see how much you're getting from it before you supplement. When we switch from Muscle Meals meal replacement, which is fortified with vitamins and minerals (including zinc), to Pro-Fusion, we start supplementing with zinc. We use Muscle-Link's ZMA-T, three to four capsules at bedtime.

6) Creatine monohydrate. This nutrient has been found to boost the energy capacity of the muscle cells. That's great for speeding up the muscle-growth process, but keep in mind that more energy expenditure equals more calorie use and the possibility of more fat-burning activity. Creatine is especially helpful to those who don't eat red meat, as they can develop a creatine deficiency, which, in turn, causes the body to function at less than optimal levels. That may be one reason dieting bodybuilders report such amazing results with this supplement.

How we use creatine: We add five grams of titrated creatine (Muscle-Link's CreaSol) to our postworkout drink after almost every training session. We like to cycle it, using it for around 12 weeks and going off for two. We do that throughout the year.

7) Tea. Recent studies show that drinking green tea may help increase bodyfat oxidation, and another shows that oolong tea may do the same. The study involving oolong tea suggests that it's not just the metabolic stimulation that makes the tea effective—it actually may thwart the addition of bodyfat (*J Nutr*, 131:2848-2852; 2001). Researchers in Taiwan studied more than 1,100 people for 10 years and found that those who drank tea—green, black or oolong—several times a week had 20

percent less bodyfat than those who never drank tea.

How we use tea: SAN's Tight supplement that we use before training contains green-tea extract. Steve also has green tea most nights after dinner. He says it helps kill the urge to eat before bedtime (and you burn calories when you run to the bathroom to pee in the middle of the night).

8) Water. Your muscles are about 70 percent water, but that's not the reason this substance is considered an anabolic accelerator and fat burner. Drinking more water isn't going to force your muscles to hold more and thus become larger, although sufficient carb intake will help them hold as much water as possible and retain a full look. For maximum muscle growth and fat loss to occur, all of your bodily systems must be functioning at optimal levels, and water is one way to keep things flowing along at a healthy pace. It helps flush poisons from your system and also enhances blood flow, which means that nutrients reach your recovering muscles more efficiently.

Keep in mind that bodyfat is where many toxins are stored. When you start burning fat, your body has more toxins to deal with, and water makes removal of that waste more efficient. Without enough water your body may force the toxins back into fat storage, which can slow the fat-burning process—your body needs the fat to hold the toxins. Incidentally, alcohol is a toxin, so drinking it on a regular basis can also hamper the fat-burning process, not to mention the fact that alcohol contains excess, empty calories that can blunt anabolic hormone activity (it's been shown to suppress testosterone).

Here's a big bonus: Water also ramps up your metabolism. Researchers conducted a study to test its thermogenic effects—that is, its conversion of fat calories into heat. Seven men and seven women, with an average age of 27, drank 500 milliliters, or about half a quart, of water. That caused a metabolic increase of 30 percent over resting levels. The increase occurred within 10 minutes, reaching a maximum 30 to 40 minutes after the subjects drank the water. It lasted for more than an hour, and it led the authors to suggest that

drinking just over a quart of water a day would augment energy expenditure each day by 200 kilojoules. That's like taking a dose of 50 milligrams of ephedrine three times a day, which results in an increased energy expenditure of 320 kilojoules. Granted, that adds up to only about 100 extra calories burned daily, but it does add to weight loss (*J Clin Endocrinol Metab*, 88:6015-6019; 2003).

How we use water: We drink a total of six to eight glasses of water throughout the day. Try it. You'll not only feel healthier, but you'll build muscle and burn fat faster. And by keeping your system properly hydrated, you make it more efficient at flushing out fat by-products as you burn off adipose tissue.

9) Growth hormone. No, we don't inject GH (like so many pro bodybuilders and other athletes do), but we do everything we can to increase it naturally because it helps burn bodyfat and it synergizes with anabolic hormones like testosterone to make your muscle-building efforts much more productive.

How we use GH: At the beginning of our ripping phase we jump-start the process with a growth hormone booster. We use GH Stak and have gotten some pretty impressive gains with it. Why did we choose this particular product? For one, it was developed by noted



pharmacologist James Jamieson, who also invented the patch delivery system for drugs. It comes in effervescent tablets (like Alka-Seltzer), which contain a number of growth hormone activators along with anterior pituitary peptides that normalize somatostatin, a hormone that can shut down GH receptors. That's extremely important because if you elevate GH, you want to minimize any substance that can smother its effects.

We like to use it before we train, and because your stomach should be empty when you take it, you'll have to move your

preworkout meal. There should be two hours of no eating before you take it. We eat breakfast at 6 a.m., have a protein drink at eight and then take our GH Stak right before we train at 10 a.m. A four-week cycle is usually what Steve does; Jonathan may stay on it for six to eight weeks, gradually increasing the dosage each week as the instructions suggest. We also design our training to maximize GH output, as you'll see in the next chapter.

Supplement and Nutrient Summary

- 1) L-carnitine: 2-3 grams before bed or before training.
- 2) Caffeine: Tight, 1 cap before training.
- 3) Yohimbine: Tight, 1 cap before cardio (optional).
- 4) Phosphatidylserine: Cort-Bloc, 3 caps before training; 2 caps before bed.
- 5) Zinc: ZMA-T, 3-4 caps before bed.
- 6) Creatine: 5 grams after training.
- 7) Green tea: 1-2 cups at night (also in Tight).
- 8) Water: 6-10 glasses a day
- 9) Growth hormone booster: GH Stak, before training the first 4-8 weeks of ripping phase.

Note: The supplements listed above, as well as the ones mentioned in other places in this book, are available from Home Gym Warehouse; call 1-800-447-0008 or visit www.home-gym.com.

CHAPTER 8

X-treme Lean Training

The bodybuilding champs of yesteryear used to swear by high-rep sets for burning bodyfat. For example, they'd do up to 20 reps on leg extensions, believing that they were etching cuts into their thighs. These days we know that spot reducing is impossible, so the high-rep strategy was and is completely wrong for getting ripped. Or is it?

As new studies indicate, lack of blood flow to an area on your body, such as your thighs or midsection, can hamper fat loss there. So high reps may help. It's kind of a round-about spot-reduction strategy—or at least a more targeted fat-loss-acceleration technique. From that perspective, high reps have X-treme Lean potential. But there's more...

Research shows that muscle burn induces growth hormone surges. And growth hormone is notorious for firing up fat-burning. Do high reps make a muscle burn? You bet they do! (Try a 20-rep set of leg extensions and tell us you don't feel the fires of hell racing through your quads.)

So maybe those legendary bodybuilders weren't wrong after all. While they may not have realized the exact mechanisms at work, they did instinctively employ some high-rep sets when it was time to get lean—using some lower-rep sets as well—and in the process ramped up GH and blood flow.

We know how important GH and blood flow are to the fat-burning process—you've read about both throughout this book—and that's why we use a number of techniques in the gym to maximize both. Those methods include drop sets, supersets, tri-sets, high reps and X Reps.

If you've read our e-book *The Ultimate Mass Workout*, you know what each of those are, and you've seen how we use them. For those who haven't, here's a brief description:

Drop sets: Do a set to failure, reduce the poundage and then immediately do another set to failure. You can use one, two or three weight reductions, depending on your goals and pain threshold (just remember that the fires of hell can help you burn more fat; you'll feel them here).

Supersets: Do a set to failure of one exercise, then move

to another exercise for that same bodypart and immediately do another set. For example, lying extensions followed by close-grip bench presses for triceps.

Tri-sets: The same as supersets, only you use three exercises instead of two.

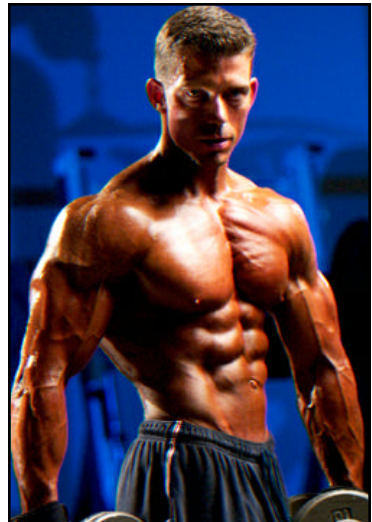
High reps: Using a weight that allows more than 15 repetitions.

X Reps: At the end of a set to failure, you move the weight to the X spot on the stroke, usually below the midpoint, and pulse in a five-to-10-inch range.

If you've been to our site, www.X-Rep.com, you know which of those techniques has produced the best results for us. (Heck, we even named the Web site after it.) We got such spectacular muscle gains and fat-burning results in only one month after using X Reps, that it's become a mainstay in our program—and we've had a much easier time staying leaner and bigger thanks to that training innovation.

X-traordinary Results

So why do X Reps, or power partials at the end of a set, work so incredibly well? One big reason is that they allow you to leapfrog nervous system failure. As we explained in *The Ultimate Mass Workout*, every time you do an all-out set—to where you're grinding out those important last reps that create the most muscle gain—your nervous system fizzles. It stops the muscle dead in its tracks, leaving as much as 50 percent of the



Jonathan's X-Rep results. For the exact training program we used during our X-Rep transformation, see *The Ultimate Mass Workout* e-book, available at www.X-Rep.com.

fast-growth fibers unused or understimulated. According to scientists, that's an "inhibitory mechanism" your body has to protect itself, but it's a bad deal for those seeking more muscle because it limits results. You can get around it—somewhat—by doing more sets, but your muscles still balk early on each of those, so adding lots of sets is very inefficient (X Reps are the best way around it that we've found). Plus, other genetic deficiencies may cause your gains to crash and burn.

Those genetic shortcomings include not having enough of the right kind of muscle fibers or enough recovery ability to get extraordinary growth rates. If you're not gifted in the fast-growing fast-twitch area, adding muscle to your frame will be painfully slow. And if you lack the ability to recover from a high number of straight sets—to get past nervous system failure little by little, as explained above—your growth may be nonexistent. Obviously, high volume (lots of sets) is very inefficient, overtraining being unavoidable—unless you use drugs, which is precisely why so many bodybuilders start using steroids. (You may be realizing why so many people quit trying!)

The reality is that even with average or even below-average genetics, you can still build a muscular, defined, eye-popping physique. You just have to train smarter to partially disarm or completely derail those limiting factors. You can't just do lots of sets on any old routine, as the genetic, drug-enhanced elite do. You can't afford to waste all that precious energy because there will be nothing left for growth. You have to sneak up on the muscle and clobber it with a few intense, precise sets that hit as many fibers as possible. And if you can do that *and* trigger more fat-burning at the same time, you've really got something (we're going to tell you how in a moment). Do that correctly and soon your muscular, ripped physique will amaze you and everyone else when you're at the beach or by the pool.

That's where X Reps come in. They can make each set three to five times more effective, which means you don't need a lot of sets to get the job done. Helping you leapfrog nervous system failure is one thing, but they also do something else that

can produce spectacular growth as well as leanness: They occlude blood flow to the target muscle.

Size, Strength and Fat Burning

Scientists have been getting incredible muscle growth and strength increases by blocking blood flow during workouts. It's called occlusion training. One study, reported in the *Journal of Strength and Conditioning Research* (15:362-366), applied occlusion to the subjects' forearms by placing a blood-pressure cuff on their upper arms for two minutes. The cuff was then removed and the subjects did wrist curls. Results: Those who had their blood flow impaired prior to exercise showed a 20 percent strength increase over the subjects who didn't use the blood-pressure cuff. Impressive, to say the least.

What about muscle size? Rob Thoburn (www.robthoburn.com), an *IRON MAN* contributor and muscle-science researcher, has been corresponding with Japanese scientists who have been experimenting with occlusion techniques. Thoburn reported that Takashi Abe, Ph.D., got a 7 percent increase in quadriceps cross-sectional area in four months with standard training, but when he used occlusion, he got an 8 percent increase in cross-sectional area—in only two weeks! That's right, slightly better results in about one-eighth the time—two weeks as opposed to 16 weeks.

Continuous tension, as Jonathan gets here with the Forearm Bar, blocks blood flow to the target muscle, and that can result in extraordinary size and strength gains as well as a fat-burning aftereffect.



That's about an 800 percent increase in gains when blood flow was impeded. (You read those numbers right. Unbelievable!)

Why does blocking blood flow produce such spectacular increases in muscle size and strength? Part of it may be due to the incredible rush of blood to the bodypart once blood flow resumes. Scientists have suggested that the bloodbath that occurs can produce everything from upgraded release of heat shock proteins to alterations in muscle calcium metabolism to greater recruitment of fast-twitch muscle fibers.

That last one makes a lot of sense—greater recruitment of fast-twitch fibers—a direct result of ramping up muscle energetics with extra blood. Let us explain: If you block blood flow to a muscle for a minute or two, the moment you remove the occlusion, it's like a damn breaking—blood floods to the choking bodypart like a tidal wave. Now if we relate that to the size principle of fiber recruitment—the low threshold motor units fire first (slow-twitch endurance fibers), followed by the mediums followed by the high-threshold motor units—it could be that with so much more blood (oxygen) in the muscle, the slow-twitch endurance fibers carry more of the load early in the set, sparing more fast-twitch recruitment for later. That would result in more reps, i.e. impressive strength (20 percent would take a 300-pound bench to 360 if you could occlude blood from all the muscles involved for two minutes). Interesting stuff. And it may explain why warming up a muscle is so important for strength—it gets more blood in the muscle.

Okay, that may explain the strength jumps, but what about the muscle size increases?

It's possible that blocking blood flow works so well in creating new size by affecting the slow-twitch, or type 1, fibers as well. Those fibers are aerobic, which means they require oxygen. One theory is that if you starve them of oxygen with occlusion early in the set, they adapt by getting larger—and that means you get bigger faster!

Bodybuilders tend to focus on the fast-twitch fibers because they've had it hammered into their heads that those are the

ones with the most growth potential. That's true, but growth in the slow-twitch fibers will obviously improve the size of a bodypart as well. You should try to build *all* fiber types and subtypes for the most size possible—and fat burning; remember, more muscle helps speed up your metabolism—and occlusion training is key to making that happen.

How does it accelerate fat burning? Remember that muscle burn is directly connected to growth hormone surges, and GH is a powerful fat burner. Well, occlusion training burns like a blowtorch when you train with it. That's because when you block blood flow to a working muscle, it's oxygen deprived. Are you beginning to see why you should include some type of occlusion training in your X-treme Lean workouts? The question is, What's the best way to do it?

Fat-Burning, Muscle-Building Occlusions

Unfortunately, using a blood-pressure cuff or a tourniquet above the working muscle isn't very practical (how are you going to stop blood flow to your pecs?), and it can be painful, perhaps even dangerous. But you can get similar, safer occlusion effects with standard exercises and perhaps get close to replicating some of those amazing gains in only a few workouts. Here's how...

Keep in mind that when you contract a muscle, you force blood out of it. So if you keep tension on the muscle long enough as you pump out continuous-tension reps, you occlude blood flow. The burn you get on the last few reps of leg extensions is partly due to the quad muscles screaming for blood (oxygen) because they're in a constant state of tension during that exercise—blood is getting squeezed out of the muscle on every rep.

Now, most people use leg extensions in their quad routines, so why aren't they getting 8 percent increases in size every two weeks? Part of the reason is that right when the most occlusion is occurring—near the end of a set—they stop. It's a simple case of terminating sets too soon—when they can't get any

more complete reps—and that severely limits occlusion effects. (Remember, the first study above blocked blood flow for two minutes to get impressive strength results; most standard sets only last about 20 seconds.)

So there are two ways to get better occlusion effects from exercises with continuous tension:

- 1) Add X Reps to the end of the set, such as right below the midpoint of a leg extension rep. Six to eight X Reps should add at least eight seconds to the set and force the muscles to keep contracting at that point of maximum-force generation (there's more on max-force points in *The Ultimate Mass Workout*). Static contractions at the fully contracted position may work also to some extent, but we've found that movement, even partial pulses, helps force as much blood out as possible, and that's what occlusion is all about.
- 2) Do a high-rep set of a continuous-tension exercise rest, then do a big compound movement. That will give you an extended occlusion effect—50 to 60 seconds—which could translate into more muscle contractile force on the second exercise. For example, do a 20-rep set of leg extensions, rest, then do a set of squats. An added benefit of high reps is that you'll get more muscle burn on both exercises (GH release for more rapid fat loss).

You'll see both of those in the program that begins on page 76. Number one is self-explanatory, so let's look at two and apply it to quads. You'll use a compound, or midrange, exercise like squats, hack squats or leg presses, and you'll use leg extensions, a contracted-position quad exercise that provides continuous tension (occlusion). Here's the sequence...

First, warm up on your big exercise. We use hack squats, doing two progressively heavier warmup sets (if you have knee issues, you may want to do some light leg extensions too).

Now it's time for the work sets. Do one heavy all-out set of hack squats for eight to 10 reps. Go as low as you can and drive to full lockout. This is *not* the occlusion part. Your first

work set is to push more blood into the target muscle. It's like an extended warmup that primes your nervous system for optimal force later—on your X Rep set. (Note: More force equals more growth stimulation. See *The Ultimate Mass Workout* e-book for more detailed information.)

Rest one minute, then go to the leg extension for some serious occlusion. Do 15 to 20 reps, with each one squeezing blood out of your quads. It should burn like crazy at the end of the set as your quads are empty and screaming for oxygen (if it doesn't burn, add weight). Extreme burn means occlusion has occurred. Now to take advantage of it...

Rest another minute, feel the blood rushing in, and then go back to the hack machine. Crank out as many reps as you can. When you can't get another full rep, do X Reps, or partial pulses, at about the midpoint of the stroke (that will give you key fast-twitch fiber activation—and some occlusion as well). If you pushed even close to failure on those three sets, you'll feel an incredible rush and fullness in your quads. (It's that massive wave of blood we mentioned earlier.) You also will have stimulated a substantial number of muscle fibers and GH.

Finish with sissy squats or feet-forward Smith machine squats, with X Reps, and you will have completed the full-range chain for quads—midrange (hacks), contracted (leg extensions) and stretch (sissy squats). That's Positions-of-Flexion training, a full-range muscle-training method we've been using for years (see page 80 for more information).

Incidentally, Ronnie Coleman, the current Mr. Olympia, does high-rep sets of leg extensions prior to launching into his heavy compound quad work. He'll do 20 reps on each blood-wringing set. Is he using extensions for occlusion to achieve more muscle and strength with a fat-burning aftereffect? We think he's onto something.

Let's look at the program. (Note that we've put each workout on a separate page so you can print it out and take it to the gym. Write your work-set poundages to the right of each exercise. We use a small clipboard with a pencil attached.)

X-treme Lean High-Definition Workout 1

Workout 1: Chest, Lats, Triceps, Abs

Incline presses	1-2 x 8-10	_____
Incline cable flyes	1 x 15-20	_____
Incline presses (X Reps)	1 x 8-10	_____
Bench presses or dips	1-2 x 8-10	_____
Cable flyes or crossovers	1 x 15-20	_____
Bench presses or dips (X Reps)	1 x 8-10	_____
Pulldowns or chins	1-2 x 8-10	_____
Machine pullovers or stiff-arm pulldowns	1 x 15-20	_____
Pulldowns or chins (X Reps)	1 x 8-10	_____
Dumbbell pullovers (drop set)	1 x 8(6)	_____
Close-grip bench presses	1-2 x 8-10	_____
Pushdowns	1 x 15-20	_____
Close-grip bench presses (X Reps)	1 x 8-10	_____
Overhead extensions or cable pushouts (drop set)	1 x 8-10	_____
Hanging or incline kneeups	1-2 x 10	_____
Crunches or Ab Bench crunches	1 x 15-20	_____
Hanging or incline kneeups (X Reps)	1 x 10	_____
Superset		
Full-range crunches or Ab Bench crunches	1 x 10	_____
Bench V-ups	1 x max	_____

Note: X Reps are power-partial movements added to the end of a set. Move the weight to just below the middle of the stroke and pulse, doing short reps in a five-to-10-inch range. If you can't pulse, hold for a static contraction at that point till failure.

X-treme Lean High-Definition Workout 2

Workout 2: Quads, Hams, Gastrocs, Low Back

Hack squats, squats or leg presses	1-2 x 8-10	_____
Leg extensions	1 x 15-20	_____
Hack squats, squats or leg presses (X Reps)*	1 x 8-10	_____
Sissy squats or Smith-machine squats (X Reps)	1 x 8-10	_____
Leg curls	1 x 15-20	_____
Smith-machine squats or leg presses (X Reps)	1 x 8-10	_____
Superset		
Stiff-legged deadlifts	1 x 9	_____
Hyperextensions (X Reps)	1 x max	_____
Leg press calf raises (X Reps)	2 x 20, 15	_____
Standing calf raises (drop set; X Reps)	1 x 12(8)	_____
Superset		
Seated calf raises (drop set; X Reps)	2 x 12(8)	_____
Low-back machine or Hyperextensions	1 x 8-12	_____

Note: X Reps are power-partial movements added to the end of a set. Move the weight to just below the middle of the stroke and pulse, doing short reps in a five-to-10-inch range. If you can't pulse, hold for a static contraction at that point till failure.

*Due to a leverage shift, the best X Spot for squats isn't below the middle of the stroke. Do your X Reps at a point between the middle and the top of the stroke.

X-treme Lean High-Definition Workout 3

Workout 3: Delts, Midback, Biceps, Forearms

Dumbbell upright rows	1-2 x 8-10	_____
Forward-lean laterals	1 x 15-20	_____
Dumbbell upright rows (X Reps)	1 x 8-10	_____
Dumbbell presses		
(drop set; X Reps)	1 x 8(6)	_____
Incline one-arm laterals or cable		
laterals (drop set; X Reps)	1 x 8(6)	_____
Bent-over laterals (drop set)	1 x 8(6)	_____
Machine rows	1-2 x 8-10	_____
Bent-arm bent-over laterals	1 x 15-20	_____
Machine rows (X Reps)	1 x 8-10	_____
One-arm dumbbell rows (X Reps)	1 x 8-10	_____
Barbell shrugs	1 x 15-20	_____
Cable upright rows (X Reps)	1 x 8-10	_____
Dumbbell curls	1-2 x 8-10	_____
Spider curls or machine curls	1 x 15-20	_____
Cable curls (X Reps)	1 x 8-10	_____
Incline curls (drop set)	1 x 8(6)	_____
Incline hammer curls (drop set)	1 x 8(6)	_____
Dumbbell reverse		
wrist curls (drop set; X Reps)	1 x 12(8)	_____
Dumbbell wrist curls		
(drop set; X Reps)	1 x 12(8)	_____

Note: X Reps are power-partial movements added to the end of a set. Move the weight to just below the middle of the stroke and pulse, doing short reps in a five-to-10-inch range. If you can't pulse, hold for a static contraction at that point till failure.

X-treme Lean High-Definition Workout Tips

- Train five days a week—Monday through Friday—if you can. Weight training ramps up your metabolism, so the more you can get to the gym, the quicker you will get lean. If you don't have the time or inclination to train five days a week, follow the program four days—Monday, Tuesday, Thursday, Friday, for example. If you'd rather train three days a week, check out Becky Holman's routine in chapter 6 or create your own program.
- Do one to two warmup sets with 50 and/or 70 percent of your work weight on the first exercise for each bodypart.
- Push the majority of your work sets to positive failure—until you can't manage another rep in good form. Then do X Reps if that's indicated for that exercise.
- The ideal rep speed is two seconds up and two seconds down for most exercises; always keep your form strict.
- Rest one to two minutes between sets.
- For exercises designated as "1-2" sets, you can do two sets for weak bodyparts or muscle groups you want to specialize on. For exercises designated as "15-20" reps, pick a weight with which you can get 15; add weight when you can get 20 repetition.
- For exercises designated as drop sets you reduce the poundage on each successive set: Do one set to failure, reduce the weight, and then immediately do another set to failure.
- Try to increase your exercise poundages whenever possible. For example, if you get 10 reps on rows, increase the weight at your next workout by five pounds (and write down the increase).
- Don't miss workouts. Each session is short, so it shouldn't be too difficult to adhere to. Remember, weight training keeps your metabolism in the fat-to-muscle mode all day long. If you do miss a workout, don't obsess over it or let it snowball into missing more. Just do the next workout as scheduled and continue being as persistent as you can.

Positions-of-Flexion Primer

With a Positions of Flexion protocol you train each target bodypart in three positions—midrange, contracted and stretch—to complete the full-range chain. Each of those positions has a specific purpose, as follows:

Midrange: Stimulates the bulk of the muscle fibers with synergy, or muscle teamwork. When a number of muscles work together—such as the chest, triceps and deltoids during bench presses—the target (chest) is more effectively stimulated with heavy overload. The human muscle structures are designed to work in tandem for maximum power output, so these movements are simply more natural than forced isolation. X Reps supercharge these exercises, and you usually do those power partials just below the middle of the stroke.

Contracted: Here you place the target muscle in the most advantageous position for it to contract. These exercises usually have continuous tension, so they are perfect for the high-rep occlusion sets in the High-Definition program. Examples include leg extensions, crossovers and leg curls.

Stretch: Here you put the target muscle in its ultimate elongated, or stretched, state with resistance. Examples include flyes for the chest, stiff-legged deadlifts for the hamstrings and sissy squats for the quads. The stretch forces the activation of the myotatic reflex, which is believed to cause the recruitment of reserve muscle fibers in the target muscle. When the target is stretched with a quick twitch to reverse the movement, the nervous system receives an emergency-response signal, and the muscle is put in a hypercontracted state. This can recruit reserve muscle fibers, which means more of the target muscle is stimulated to grow, a perfect way to end a bodypart workout. That's why you usually do these as the last movement—with X Reps—in the High-Definition program.

Note: For more information on POF as well as other POF routines, see *Train, Eat, Grow: The Positions-of-Flexion Muscle-Training Manual*, available at www.home-gym.com.

CHAPTER 9

X-treme Lean Q&A

Q: I weigh around 215 right now. I'm pretty active, and I have rock-hard legs, but I need a better upper body. If I want to maintain a fit 190-to-200-pound bodyweight, should I try to drop all 25 pounds to 190 and then build the muscle, or should I just drop 10 to 15 pounds and use weight training to replace the fat with lean muscle? I want to be a fairly ripped 190.

A: First, you shouldn't be so hung up on weighing a certain amount. In fact, you probably shouldn't weigh yourself. Go by how you look (take photos, as we suggest in Chapter 3). If you're losing notches on your belt, you're losing fat.

When you lose fat and gain muscle, you redistribute your weight. In other words, you'll look completely different if you lose 10 pounds of fat and add 10 pounds of muscle, but you'll weigh exactly the same. Think about that, and let it sink in. Step away from the scale!

Concentrate on working out hard, being consistent and keeping your eating relatively clean. You'll be amazed at the changes your body will make.

Q: I can only make it to the gym three days per week. Should my diet be the same on the days I don't train, or should I reduce my calories somehow?

A: On nonworkout days you should eliminate your postworkout drink (fast carbs and fast protein) and substitute either a meal replacement or a lower-carb meal, such as those listed on page 42 in X-treme Lean Meal Options. That substitution meal should be about 350 calories and contain no more than 20 grams of carbs. That should put your carb intake on your nonworkout days at just over 100 grams. That amount will keep your muscle recovery and glycogen replenishment moving forward and provide enough carbs for healthy body and brain function.

By the way, if you can only make it to the gym three days a week, try to do some medium-intensity cardio, like fast walking, on those nonworkout days.

Q: I've tried higher-protein, low-carb diets, and they tend to constipate me. Is there anything I can do to alleviate that problem?

A: That can happen on low-carb diets because most dietary fiber comes from carbs—fruits and vegetables. Our diets are medium-carb, so you shouldn't have that problem. In fact, Steve's diet includes high-fiber cereal in the morning, an apple and cruciferous vegetables. Nevertheless, everyone's system is different, and even we run into it now and again. For insurance we often use psyllium husk powder at night. Two tablespoons in a protein drink or in water will keep things moving, and it will also help fill up your stomach more to decrease appetite.

Q: What's the number-one thing I can do to start dropping fat immediately?

A: Exercise! If you mean from a dietary standpoint, the first thing you should always do is start eating five to six protein-based meals a day. As we said, protein has a higher energy cost than carbs, so protein-based meals will help you burn more calories and, if you keep your meals small—in the 300-calorie range—you'll limit insulin production. That's a good thing because insulin stops fat burning and helps your body store excess calories as bodyfat. The only time insulin is good is immediately after a workout to help shuttle protein and carbs into your muscles. Research shows that even 100 grams of carbs after a workout won't increase fat deposits.

Q: Does Pro-Fusion protein powder work as a good between-meals protein drink, and can I drink it 30 minutes before a workout? What about as my postworkout shake? How many times a day can I take it? Is it really better than regular protein supplements? Can women take it too?

A: Pro-Fusion is a great protein source because it combines whey, micellar casein and egg. You get fast and slow release of amino acids. Having one or two scoops about an hour before

you train is an ideal use for it. You can also use it between meals or with meals, if the meal needs more protein. And, yes, women can and should use it too. As she outlined in Chapter 6, Becky Holman used it every day during her transformation program. One of her favorite between-meals snacks during that time was chocolate Pro-Fusion in water with a tablespoon of peanut butter. (She said that helped quash her cravings for Reese's Peanut Butter Cups.)

As for after the workout, you can use Pro-Fusion then as well. It's best to mix it in fruit juice instead of water, as you need carbs to replenish glycogen stores postworkout; however, we recommend that you use a fast straight whey protein powder in juice after you train, or, better yet, a postworkout-specific supplement like RecoverX. With specially formulated postworkout powders you get all fast protein (whey and hydrolyzed whey) and fast carbs, which is exactly what your muscles need after a hard workout. Oh, yeah, women can and should use postworkout drinks too. Becky always had RecoverX after each of her three weekly workouts. We're big believers in RecoverX plus creatine after training. It's why we suggest the X Stack, which is RecoverX and CreaSol that you mix, after every training session. The X Stack is available at www.Home-Gym.com.

Q: I go to the gym with my husband. Is it okay for me to work out with him on one of the programs in your e-books and use X Reps, or will I get too big?

A: Work out with him as hard as you can—and include X Reps to build muscle and burn fat. A woman's hormonal makeup prevents excessive muscle gain. You have more estrogen and not a lot of testosterone, which means you'll never look like a male bodybuilder—not even close. You'll just get curves in all the right places.

What about those women bodybuilders you see? They all take male hormones to make their bigger muscle possible. Even many men have to supplement their male hormones to

get extremely big muscles, so you don't have to worry one iota.

Q: I'd like to lose about 60 pounds. I have a few questions: For breakfast Steve says he pours Pro-Fusion protein powder mixed in water over his cereal. Is that all he puts on it? Does he ever mix it in milk? Could I just use whey powder?

A: Steve uses about one scoop of Pro-Fusion in water, stirs it with a spoon in a glass and then pours it over his cereal. It has a sweetness that adds to his Fiber One/Raisin Bran combination (older guys need their fiber). If you can't stomach that—Steve's wife and kids gag when they see him do it—you could use skim milk on your cereal and have a small protein drink in addition. Whey powder would work, although a micellar-casein-and-whey combo protein will keep aminos in your bloodstream longer, due to the fast/slow protein release. Milk is pretty good at doing that too.

Q: Do you think it would be healthy to replace my lunch with a meal-replacement drink every day? I hate to cook, and I eat the same thing for lunch every day: a peanut butter-and-jelly sandwich, a banana and a 16-ounce glass of fat-free milk.

A: As long as you're eating solid food at other meals—and getting enough fruits and vegetables every day—substituting a meal replacement for a solid-food meal should be fine. We use a lot of liquid meals. The only problem with that is getting enough fruits and vegetables, so we take vegetable and fruit capsules, which contain an array of them freeze-dried. You may be able to find them in health food stores. They're good health insurance, especially for older bodybuilders. We use capsules from Vitamin and Mineral Therapies International (www.vmtiinc.com). Phytonutrients from those foods are essential for health, and the capsules are the next best thing. Another route is a new powder called Miracle Greens. We dump a tablespoon or two of that in our protein drinks, and its

more “health insurance.” High-protein diets are known to be acidic to the body and the alkalinity of the fruit and vegetable powders can help. Acidosis of the blood can slow muscle growth and fat loss, so be sure to get enough fruits and veggies. If you can’t do that, the next best thing is to supplement with capsules and powders.

Q: Currently I do four 30-minute sessions, one on Saturday, one on Sunday and a session on each of my leg days. Everyone I talk to says I should increase the number of minutes so I can get into burning bodyfat for energy. Should I do longer sessions?

A: A lot of studies say that fat burning during cardio doesn’t begin till about 25 minutes in; however, you can speed that up by:

- 1) Not eating any carbs a few hours prior to your session (have a small protein shake or a few amino acid capsules about an hour before to prevent muscle breakdown).

- 2) Having a cup of coffee before (or something else that contains about 100 milligrams of caffeine), as caffeine increases the use of fat substrates for energy.

- 3) Doing your cardio after a weight-training workout, as the lifting will deplete your bloodstream of glucose and prime your body to shift to fat for energy during the low-intensity cardio that follows.

You say you do cardio on leg days. New research suggests that’s not a good idea because it can interrupt leg-muscle recovery if you do it after your workout. A better plan is to do it on the same day, but do it at low intensity before the workout as a warmup. Or you can do it after if you wait at least 30 minutes—later in the day would probably be better. Doing cardio immediately after an upper-body workout, however, is fine and will allow you to tap into bodyfat sooner.

As for your weekend cardio, try not eating carbs before you do it and having a small protein shake (one scoop) 30 minutes to an hour before. You can also bump up the amount of cardio

you do to 45 minutes; just don't make it very intense. If you can't carry on a conversation during your cardio, you're probably working too hard and dipping into muscle glycogen stores rather than bodyfat (more on that below).

Keep in mind that cardio isn't only for burning bodyfat during the activity. It also creates an overall calorie deficit, which forces your body to burn bodyfat for daily energy needs.

Q: When and how long should I do cardio to start losing fat? Also, how many days a week of cardio do you suggest, and what about high-intensity cardio?

A: There are two ways to do cardio: slow, steady-state work, which means 20 to 40 minutes of medium-intensity fast walking, and high-intensity interval training (HIIT), which means going all out for 20 seconds, then slow for 40 seconds, then repeating that sequence four to eight times. An example is sprinting the straightaways and walking the curves on a running track.

Steady-state work burns calories and can tap into fat stores during the activity; interval training also burns calories but doesn't burn as much fat during the session. So steady-state cardio is the ticket if you want to lose fat, right? Not necessarily. HIIT ramps up your metabolism to burn more fat after the workout. In fact, interval training has been found to burn more fat overall than steady-state work, even though it doesn't burn much fat during the actual activity. Why? The fat burn is due to the metabolic uptick you get, which doesn't occur with steady-state work.

Interval training has the same metabolic effect as a hard weight workout and can stress the muscles you use in the same way—it trains fast-twitch fibers in your quads and calves. That means you don't want to do it the day before or the day after a hard leg workout. You could make high-intensity interval cardio part of your leg workout or as a substitute for your lower-body weight workout, but you have to be cautious. Too much can trigger overtraining. Remember, you're getting the

same systemic effect when you hit the weights, no matter what bodypart you're working. Too much intensity training will overstress your recovery system quickly.

That's a lot of info, so let us give you our suggestions.

You can do steady-state, medium-intensity cardio any time, about as often as you can fit it into your schedule—but not immediately after a leg workout. However, it's not as efficient as interval training. Nevertheless, it can help create a calorie deficit so you get rid of bodyfat. Plus, it won't steer you toward overtraining as easily as interval aerobics can.

You can do high-intensity interval cardio on days you don't train with weights, but don't do it the day before or the day after a leg-training day. Keep in mind that it has an effect on your recovery system similar to a hard weight-training workout, so if you're on the brink of overtraining with weights, HIIT can push you over the edge. If you're training five days a week with weights, we suggest you only do one interval cardio workout—on Saturday or Sunday. (It's a good idea to leave at least one day workout-free for systemic recovery.) As we said, you can use it as part of your leg routine during the week if you like, but cut back on quad, calf and hamstring weight work that day.

Here's how Steve has used the two types of cardio. When he's on a five-day weight-training schedule, similar to the one in Chapter 8, working out Monday, Tuesday, Wednesday, Thursday and Friday, legs can fall on any of those days. He'll do one medium-intensity cardio session during the week, usually on an upper body day. That gets blood into his legs without stressing the fast-twitch fibers. Then on the weekend he tries to do a high-intensity interval session on the day that's farthest from his next leg workout. If he works legs again on Monday, he'll do his interval cardio on Saturday. If he trains legs on Friday, he'll do his interval cardio on Sunday. The weekend day he doesn't do cardio is for systemic recovery.

Q: Shouldn't I cut out all milk and other dairy foods when I'm trying to get lean?

A: On the contrary. New research finds that milk and other dairy products can reduce your fat cells' tendency to store calories. Michael Zemel, chairman of the nutrition department at the University of Tennessee in Knoxville, is one of the leading researchers delving into the phenomenon. In one study he put 32 people who needed to lose weight on reduced-calorie diets, but some of the diets included three to four servings of dairy daily. Six months later all the subjects had lost weight, but those who were eating dairy lost 70 percent more—about 19 pounds of fat compared with only 11 pounds in the subjects who didn't eat dairy. Zemel says the reason is that when there's plenty of calcium in the blood, fat cells get the message to quit storing fat and start burning it. On the other hand, when calcium levels are low, the cells hoard fat.

Other studies verify those findings. In the mid-'90s Connie Weaver and Dorothy Teegarden conducted a study at Purdue University to observe the bone health of women between the ages of 18 and 31—but they noticed something else: Women who ate a diet that included milk, cheese or yogurt lost or maintained their weight, while those who didn't put on pounds.

As Zemel says: "If people are cutting calories and not including dairy in their diet, they're making a big mistake."

Bottom line: Be sure you're getting enough calcium in your diet. Check your meal-replacement supplement for balanced calcium and magnesium—and always include some cottage cheese and/or yogurt in your X-treme Lean meal plan.

Q: How much sleep should I be getting for best results from the X-treme Lean program?

A: It varies from individual to individual. A good rule of thumb is that if you have a difficult time getting out of bed in the morning, you're going to slow your progress. The fact is, if you don't get enough sleep, you make it more difficult to lose bodyfat. In a study done at the University of Chicago, men who got only about four hours of sleep a night showed lowered leptin levels. As you saw in Chapter 4, leptin is a hormone that

signals your body that it's had enough food. The leptin levels of many of the subjects, who were all well-nourished, were similar to those of underfed people. That may explain why other studies have shown that sleep-deprived people crave starchy and sugary carbohydrates—their leptin levels are low, which tricks their bodies into thinking they need more food.

One thing that can help is to go to bed at the same time every night, even on the weekends. If you keep your body on a schedule, you won't add unnecessary stress and fatigue; however, if you stay up late on the weekends, you'll shock your body's built-in clock, and you'll have a hard time readjusting it. You may even feel as if you have a hangover on Monday, even if you didn't drink alcohol over the weekend, which will be detrimental to your energy levels and your training. (That's one reason people despise Mondays and often get headaches.) Try to stay on schedule as much as possible.

Q: How do you guys stay motivated?

A: Staying motivated is one of the hardest parts of building muscle and burning fat. For us it's most difficult in the winter, when sugary foods are everywhere and our physiques are hidden from view. And to be honest, we both add some fat from about Thanksgiving to past New Year's Day—but we try not to let our abs completely disappear (Steve's before picture on the cover shows he's not always successful in that endeavor).

For most people it's just hard to exercise in the winter, period, much less eat right. We manage to stay consistent, using a few tricks. For example, during part of the winter we often go on a basic program similar to the Basic Ultimate Mass Workouts in *The Ultimate Mass Workout* e-book, training only three or four days a week using fairly abbreviated sessions. We also like to experiment with different tactics, like X-Rep variations. Finding and experimenting with new training techniques is a big motivator for us.

When we're in that back-to-basics winter phase, we try to

increase our strength as we gradually increase our calories. We make an effort to stick with quality foods and avoid junk, but we do allow ourselves to indulge every so often (Jonathan is better at staying strict than Steve). We try to convince ourselves that winter is the time when we can build lots of muscle due to a calorie surplus—your body is more apt to pack on mass when there are extra calories available—so we stay focused on how that extra muscle will look when we lean out for summer.

As spring approaches, say, around the end of March, we start training for some detail and ramp up the intensity. We also begin to gradually drop our calories—or at least eat cleaner. It's still cold out, so our motivation is only about 80 percent; however, it's much easier to see summer on the horizon, and our big goal is to try to improve on the way we looked the year before.

And, of course, once we start leaning out, the looks and comments we get add rocket fuel to our motivation. It seems like everyone notices, even strangers. For example, Steve was running in his neighborhood with his shirt off one afternoon, and a guy driving his kids home from school pulled up next to him and said, "Hey, you look awesome!" His kids waved, and Steve thanked him, waved back to the kids and kept running. Sure, it was a little strange, and took Steve by surprise, but it was good of the guy to take time to stop. Then, on down the bike path, a woman pushing a baby carriage with her husband walking beside her saw Steve coming toward them. As he passed, the woman said, "Now that's a body!" More motivating acknowledgement (although she probably said it to annoy her husband).

Jonathan has had similar experiences. While at the beach with his shirt off, Jonathan saw an older gentleman and his wife walking toward him. The man glanced at Jonathan and said sarcastically, "Gee, you need to work out." Then, when he and his wife got a little closer and took a good look, they were stopped in their tracks by Jonathan's condition. They just kept looking at him, jaws dropped, uttering a "wow" every few

seconds.

We're not relaying those incidents to brag. We just want to remind you that those types of pats on the back help fuel motivation as you get in muscular shape—and they keep coming. Once you start making X-treme Lean progress, you'll no doubt get lots of those types of comments, not to mention approving glances, with a raised eyebrow or two, from both sexes. Is it all worth it? You bet it is! And you'll feel great too!

Q: I want abs. What exercises should I do to get them?

A: Believe it or not, getting abs is more about losing bodyfat than exercise. Almost anyone will have abs if they get down to below 8 percent bodyfat, and the diet advice in this e-book will get you to that point as quickly as possible. You can do a lot to achieve deeper lines of delineation in your midsection with exercise, however. Those lines you see—or want to see—are caused by tendons running across and down the muscle, so the more developed your rectus abdominis, the long, flat muscle that runs from your ribcage to your pelvis, the deeper the creases. There are some good ab programs in this book. Just remember to try to increase the weight you use whenever possible. That will give you a little more muscle in the midsection and deepen those creases.

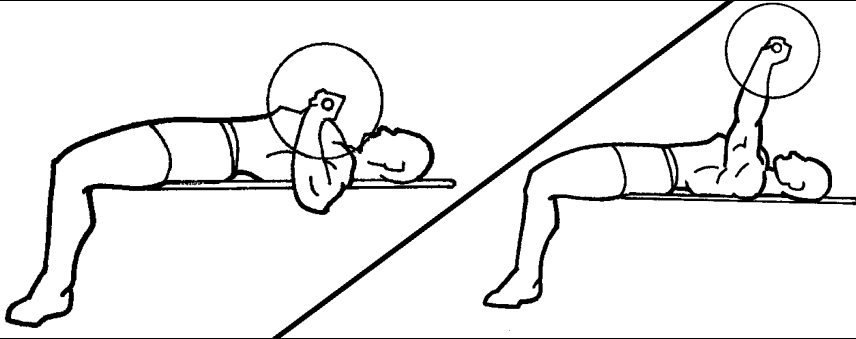


APPENDIX A

Exercises

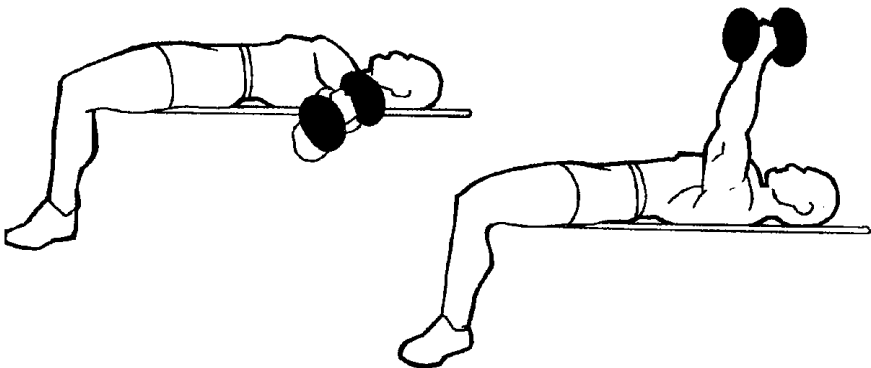
Bench Presses, Midrange: Lower and Middle Chest

- Keep your feet flat on the floor.
- Maintain an arch in your lower back.
- Touch the bar just below your low-pec line.
- Drive the bar up and back in a natural arc.
- Don't pause at the top or bottom of the movement.
- Don't raise your hips off the bench.



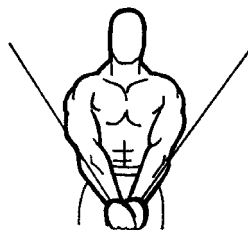
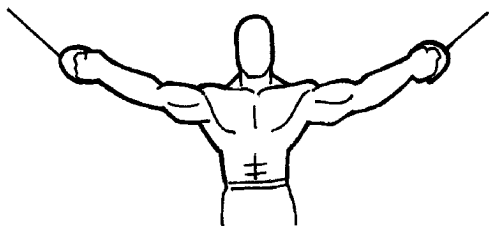
Flat-bench Flyes, Stretch: Lower and Middle Chest

- Keep a slight bend in your elbows at all times.
- Lower the dumbbells till they are on the same plane as your torso.
- When you reach the stretch position, reverse the movement with no bounce.
- Don't pause at the top or bottom.



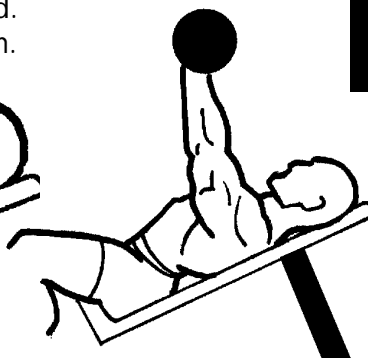
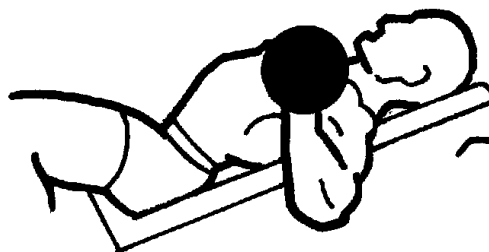
Cable Crossovers, Contracted and Stretch: Lower and Middle Chest

- Pull the cables down till your hands touch at a point about a foot in front of your abdomen.
- Pause at the bottom for a count before releasing.
- Don't lean too far forward; keep your head up.
- Do these with low-cable attachments on an incline bench for an upper-chest contracted-and-stretch-position exercise.



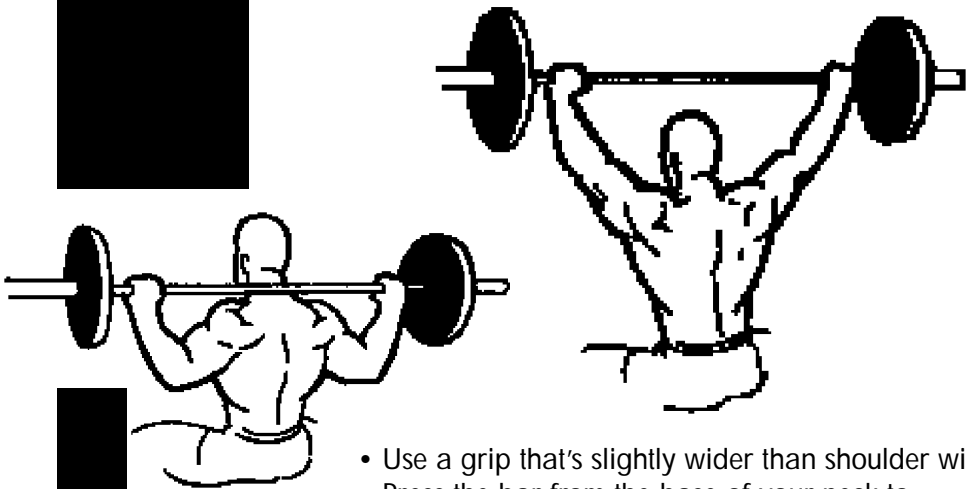
Incline Dumbbell Presses, Midrange: Upper Chest

- Use an incline bench set at about 45 degrees.
- Press the dumbbells from your shoulders, going up over your eyes till they touch.
- Keep your palms facing forward.
- Don't pause at the top or bottom.



Deltoids

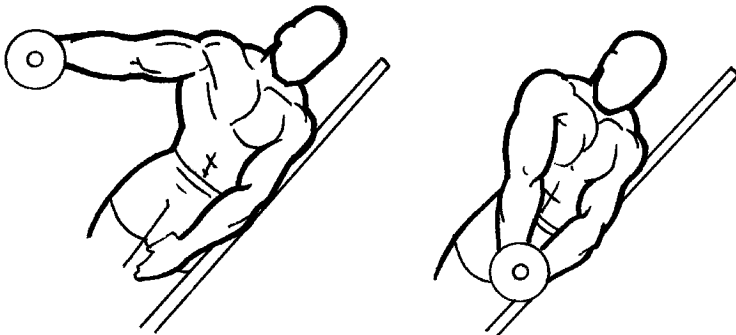
Behind-the-neck Presses, Midrange: Deltoids



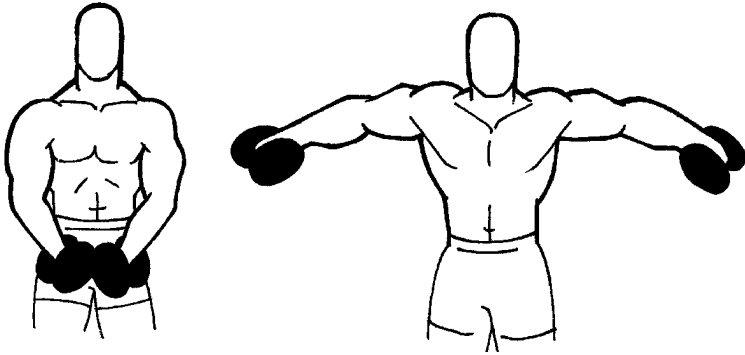
- Use a grip that's slightly wider than shoulder width.
- Press the bar from the base of your neck to overhead.
- Don't pause at the top or bottom.

Incline One-arm Laterals, Stretch: Medial Deltoid

- Raise your arm till it's parallel to the floor.
- Lower your arm in front of your torso, but don't relax your shoulder; keep tension on your deltoid throughout the set.



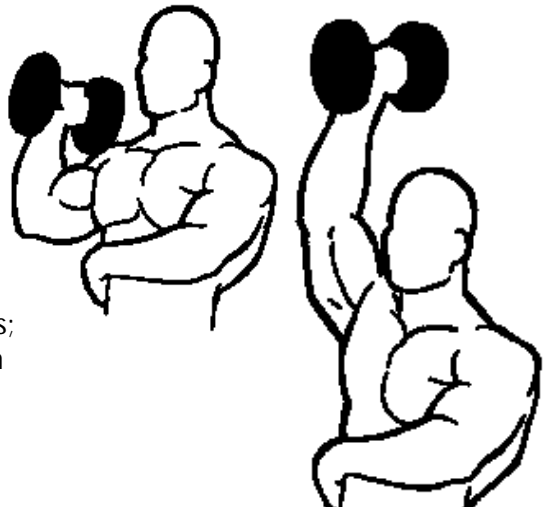
Lateral Raises, Contracted: Medial Deltoid

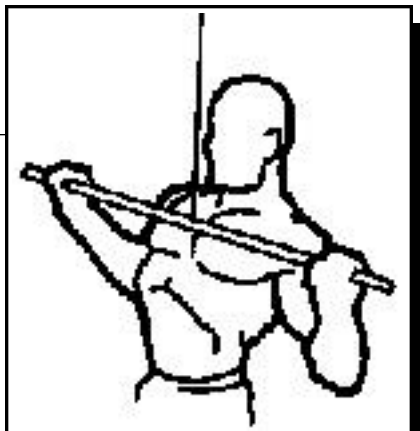
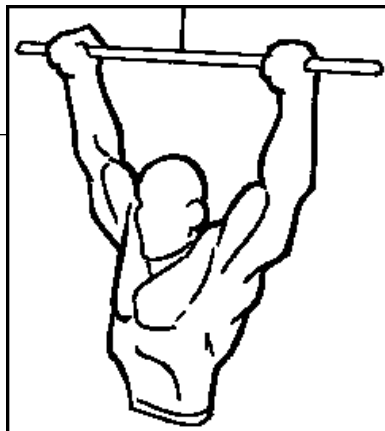


- Start with the dumbbells touching in front of your thighs.
- Keep a slight bend at your elbows.
- Raise your arms till the dumbbells are close to ear level.
- Hold for a count at the top.
- Don't lean back; keep your torso upright and focus on lifting your elbows.

One-arm Presses, Midrange: Deltoids

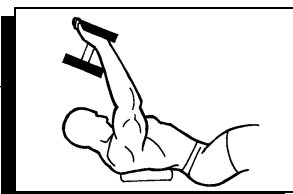
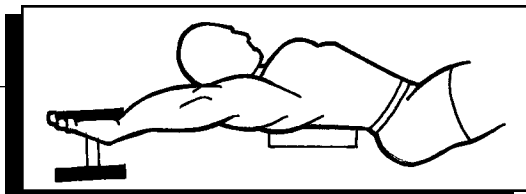
- Keep your palm facing forward throughout the movement.
- Grab your torso across the front of your body with your free arm for stabilization.
- Don't pause at the top or bottom.
- Don't lean back as you press; try to keep only a slight arch in your lower back.
- You can do these standing or seated.





Pulldowns, Midrange: Lats

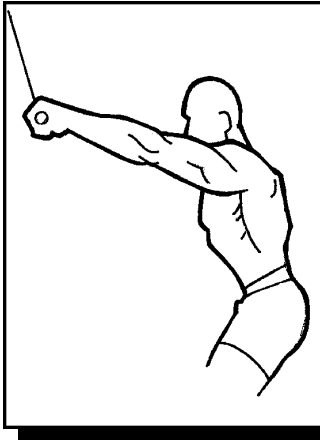
- Use an overhand grip slightly wider than shoulder width.
- Pull the bar down to your upper chest, keeping a slight arch in your lower back.
- Don't pause at the top or bottom.
- Don't lock your elbows at the top to keep tension on your lats.
- Don't release the tension on your shoulders at the top, or you could injure them.



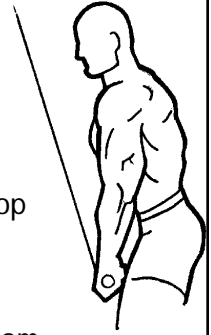
Dumbbell Pullovers, Stretch: Lats

- Keep your hips lower than the bench.
- Lower till your arms are parallel to the floor, no farther.
- Raise the dumbbell to a point over your face.
- Don't pause at the top or bottom.

Stiff-arm Pulldowns, Contracted: Lats

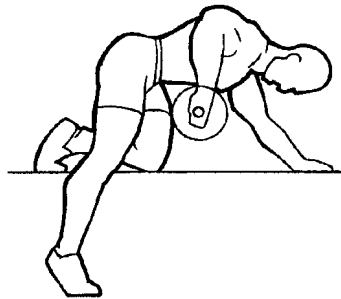
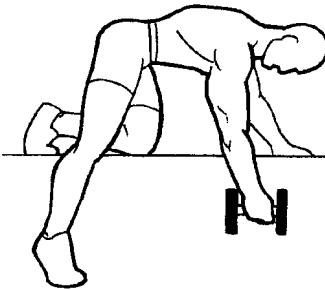


- Keep your arms almost locked.
- Pull the bar from a point just above the plane that's even with the top of your head, bringing it down in an arc to your thighs.
- Hold for a count at the bottom and contract your lats.

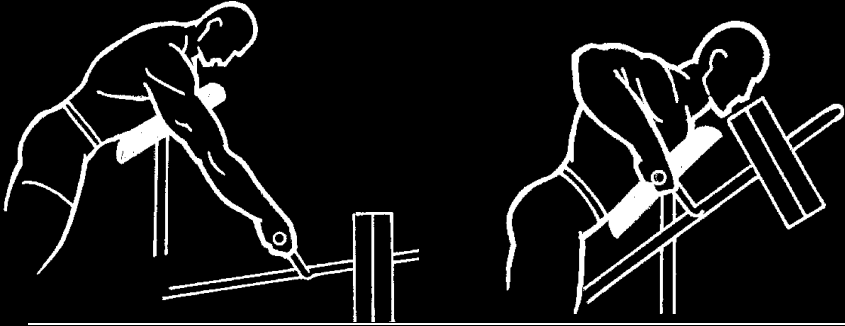


One-arm Dumbbell Rows, Stretch: Midback

- Bend at your waist with a dumbbell in one hand and brace yourself on a bench with your free arm.
- Start with your arm straight and your palm facing your free arm.
- As you pull the dumbbell up to your chest, rotate your hand so your palm is facing back at the top.
- Keep your arm angled away from your torso.
- Keep your back flat and try not to lean to the side as you row.
- Don't pause at the top or bottom.
- You can also put your leg up on the bench to prevent cheating.



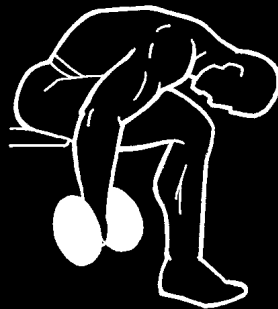
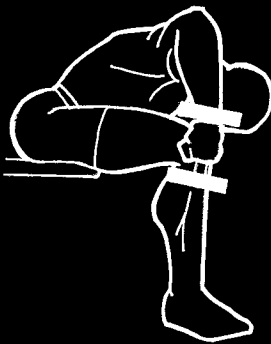
Close-grip Rows, Midrange and Stretch: Midback



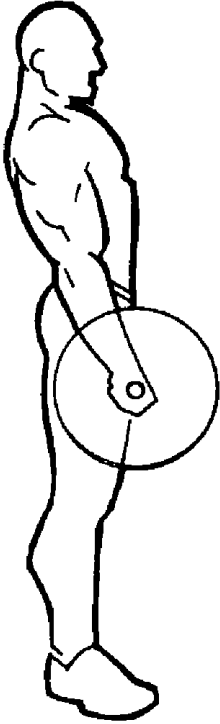
- You can also do this movement with a V-bar and a cable or a T-bar-row machine with chest support.
- Keep your back flat.
- Use an overhand grip, with your hands a few inches apart.
- Keep your arms angled away from your torso.
- Don't pause at the bottom, the point of stretch.
- Don't relax your shoulders; maintain tension on your midback muscles throughout the set.

Bent-arm Bent-over Lateral Raises, Contracted: Midback

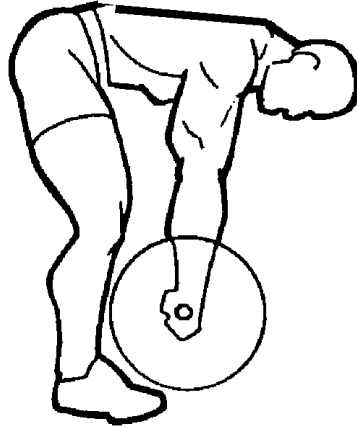
- Keep a slight bend at your elbows.
- Raise your hands till your arms are parallel to the floor.
- Keep your back flat.
- Pause at the top of each rep for a count.



Stiff-legged Deadlifts, Stretch and Midrange: Hamstrings

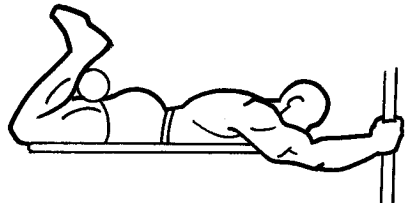
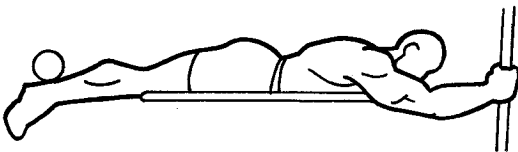


- Keep a slight bend in your knees and your back flat throughout the movement.
- Lower the bar to midshin level, keeping the bar close to your legs.
- When you reach midshin level, reverse the movement with no bounce.
- Don't pause at the top or bottom.

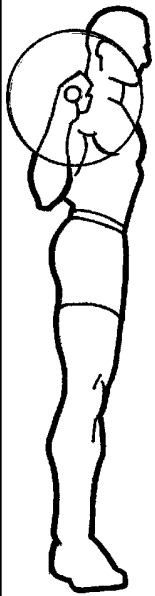


Leg Curls, Contracted: Hamstrings

- Flex your feet toward your shins.
- Pause at the top for a count before lowering.
- Don't swing or jerk; maintain a slow, controlled movement.
- Don't raise your hips off the bench.



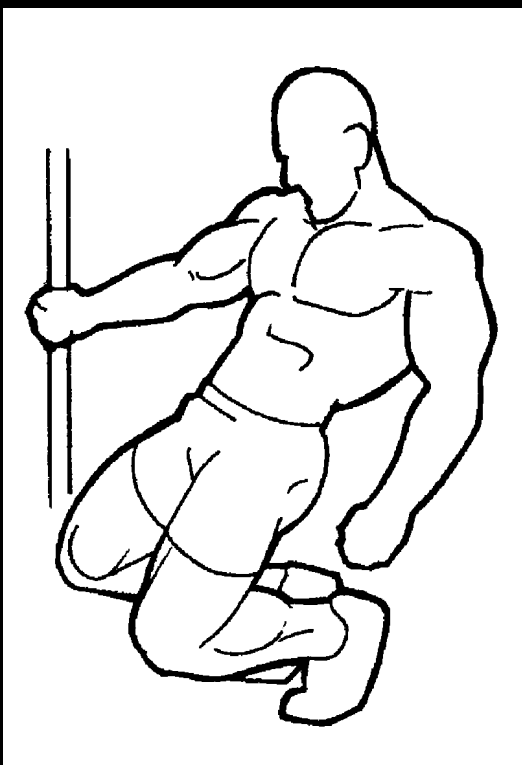
Squats, Midrange: Quadriceps



- Rest the bar on your traps, just below the base of your neck.
- Maintain a flat lower back throughout the movement.
- Look straight ahead.
- Squat to a depth at which your thighs are just below parallel to the floor.
- Try not to lean too far forward; stay as upright as possible.
- Don't pause at the top or bottom of the movement.
- Do these with your feet forward on a Smith machine for midrange hamstring work.

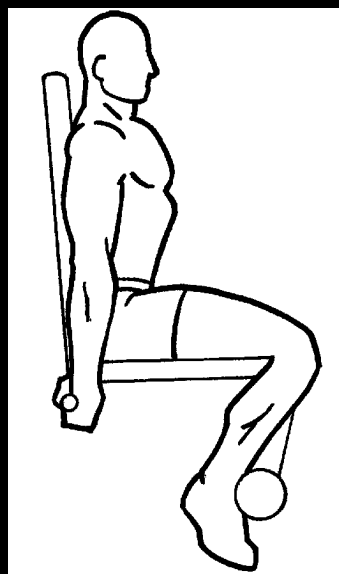


Sissy Squats, Stretch: Quadriceps

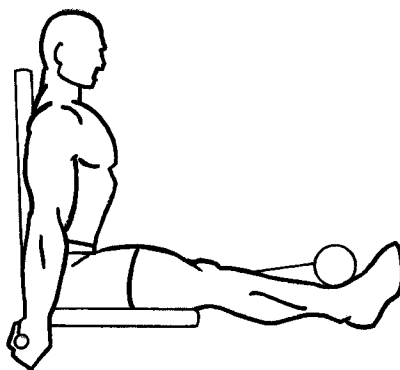


- Hold on to an upright for balance.
- Lean back as you bend your knees, keeping your torso and thighs in the same plane—no bend at the waist.
- When your hamstrings meet your calves, reverse the movement with no bounce.
- Don't pause at the top or bottom.
- Hold a barbell plate on your chest for more resistance or do the exercise on a Smith machine.

Leg Extensions, Contracted: Quadriceps

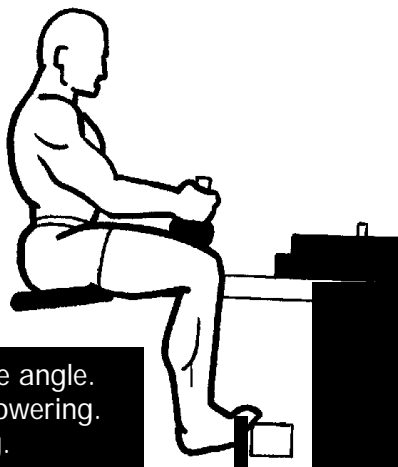
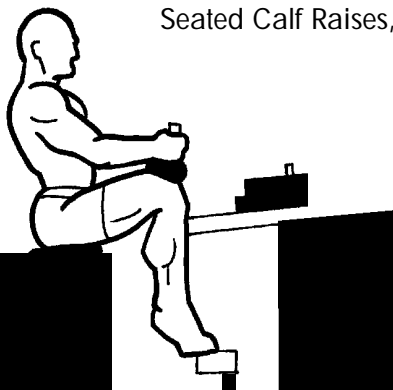


- Angle your feet slightly outward.
- Pause at the top for a count before lowering.
- Don't swing or jerk; maintain a slow, controlled movement.
- Don't raise your hips off the bench.



— Soleus —

Seated Calf Raises, Contracted: Soleus

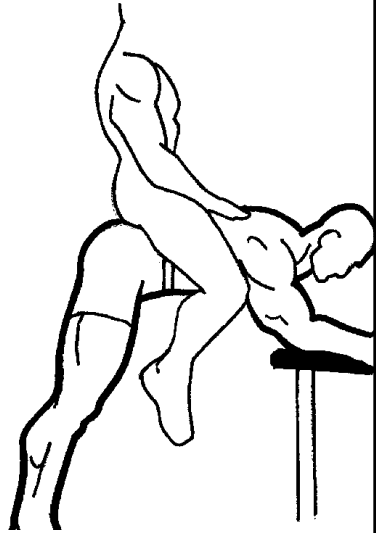


- Keep your knees bent at a 90 degree angle.
- Pause at the top for a count before lowering.
- Maintain a slow cadence; no jerking.

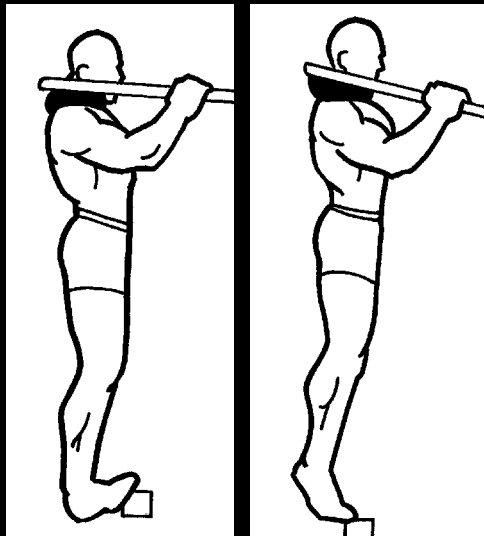
Gastrocnemius

Donkey Calf Raises, Stretch: Gastrocnemius

- Keep your knees almost locked and your torso at a right angle to your legs.
- Stretch down as far as possible, and without pausing, drive up to the top position.
- Pause for a count, then lower to full stretch.



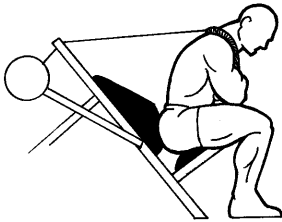
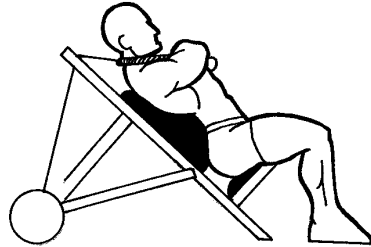
Standing Calf Raises, Contracted: Gastrocnemius



- Keep your knees locked.
- Pause at the top for a count before lowering.
- Maintain a slow cadence; no jerking.

Ab Bench Crunch Pulls, Stretch and Contracted: Rectus Abdominis

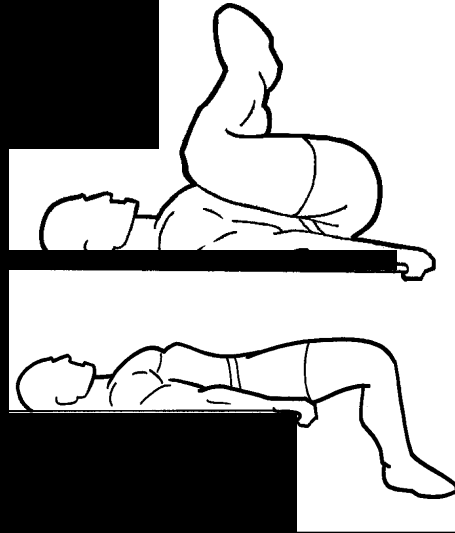
- Allow the cable to pull you back to where your rectus abdominis is stretched, then, without pausing, initiate the movement.
- Slowly pull forward into the contracted position and pause for a count.



Note: If you don't have an Ab Bench, you can simulate this movement using a high cable and a preacher bench for lower-back support. Or you can do crunches on a bench press bench with your upper back hanging off one end to provide ab stretch. See page 72.

Kneups, Midrange: Rectus Abdominis

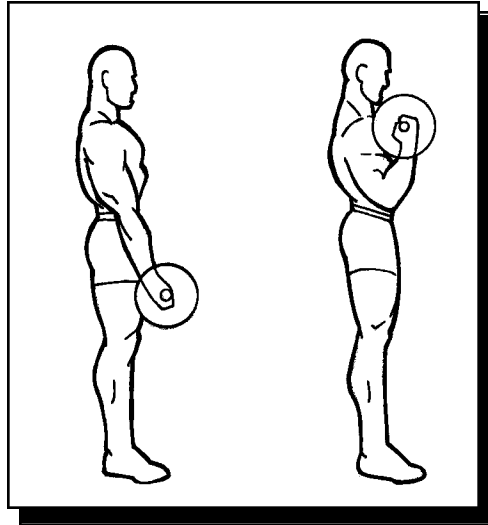
- Pull your knees into your chest as you roll your hips up off the bench.
- Hold for a count at the top.
- Lower your hips slowly, then extend your legs.
- Maintain a slow cadence; no jerking, no momentum.
- Incline the bench to increase the difficulty of this exercise as you get stronger.
- For maximum difficulty do the exercise hanging from a chinning bar.



Biceps

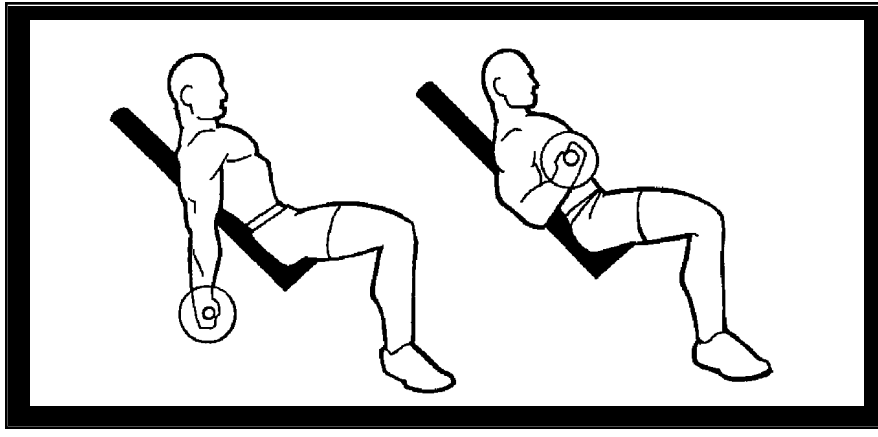
Barbell Curls, Midrange: Biceps

- Use a shoulder width underhand grip on the bar.
- Start each rep with the bar against your front thighs.
- Curl the bar till it almost meets your chin, then lower it slowly.
- Don't swing or jerk.



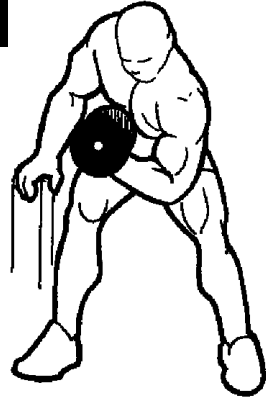
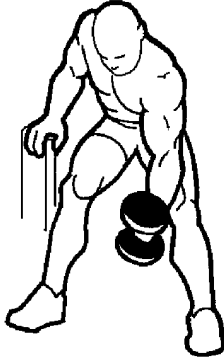
Incline Curls, Stretch: Biceps

- Keep your palms facing forward and your upper arms stationary throughout the movement.
- Don't pause at the top or bottom.



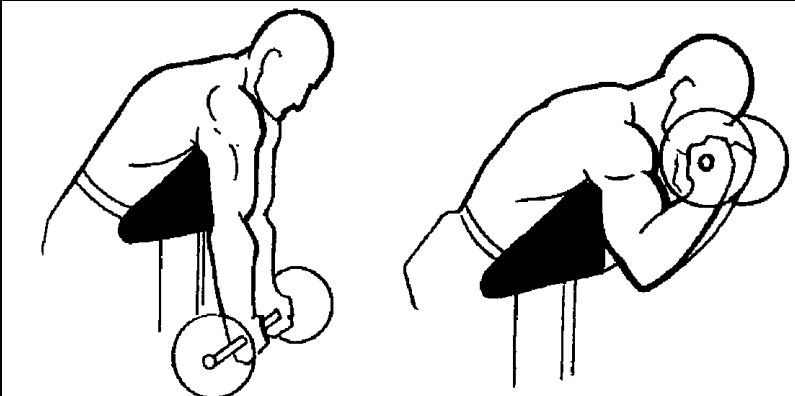
Concentration Curls, Contracted: Biceps

- Keep your upper arm stationary throughout the movement.
- Don't pause at the bottom.
- Pause at the top for a count and flex your biceps.
- You can also do these seated with your working arm braced against the inside of your thigh.



Spider Curls, Contracted: Biceps

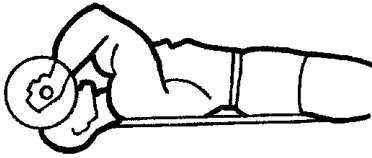
- Use a straight bar with your palms up and your hands about shoulder width apart.
- Brace your upper arms against the vertical side of a preacher bench, not the angled side.
- Don't pause at the bottom.
- Pause at the top for a count and flex your biceps.



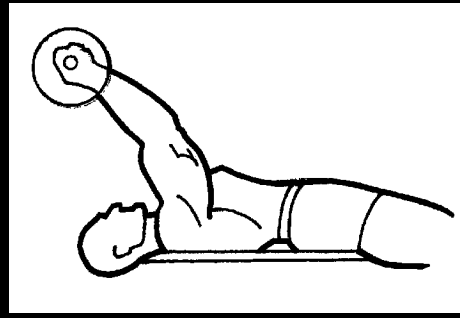
Triceps

Lying Triceps Extensions, Midrange: Triceps

- Use an overhand grip with your thumbs about eight inches apart.
- Keep your upper arms stationary.
- Lower the bar till it touches your forehead or the top of your head.
- Don't pause at the top or bottom of the rep.

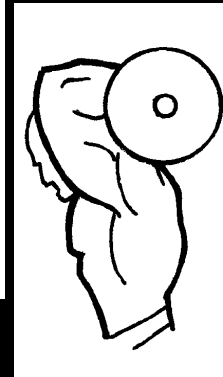


Note: Close-grip bench presses can substitute for lying extensions as a midrange triceps exercise.



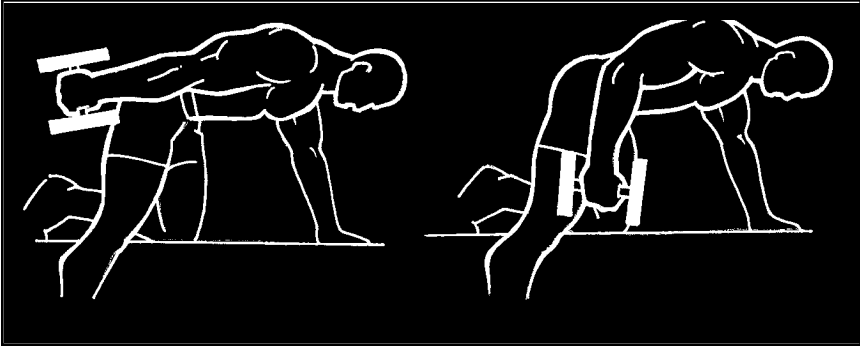
Overhead Barbell Extensions, Stretch: Triceps

- Do these either standing or seated.
- Lower the bar behind your head till your forearms meet your biceps for a full triceps stretch.
- Don't pause at the top or bottom.



Dumbbell Kickbacks, Contracted: Triceps

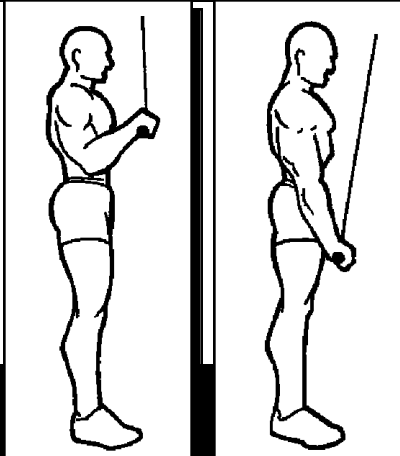
- Keep your upper arms as motionless as possible at your sides.
- Hold at the top for a count to contract your triceps.
- Don't pause at the bottom.
- You can do these one arm at a time or with both arms at the same time



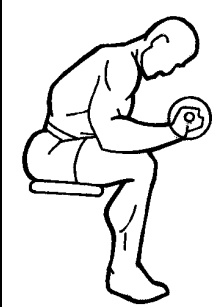
Triceps Pushdowns, Contracted: Triceps

Note: For best triceps contraction do these one arm at a time, and make sure you keep your upper arm slightly behind your torso.

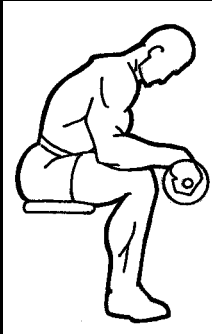
- Grip the bar with your palms facing down and your hands slightly narrower than shoulder width.
- Don't pause at the top.
- Pause at the bottom for a count and flex your triceps.
- You can also use a V-bar or rope instead of a straight bar.



Reverse Wrist Curls, Contracted: Forearm Extensors



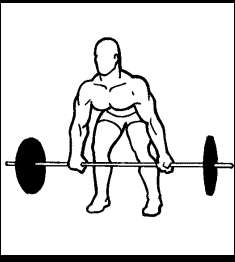
- Take an overhand, palms-down, grip on the bar, with about 10 inches between your thumbs.
- Rest your forearms on your thighs or on a bench.
- Allow the bar to pull your hands down, then curl it up to the highest point possible with forearm extensor strength alone.
- Pause at the top for a count, then slowly release.



Wrist Curls, Contracted: Forearm Flexors

- The same as reverse wrist curls, except you use a palms up grip on the bar. This movement works the forearm flexors on the underside of the lower arm.

The Deadlift



The regular deadlift can be classified as a midrange midback exercise or a midrange quad exercise. While you use your legs to power through the first two-thirds of the stroke, it's almost a full-body exercise. No matter how you classify it, it's one of the best all-around mass moves available.

