

How Women Athletes *Should Eat*

An interview with body composition expert Francine Savard

BY KIM GOSS, MS

Achieving an optimal body-weight and bodyfat level is a major concern among young women athletes, as well as for young women in general. Unfortunately, there is so much misinformation circu-

lating about this subject that achieving this goal is a challenge. But one sure way to learn what works is to ask an expert who has helped many women achieve success in figure and physique competitions: Meet Francine Savard.

Savard was a national champion in the gymnastics discipline of sport aerobics and was a cheerleader for 10 years with the Canadian Football League. For the past 12 years Savard has been a personal trainer specializing in helping



Mary-Pier Gaudet is a Canadian stuntwoman who recently joined the Team BFS Weightlifting Club.

Photo: Karim Ghonem



Francine Savard

women achieve their goals in optimal body composition. She offers advice about nutrition and supplements, and designs and supervises workout programs.

Working out of Proactif Fitness in Montreal, Quebec, she typically is able to help her women clients lose 10 percent bodyfat in as little as six weeks – and keep it off. Let me tell you more.

One woman Savard trained was at 32.2 percent bodyfat and had tumors in both her knees. Says Savard, “After surgery – thankfully, the tumors were benign – we started training. I trained her for seven months, and despite having two months where we had to do a lot of rehab, she achieved a bodyfat of seven percent. The following year, she went on to compete in figure competitions and represent Canada at a world competition in Italy.”

Such results have attracted the attention of many elite women athletes and those wishing to become elite. Savard has a long client list of figure and physique competitors who have competed at the national and international level. She has also worked with many elite strength athletes from Canada, including weightlifter Valérie Lefebvre and powerlifter Shany Gilbert.

Lefebvre competed in four Junior World Championships, earning two bronze medals, and two Senior World Championships. At a bodyweight of 152 pounds, Lefebvre snatched 196 pounds and clean and jerked 242 pounds to place 23rd. After less than three months of working with Savard, Lefebvre increased her total by 22 pounds. “I had been feeling tired, and my performances were worsening,” says Lefebvre. “I started to follow Francine’s recommendations in regard to my nutrition, and within a week my performances skyrocketed. My

strength and my speed also greatly improved.”

This year at the Senior World Championships Savard was able to manipulate Lefebvre’s diet so that she could reduce and qualify in the 139-pound bodyweight class. Lefebvre snatched 194 pounds and clean and jerked 248 pounds, which, pound-for-pound, was a performance superior to the previous year’s. She also moved up five places, and as such she helped Canada earn valuable points so her country could send three women to the 2012 Olympic Games, compared to the US, which at the time of this writing can send only two.

Another of Savard’s clients is powerlifter Shany Gilbert. On June 4 at the CPR Canadian Pro/Am Nationals, Gilbert squatted 600 pounds, bench pressed 403 (424 on a fourth attempt), and deadlifted 463 at a bodyweight of 176 pounds. She did these lifts at the age of 21, making her one of the most promising young powerlifters in the world.



Valérie Lefebvre is an Olympic hopeful from Canada who was able to successfully drop a weight class. At the World Championships this year, Lefebvre snatched 194 pounds and clean and jerked 248 pounds in the 139-pound weight class.

The Diet of Champions

Asked why so many young women are overweight today, Savard responds that a primary reason is that most girls are not very active physically. “Rather than participating in sports, they are distracted with video games and other forms of entertainment. This is why we need to fight to have sports and physical fitness programs become a

have higher estrogen levels. One such toxin is bisphenol A (BPA), a chemical used to make plastic products. BPA can increase levels of estrogen, and estrogen can affect metabolism, causing weight gain, especially in the thighs. Savard comments, “Women have a fragile system, and imbalances in hormones such as estrogen can easily cause them to gain unwanted

actors are often supervised, with a lot of people to take care of them to make certain they stay slim. Sure, there are shortcuts that can be taken, such as with the use of certain nutritional supplements, but they are not meant to be repeated constantly.”

In working with young women, Savard says, male coaches need to be aware that women have a special

“Women respond well to weight training for fat loss, even more so than to aerobic training.”

stronger presence in the school system. Also, girls often are not getting the correct information about nutrition and learning about other factors that can affect their weight, such as hormones. It’s a lot more complicated than just counting calories.”

Regarding hormones, Savard says that environmental problems, such as the influence of toxins in food and water, have caused young women to

weight.”

Although we live in what has been called the “Information Age,” Savard says we are exposed to a lot of misinformation, especially from watching celebrities. “Movie and television stars who reach the top of their profession are often very slim to begin with, as this type of body suits the camera. As such, they have a genetic advantage in acquiring a desired figure. Also, these

relationship with food, and often tend to eat for emotional reasons. “Coaches need to be aware that it is natural, during times of the month, for a woman’s bodyweight to fluctuate, and this can cause fatigue and affect performance.”

In regard to training, Savard notes that women respond well to weight training for fat loss, even more so than to aerobic training. “Male coaches may be too soft on women, such that they will often avoid high-intensity training and focus on high repetitions with relatively lighter weights. Or have them focus on aerobic training, which is an inferior way to lose bodyfat. I have coached for a very long time all types of women, from those who want to compete in figure competitions in bikinis, to high-performance athletes, and also everyday women who want to look like a supermodel. What I’ve found is that the weight on the bar is key.”

When she is designing diets for her clients, Savard says she counsels young women athletes and their coaches to look at the big picture. “They need to focus on eating high-quality food that doesn’t cause fluctuations in blood sugar, instead of eating a diet too high in carbohydrates. Young women also need to consume foods



Fitness competitor Myriam Tremblay has benefited from Savard’s nutrition and supplement program.



Photos: Pascal Ratthé

that will help their body detoxify. I see many young women go to weight-loss centers and buy their chemically refined meals.”

During initial consultations with her clients, Savard determines not just their bodyfat percentage but also the way they store bodyfat; she says this can help determine hormone imbalances. From this data, including assessing their activity level, Savard can determine how much protein they require. “Protein requirements are determined by muscle mass, so athletes such as Shany, who can bench press over 400 pounds, will have much higher protein requirements.” Adjusting Lefebvre’s diet to increase her protein level was a key factor in the success Savard had with Lefebvre.

“I determined that Valérie was only consuming about 90 grams of protein a day, so increasing the protein in her diet was one of my first priorities,” says Savard. “I also found that she was not eating clean; she was consuming many products that she should not have, such as those with soy. She also told me that she was having

problems with excessive fatigue, and was not recovering well from her workouts.” To give you an idea of what an elite weightlifter’s diet should look like, here is a typical breakfast and a snack that Savard gave to Lefebvre:

Breakfast

- 150 grams of lean red meat or 120 grams of chicken or 180 grams of white fish (such as sole) or 9 big egg whites
- 80 grams of sweet potatoes with the peel
- 140 grams of raspberries or 225 grams of tomatoes
- 1 tablespoon of salted butter or coconut butter

Snack

- 1 cup of Greek yogurt (lots of probiotics in there and no dairy byproducts)
- 1/2 scoop of whey isolate mixed in with the yogurt
- 175 grams of cucumber
- 100 grams of carrots
- 75 grams of peppers
- 2 tablespoon of ground flax seeds

Food comes first in Savard’s program, and she emphasizes foods high in fiber. Savard also encourages her athletes to drink a lot of water, as this is vital for optimal health, athletic performance and weight loss. That being said, Savard is also a believer in nutritional supplements. “I always recommend a multivitamin, one that is bioavailable so that your body doesn’t have to fight to absorb it. Omega 3’s are a must, as is vitamin D3.”

When working with young women, Savard still encounters their fear that lifting weights will build too much muscle and cause them to acquire a manly appearance. “What young women have to understand is that unless you have a naturally high level of testosterone, you are not going to build too much muscle. And even if a woman has a high level of testosterone, they are not going to grow just like that – they would have to train very hard.”

Although Savard trains female bodybuilders, the goals of these women are not necessarily right for other female athletes, she emphasizes. “Bodybuilders are taking their training to an extreme in building muscle and losing fat, which is not necessarily what most of the women I train want. Yes, being lean will help an athlete become faster and more powerful because there is less friction in the muscles and less weight to carry. However, in many sports being extremely lean like a bodybuilder is not conducive to optimal performance.”

Whether it’s competing as elite athletes or just becoming super fit generally, women have the tools to achieve their highest physical goals. It starts with following sensible nutritional programs and training with weights. Take it from Francine Savard. **BFS**



Savard has been working with powerlifter Shany Gilbert, whose best official lifts include a 600-pound squat, 424 bench press, and a 463 deadlift at 176 pounds bodyweight.

Fat Loss Forever:

The Flexible Diet

BY KIM GOSS

FROM THE AUTHOR OF *THE RAPID FAT LOSS HANDBOOK*

A GUIDE TO FLEXIBLE DIETING

HOW BEING LESS STRICT WITH YOUR DIET CAN MAKE IT WORK BETTER



LYLE McDONALD

BODY
RECOMPOSITION
www.bodyrecomposition.com

Q When is it OK to cheat?

A Never—unless you're playing the diet game.

Here's a shocker: Most diets will fail. The National Institutes of Health did a 20-year study that concluded that 95 percent of people who lost weight gained all of it back within a few years, and many gained back more. Other studies have reported similar results, and the problem doesn't seem to be getting any better. In fact, it may be worse.

Despite vast amounts of information available about nutrition in this country, over the past three decades the rates of overweight and obesity have steadily

because they believe that all their efforts have been wasted from that single lapse in discipline. In contrast, McDonald says, if you look at long-term results, occasional breaks from any diet program do not guarantee failure. So if you follow a strict diet for four days, then on the fifth day you decide to go for the super-size option at a fast food restaurant for lunch, it's not a big deal.

One peer-reviewed medical study McDonald uses to support his theory of flexible dieting was published three years ago in *Obesity Research*: "Prescribed 'Breaks' As a Means to Disrupt Weight Control Efforts." In this study, researchers wanted to determine the effects of going off a diet for brief periods. The subjects were put on a diet designed to help them lose weight and then were told to go off the diet for either two or six weeks before starting it again. The results were not what the researchers expected. "Not only did the subjects not regain very much weight; they had almost no trouble going right back onto their diet when the two (or six) weeks were over," says McDonald. "But consider what happened in this study: The subjects were told by the researchers to go off their diet; in essence, the break was part of the diet."

You Deserve a Break Today

McDonald cautions that instead of just cheating on a diet whenever you feel like it, the key to successful long-term "flexible dieting" is to plan the breaks so you stay in control. McDonald's approach is to have people experiment with planned breaks to help them lose the weight they want and keep it off. Let's look at one of these planned breaks, which McDonald calls "free meals."

A free meal, which he also refers to as a "reward meal," is a single meal that breaks your diet. Someone on a low-carbohydrate diet might have a serving of

pasta, or someone on a low-fat diet might have a serving of French fries or pizza. "The main thing is that the free meal lets you address any cravings you might have by allowing you to have a little of those 'forbidden' foods."

McDonald believes that a single meal isn't really enough to affect the various hormones that are involved in the physiological responses to dieting. "Dieting nonstop for extended periods gets to be a real mental grind. Knowing that there is light at the end of the tunnel, that a couple of times per week you can eat more or less 'freely,' goes a long way in keeping your sanity. This tends to help with long-term adherence since you never suffer from the psychologically induced deprivation that you can't EVER have a certain food. You know that you're never more than a few days away from a free meal, which makes those days of dieting far more tolerable."

Recently, McDonald and I tried this approach with a sports reporter who was beginning a diet. We started with two weeks of a crash diet and then followed it with a flexible diet that included a few free meals a week. The reporter also lifted weights at least twice a week for 30 minutes per session, occasionally managing a third workout — enough work to develop some strength and muscle mass, but certainly not enough to burn a significant number of calories. The result was that he lost about 20 pounds of fat in 10 weeks and gained several pounds of mus-

cle and made dramatic improvements in blood pressure (144/100 to 121/84). He was never hungry, and he was satisfied to know he could achieve his goals without being obsessed with dieting or training.

The idea of using free meals is just one of McDonald's practical dieting strategies in *The Flexible Diet*. To purchase the book, or if you want to learn



In the 90s BFS Editor Kim Goss trained Karen Carpenter, a 5'3" ice dancer from Colorado Springs. Although she consistently followed low calorie diets, her body-weight stayed at 149 pounds. By gradually increasing her food intake and lifting weights, she lost 43 pounds, the time at which this photo was taken.

PHOTO BY JACK L. KNIGHT

more, go his website, lylemcdonald.com.

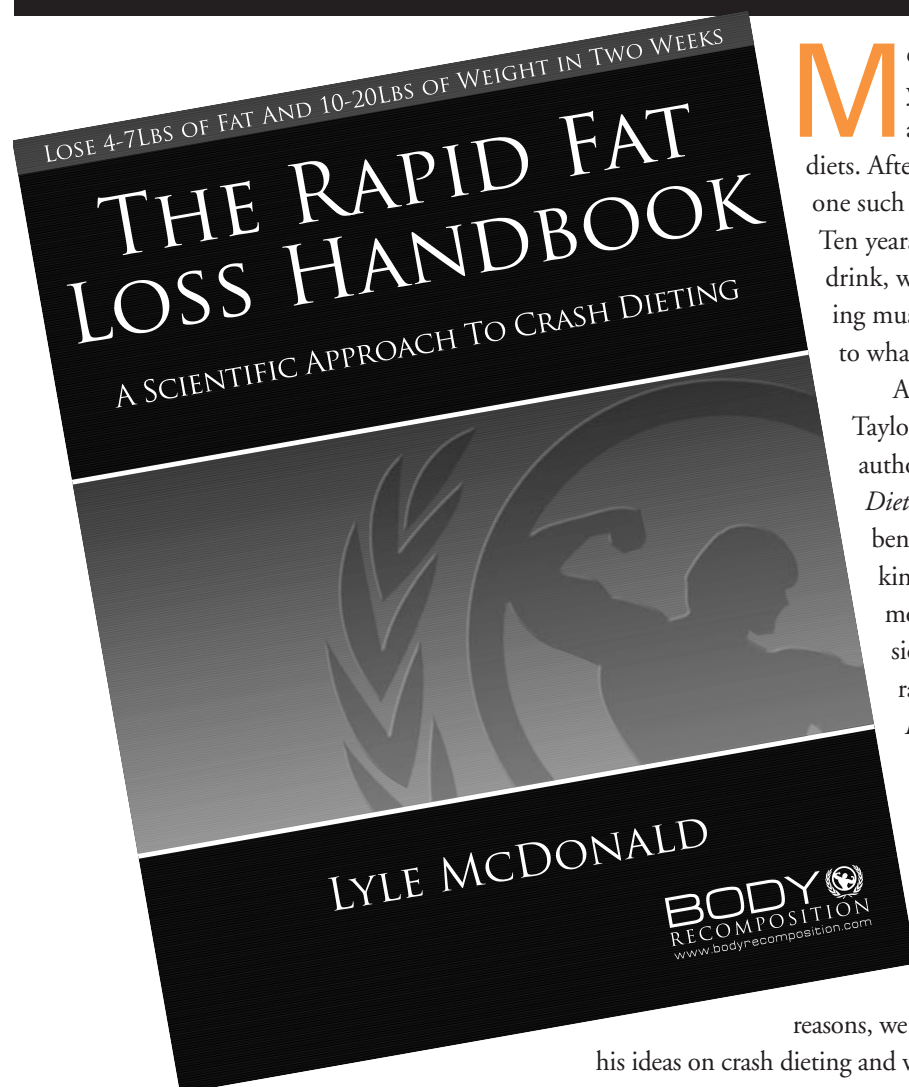
It's time for some fresh ideas to fight obesity; one look at the ever-expanding waistlines of Americans is more than enough proof that what we've been trying for the past several decades is not working. Flexible dieting is a sensible approach that tackles the issues that really matter. Check it out! **BFS**

How to Crash Diet Without Getting

BURNED

A nutrition guru explains the pros and cons of a controversial diet technique

BY KIM GOSS



Mention crash dieting to most health professionals and you can count on plenty of cynicism and warnings about the unhealthy nature of severely restricted-calorie diets. After all, in the 1970s there were 58 deaths associated with one such diet, a low-calorie plan based on a liquid-protein drink. Ten years later a similar diet, also featuring a liquid-protein drink, was associated with the deaths of 30 people. Crash dieting must be bad news, right? Before answering yes or no, listen to what Lyle McDonald has to say.

Among serious athletes and coaches, Lyle McDonald of Taylorsville, Utah, is considered one of the most respected authorities on dieting for athletes. His book *The Ketogenic Diet* is regarded as one of the ultimate sources on both the benefits and risks of low-carb dieting. A UCLA graduate in kinesiology who has worked with elite athletes and mere mortals alike, Lyle has made diet research his lifelong passion. His books are widely consulted, and recently he raised more than a few eyebrows by writing *The Rapid Fat Loss Handbook: A Scientific Approach to Crash Dieting*.

BFS takes an official stand against crash dieting, as would most coaches who deal with young athletes. However, the fact is that crash dieting is a common practice among not only athletes but also the general population – and it's also true that there are far safer ways to crash diet than by relying on those liquid protein diets that they are often associated with. For these

reasons, we asked Mr. McDonald if he would share with our readers his ideas on crash dieting and why he would risk his reputation by publishing a book on

such a controversial topic. Here is what we learned:

BFS: Lyle, what on earth were you thinking when you decided to publish a book about crash dieting?

LM: Knowing what I know, I would love to see everyone who needs to lose weight make small or moderate changes in their diets, but the reality is that some people are going to crash diet no matter what you tell them. It's also a fact that there are a lot of bad ways to crash diet, and I want to at least put a way of doing it out there that is nutritionally sound, based on good science and as safe as it can be made. I say this because crash dieting is never completely safe, but there are comparatively better ways of doing it.

BFS: In what situations might a crash diet be appropriate?

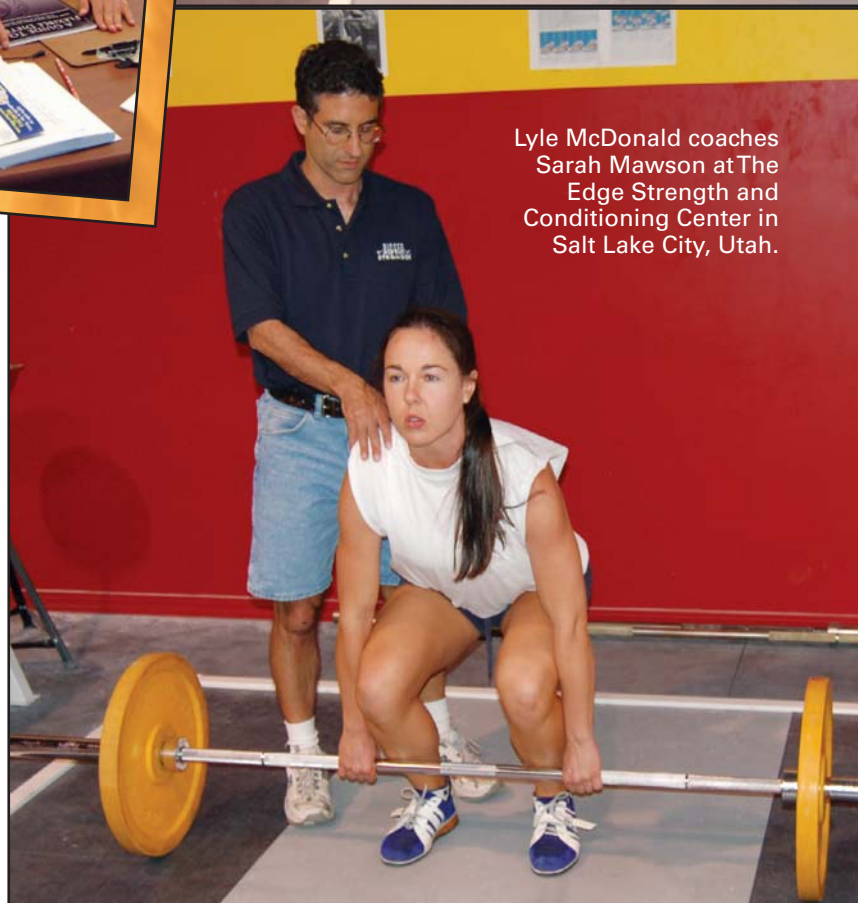
LM: Let's say there's a wrestler who has two weeks to make weight, and if he doesn't make weight all his dreams for that national championship go right out the window. In working with bodybuilders, I've found that many of them often get behind on their contest preparation. Then of course there are folks who simply want to get in shape on very short notice for spring break, a wedding or a high school reunion.

BFS: What about those diets that simply have you substitute a protein shake for a meal – isn't that the simplest way to diet?

LM: Simple, no doubt, and yes, I would love for people to take a longer-term approach, rather than taking 12-20 weeks to lose the weight. The problem is there are situations where a moderate approach simply won't work.

BFS: There has been a lot of bad press about crash dieting. Take, for instance, the uproar over the diet in the book *The Last Chance Diet* after it was associated with the deaths of many individuals. What was the problem there?

LM: That is probably the most infamous crash



Lyle McDonald coaches Sarah Mawson at The Edge Strength and Conditioning Center in Salt Lake City, Utah.

NUTRITION

BFS: Are you concerned that some people who hear about your diet will simply just eat protein and think that's all there is to know?

LM: It never is that simple: Being haphazard about nutrition is asking for trouble. For this type of diet the information in the book is essential. There's a lot of information in there about what is necessary to eat, what protein sources are best, what vegetables are allowed, along with advice about getting essential fatty acids.

BFS: But you wouldn't recommend going on this diet for months at a time?

LM: In general, no, but there are some exceptions. The way I have it set up, the fatter you are, the longer you can stay on essentially any diet. Lean individuals may only want to stay on it for two weeks at a time, because any longer than that they will get into performance loss and muscle loss. For these reasons, the last four chapters of my book detail how to move from the rapid fat loss diet to either a more moderate or maintenance diet.

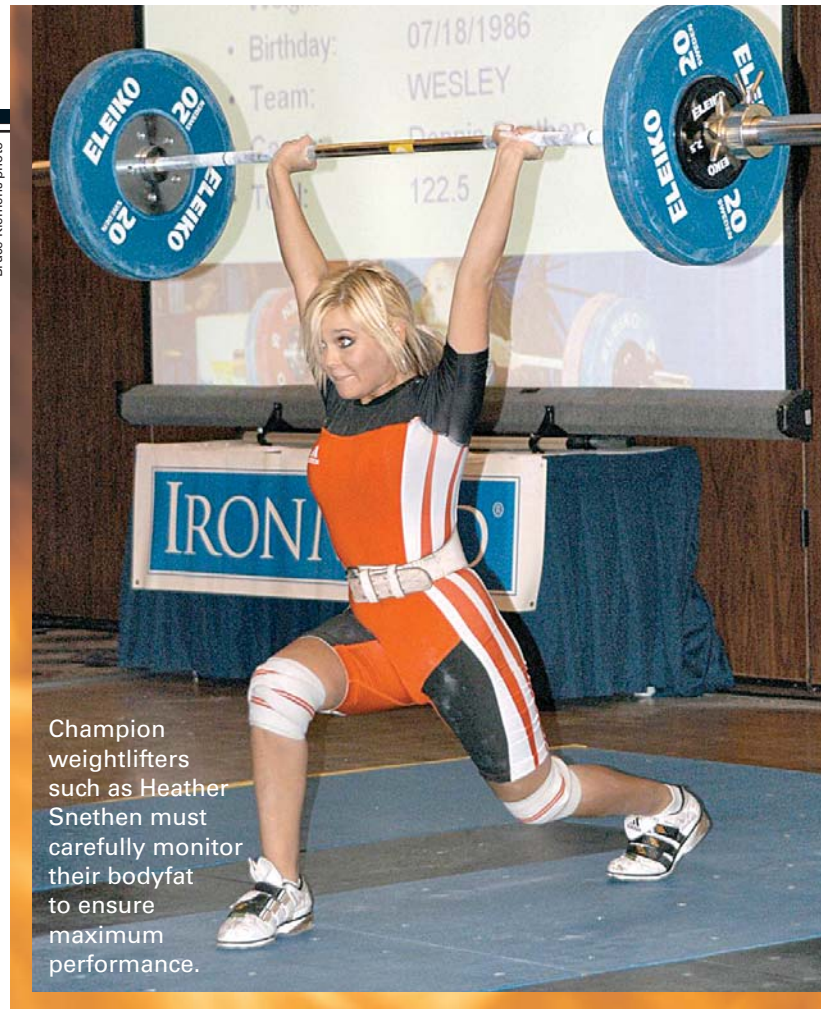
BFS: Are most of the meals basically the same?

LM: Yes, pretty much every meal is going to contain a lean protein source, such as chicken or tuna, and some sort of fibrous vegetable source. You should also have some source of essential fatty acids, such as fish oil, and a multi-vitamin/mineral supplement.

BFS: Why do you recommend a multi-vitamin/mineral?

LM: Even though we are trying to ensure you get all the essential nutrients with this type of diet, as the calories go down it becomes more difficult to get all your vitamins and minerals. Also, low-carb diets tend to cause the excretion of minerals such as calcium, magnesium and potassium.

Bruce Klemens photo



Champion weightlifters such as Heather Snethen must carefully monitor their bodyfat to ensure maximum performance.

BFS: Would people on this diet have to take dosages of vitamins that are much higher than usual?

LM: Not really, because this diet consists of whole foods. This type of supplement certainly wouldn't hurt, and will absolutely cover any potential nutritional deficiencies.

BFS: What type of exercise is better when using this type of diet: weight training or aerobic exercise?

LM: Weight training, definitely, as it will help maintain muscle mass much more effectively than aerobic training.

BFS: A lot of people have a hard time starting a diet because it can be overwhelming to commit to doing something for such a long period, say, six months or more. Would you say that this is an advantage of your diet?

LM: Absolutely. In fact, I believe one of the biggest advantages of my diet is that it gets you motivated. There is research to show that initial quick weight loss seems to help with moving into a longer-term approach. In my book I suggest that you might use the diet for two weeks to take off some fat quickly to get things moving, then move into a more moderate, traditional diet. The crash diet is not supposed to be maintained for the long term. It is a short-term solution for when people have to lose weight quickly. BFS

diet, which came out in the early 70s. It is only superficially similar to what I describe in my book. The 70s diet was based on nothing but lean protein in the form of a protein supplement that had zero bioavailability. On top of that the book failed to recommend vitamin-mineral supplements. As a result, several people got into problems where their bodies were burning cardiac tissue because of the totally inadequate protein intake, and they were suffering from other deficiencies from mineral depletion. In later studies using similar types of diets based instead on whole foods and providing high-quality protein and vitamins and minerals, individuals experienced none of these problems.

BFS: Two popular books that deal with crash dieting are *Extreme Crash Dieting* by Dr. Eric Serrano and *The Radical Diet* by Dr. Mauro Di Pasquale. What do you think about those books?

LM: They are based on similar concepts. What is unfortunate about Dr. Serrano's diet – and by the way Dr. Serrano and I are good friends – is that it's very heavily supplemented. To follow his diet requires about \$300 to \$400 worth of supplements each month. The diet probably works, but I don't think it does anything to help with long-term adherence because when someone finishes with the diet they still don't know how to eat. I think it's just as easy to use whole foods, which are cheaper and typically taste better, than to take a lot of pills and powders. I don't want people trying to live on protein drinks.

As for Dr. Di Pasquale's book, that is almost a carbon copy of his

Anabolic Diet, which was a five-day low-carb diet alternated with two days of carb-load, just with lower calories. He didn't really change anything. But my biggest problem with his book is that of the 97 pages, it's about 20 pages of information and 70 pages of supplement ads that he tells you are required to make the diet work.

BFS: Is it also true, then, that one of the advantages of pre-measured meals is that you can follow the diet precisely, but the drawback is that it doesn't teach you how to eat properly when the diet is over?

LM: Precisely. These meals are convenient and can be prepared quickly, but as far as helping you to keep that weight off in the long term they are less than ideal. I would rather get people into the habit of eating whole foods while they are on a crash diet so when they get off, all they have to do is add other foods to what they are already eating.

BFS: What about the benefits of fasting, such as cleaning out toxins and giving the digestive system a rest?

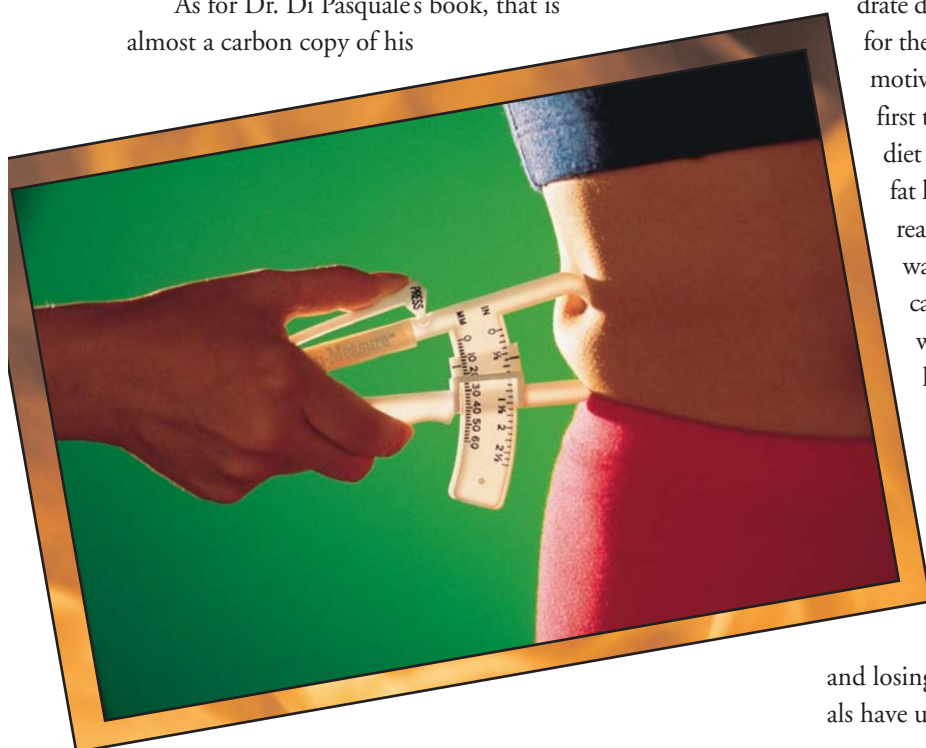
LM: The liver is amazing at clearing the toxins out of our systems, and I've never seen any research that suggests that the digestive system needs a rest.

BFS: The subtitle of your book is *How to Lose 4-7 Pounds of Fat and 10-20 Pounds of Weight in Two Weeks*. Why do you emphasize the distinction between fat and weight?

LM: A significant part of the weight loss in a low-carbohydrate diet tends to be from water. This was one of the reasons for the popularity of the Atkins Diet, because it was very motivating to watch the scale drop by seven pounds in the first two or three days. But what you have to realize with that diet is that people are primarily experiencing water loss, not fat loss – it's not fat loss yet. And it's doubly important to realize that if the Atkins dieters eat carbohydrates again the water weight tends to come back just as quickly, which can be very demoralizing. In my book, right up front, I wanted to make certain that the reader is not being misled into believing that losing 20 pounds in two weeks is the same as losing 20 pounds of fat tissue.

BFS: What kind of results can a person realistically expect on your diet?

LM: The results have been about what's promised in that subtitle. I get e-mails that some people are dropping 10-20 pounds of weight in two weeks, and losing about 4-7 pounds of bodyfat. Some larger individuals have used it for extended periods and have lost tremendous



amounts of weight, 150 pounds and more, whereas lighter females tend not to lose as much. However, lighter females tend not to lose that much on any approach simply because their requirements for maintenance calories are so much lower. Even leaner individuals have reported no loss of muscle mass, no loss of strength, no loss of performance – as long as they did it exactly the way I set it up in the book.

BFS: We often hear trainers and people in medical fields saying if you go on a diet, you should never lose more than two pounds a week. Where did that idea come from?

LM: That's a really good question, and I don't have an answer about its source. When they've done research looking at the type of diet I'm recommending, usually involving very obese individuals, fat losses of 4-7 pounds a week are not uncommon.

BFS: When you look at top competitive bodybuilders you worked with, are such ultra-lean athletes following the types of guidelines for crash dieting you're recommending?

LM: Probably not to quite that degree. The typical natural bodybuilder may start dieting at about 10-12 percent bodyfat, but they may start 16 weeks out from their contest. If they know what they are doing, they will give themselves a very long time to get into shape, because their goal is to lose as much fat as possible without losing any muscle so they can look their best on stage. Typically what they'll do is start with a diet that is moderately calorie-deficient while they weight train intensively, and as they get leaner they'll start to eliminate more foods.



BEFORE

If you diet smartly, you don't have to lose muscle while losing fat. Four years ago NFL veteran Ethan Brooks dropped 6.7 percent bodyfat in six weeks while gaining strength and building muscle. Ethan's story was featured in our Spring 2003 issue.



AFTER

BFS: When you pick up fitness magazines, you read about celebrities who have "discovered" a new way to lose weight quickly. Do you think it's a big problem in the United States for people to follow what celebrities are doing?

LM: Yes, because celebrities are in a situation where if a producer tells a celebrity you have to lose 15 pounds or we are not going to pay you 10 million dollars to do this movie, the celebrity is going to get into shape. If average people had ten million dollars on the line, they could do it too. Celebrities also have the ability to hire personal trainers, cooks and other facilitators that the average person cannot afford. The American public is getting a little bit misled in that they are trying to get the same results as celebrities without having the same support network.

BFS: Do you have any formulas to determine specific caloric intakes on your program?

LM: Typically I recommend 10-12 calories per pound as a starting point, so if you weigh 150 pounds you should have 1,500-1,800 calories. I find that usually works pretty well for most people. But on this diet, rather than starting from calories and working backwards, I find it works well to start from protein and let the calories fall where they may.

BFS: How does that work?

LM: The way I set it up is that people have to determine their bodyfat percentage and their activity level, and this determines how much protein they're going to need per day. Since the diet is primarily all protein, that is going to set their calorie level.

increased. For example, the Centers for Disease Control and Prevention reports that in 1980, 25 percent of American adults were overweight; in 1991, the number increased to 33 percent; and in 2001, 66 percent of adults in this country were considered overweight. The figures for children are even more troubling, as the percentage of young people who are overweight has more than tripled since 1980. More specifically, children ages 6-19 years in this country – 16 percent, over 9 million! – are considered overweight.

It's not that Americans don't want to lose weight; at least it doesn't appear that way when you consider we annually spend an estimated \$30 billion on weight loss methods. And it's certainly not for a lack of variety in diet methods. There are low-carb diets (*Dr. Atkins Diet Revolution*), low-fat diets (*The Pritikin Promise*), diets associated with medical institutions (*Mayo Clinic Diet*), and celebrity diets (*Suzanne Somers' Get Skinny on Fabulous Food*). So, what is the

problem?

It's not that diets fail to help people lose weight, but that people don't stick with them to continue losing weight or to maintain ideal weight. At least, that's the theory presented in Lyle McDonald's book *The Flexible Diet*. The issue, says McDonald, a respected authority in diet research, is not so much what diet to use or what type of exercise to perform, but the long-term adherence to those diet and activity changes. McDonald's prescription for lifetime weight control is simply "Eat less, exercise more, and repeat forever!"

From Crash to Fat Burn

Lyle McDonald of Taylorsville, Utah, was introduced to *BFS* readers in our July/August 2006 issue in an interview discussing how to crash diet safely. McDonald showed that short-term crash dieting could be a great way to jumpstart a diet because of the dramatic and motivating initial weight loss, but was careful to emphasize that his program

was not designed as a long-term approach to dieting. The solution to permanent weight loss, McDonald says, is to adopt a "flexible" approach to dieting.

Because there are so many variables associated with success in dieting, such as gender and genetics, McDonald says there is no "best" diet for weight loss. "About the best summary I've seen is that, if there is an optimal diet for the treatment of obesity, it should contain plenty of lean protein, lots of high-fiber vegetables and fruits, moderate amounts of refined starches and moderate amounts of fat." It's not difficult to find a diet that will help take off pounds fast, but for McDonald the real issue is with the maintenance of weight loss: Almost all diets fail because the dieters can't stick with the program.

People often set themselves up for failure from the very start of any diet they choose because they are striving for perfection, says McDonald. If they cheat on the diet, even if it's just one meal, these people often give up completely

Nutrition Guru Lyle McDonald



Shown here with her mother Sue, Jesse Butterfield was a competitive gymnast and weightlifter so always had to carefully monitor her diet. A junior (at age 18!) at Westminster College in Salt Lake City, Jesse recently signed with the Wilhelmina Urban modeling agency



PHOTO CREDIT BLAIR KUNZ

Pros Crack Down on Tainted Supplements

Sophisticated drug testing is forcing professional sports to crack down hard on tainted supplements.

Let's face facts. Food supplements will not make up for poor training or practice habits. They will not compensate for nutritional deficiencies or toxicities caused by a generally inadequate diet. And they cannot fundamentally change your physique. What supplements can do is give you the edge you need to pull ahead of the pack. On the other hand, they can create a world of trouble for an unsuspecting athlete.

The IOC has been concerned since 1997 about the possibility of performance-enhancing contaminants in food supplements, given the lack of FDA scrutiny of such products, in contrast to the scrutiny given drugs. Given this

concern, the IOC retained an independent lab to evaluate the ingredients in 634 nutritional supplements from 215 different suppliers in 13 countries.

The results indicated that fully 14.8 percent of the supplements were found to contain prohormones that were not declared on the labels. These banned prohormones were of 11 different anabolic androgenic steroids, primarily of testosterone and nandrolone. When the excretion rate of these prohormones was evaluated, the results showed concentrations exceeding the IOC cutoff limit for several hours – a positive doping result. Such findings have come to the attention of professional sports organizations, such as NFLPA, the National



While proper supplementation can help an athlete's health and performance, smart food choices come first, which is why we're publishing this photo of Kim Priest. A junior at Hunter High School in Salt Lake City, Kim signed up for a weight training class, made better food choices and lost 20 pounds of fat in one semester! No wonder she's smiling.

4 Your Health
AAbsolute Nutrition
ALRI
American Body Building
American Generic
Laboratories
American Sports Nutrition
ANSI
ASN
AST
Avant Labs
Balanced Health Products
BetaStatin
Beverly International

Bioplex
Biotech
Biotest
BSN
Country Life
Ergopharm
Extreme Labs
GEN
General Nutrition Center
German American Tech
HDT
Hi-Tech Pharmaceuticals
Irwin Naturals
ISS Research

Kaizen
Klein Laboratories
MedLean
Mega-Pro
Metabolic Diet Plus (MD+)
Metabolife
Met-Rx
MHP
MM Sports Nutrition
MuscleTech
Myogenix
Natrol
Nature's Purest
NEXT Proteins (formerly

Next Nutrition)
NutraQuest (formerly
Cytodyne)
NutraBolics
NutraSport
NutraBiotics Research Lab
NutraCeutics
Nutritional Technologies
Optimum Nutrition
OSMO Therapy
Performance BioLabs
Pharmagenx
Pinnacle
Premier Nutrition

ProLab
SCIFIT
Shocker Nutrition
Sportlab
SportPharma
Sports One
Stacker
Supertech
Syntrax Innovations, Inc.
TwinLab
Ultimate Nutrition
Universal Nutrition (GNC)
VPX Sports

Football League Players Association.

Established in 1956, NFLPA is the union that represents the best interest of the players. Toward this aim, NFLPA has told its members that they are prohibited from participating in any endorsement agreement with any of the following supplement companies "because they manufacture products that are on the banned substance list."


If you have decided that a particular supplement might be helpful

to you as an athlete, consider subscribing to a consumer service that evaluates supplements for just such a purpose and according to IOC standards. ConsumerLab.com (CL) has tested products for purity and accuracy of labeling at the request of the US Olympic Committee. The results of these initial tests are available on CL's website at www.ConsumerLab.com. CL continues to test supplements of all types to evaluate which are safe for

athletes to take.

As an athlete, you will always be responsible for the negative consequences of your actions, from training lapses to bad supplementation or doping choices. If you decide appropriate food supplements could be helpful, make sure you carefully evaluate them beforehand. After all, your goal is to improve your performance, not to jeopardize your health and your athletic career! **BFS**

11 Ways



A Level 9 gymnast who placed second in the School Age National Weightlifting Championships last year, Jessi Butterfield displays the type of athletic figure possible with sensible eating habits. Jessi is from Salt Lake City and represents Team BFS.

(PHOTO BY BLAIR KUNZ)

A great example of the difference proper nutrition can make for an athlete is Ethan Brooks, a right tackle for the Dallas Cowboys. In April 2002 Brooks weighed 305 pounds and had 15.35 percent bodyfat. In only six weeks while working with strength coach Charles Poliquin, Brooks reduced his bodyfat to 8.69 percent while adding 20 pounds of muscle mass. He was able to achieve these amazing results by following a nutrition plan to dramatically change his eating habits, which had consisted of an excessive amount of carbohydrates and processed foods. Likewise, coaches who want to support their athletes in losing excess bodyfat and achieving maximum results from their nutrition program should be prepared with solid nutritional information.

to Help an Athlete Lose Bodyfat

Practical advice on bringing sports nutrition up to championship levels

Besides the numerous health problems associated with being overweight, a leaner athlete is generally a better athlete. Excessive fat makes athletes slower and impairs agility, jumping ability and endurance. Unfortunately, there is so much conflicting information about nutrition that it is easy to become overwhelmed. Just look at the diet section of any bookstore and you will see countless types of diet books, each one with a colorful jacket claiming that it is the best. There are diet books endorsed by prestigious universities and medical centers, books by dietitians and nutritionists with PhDs (and some without any formal education), books by successful personal trainers, books by gold-medal athletes and, of course, books by stick-thin celebrities.

At BFS we say that on a scale of 1 to 10, be an 11! With that in mind, before you attempt to wade through this information jungle, here are 11 tips from Coach Poliquin that coaches and athletes can use to help improve body composition, and consequently athletic performance, through proper nutrition.

TIP 1: Eat like a caveman

Research into the diet of our ancient human ancestors – who were hunter-gatherers, not farmers – combined with

various scientific studies demonstrates that our twenty-first-century diet of cereals and grain-fed meat is not what humans evolved to eat. We were hunter-gatherers for two million years, while agriculture has been around for only 10,000 years, and the effects of the modern-day diet on young people's health are obvious.

Obesity is generally defined as having a bodyfat percentage of more than 25 percent for males and 30 percent for females. Government reports estimate that 15.5 percent of adolescents (ages 12 to 19) are obese, compared to 5 percent in 1980 and 11 percent in 1994; and 15.3 percent of children (ages 6 to 11) are obese compared to 5 percent in 1980 and 11 percent in 1994. Although athletes are generally leaner than non-ath-

Brooks' remarkable success with proper exercise and diet in just 6 weeks.



Before (4-12-02)



After (5-27-02)

letes because of higher levels of physical activity, the modern-day diet is not helping any of us.

The simplest and most effective way to get lean is to stay away from the modern-day diet and follow a "Paleolithic diet"; that is, choosing foods that approximate what a caveman would have eaten, concentrating on the animal proteins and green vegetables available today. One favorite motto for the Paleolithic diet is "If it wasn't growing on the earth 10,000 years ago and you can't kill it with a stick, don't eat it!"

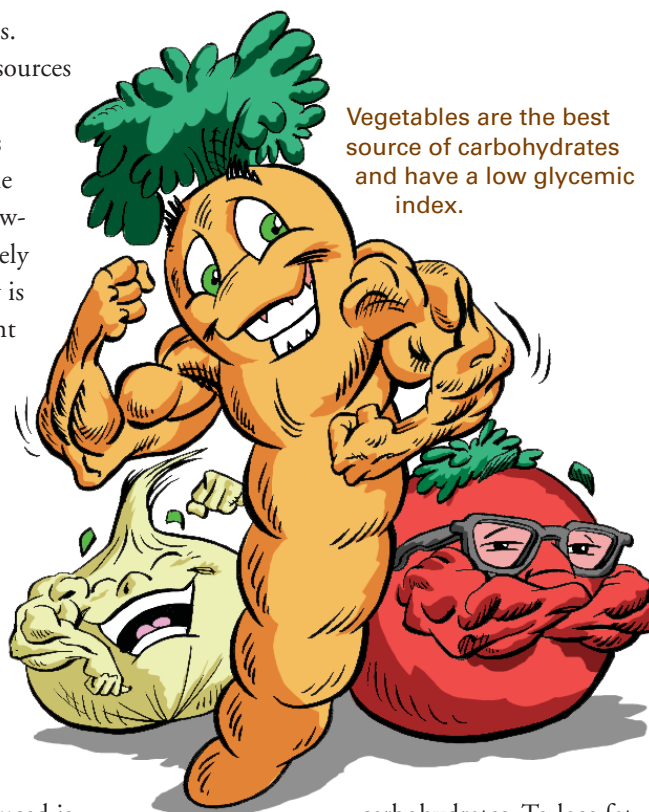
TIP 2: Avoid high-glycemic foods

The term glycemic index (GI) has been around since the early 1980s. It is a relative scale of carbohydrate's ability to

raise blood glucose levels. Vegetables and protein sources are relatively low on the glycemic index, whereas bagels, rice cakes and the low-fat scams such as low-fat ice cream are extremely high on the index. Why is this important for weight loss?

When glucose enters the bloodstream, the pancreas secretes the hormone insulin. Insulin's main function is to facilitate the transport of glucose into the cells for energy, storage and maintenance. At any given time, the amount of insulin produced is directly proportionate to the amount of glucose present.

High-glycemic-index foods will be broken down into glucose faster and therefore enter the bloodstream faster, a condition that causes more insulin to be produced. The rapid rise of insulin causes too much glucose to be taken up by the cells, which results in low blood sugar (hypoglycemia). This situation in turn stimulates the appetite for more



carbohydrates. To lose fat and live longer, eat fewer carbohydrates. The mass media, reinforced by the Surgeon General and the medical community, told us dogmatically for years that obesity is caused by the excessive consumption of fat, and that cutting out fat will make us lose weight and live longer. Nowadays, there is a total turnaround among the medical community. Pioneers such as Dr. Robert C. Atkins and Mauro Di Pasquale who

healthy because of their low fat content, such as soft drinks and fruit juices, now have been shown to undermine good nutrition.

TIP 4: Stay hydrated

For general good health and also to lose fat or gain muscle, it's vital to stay well hydrated. Unfortunately, water is often the most neglected nutrient. Dehydration leads to higher cortisol output, with negative repercussions ranging from increased oxidative stress to the brain to increased fat storage. The best indication that you are staying well hydrated is that your morning urine will be clear and odorless.

TIP 5: Never go hungry

Skipping meals leads to excessive hunger, which can result in overeating. Learn how to cook and prepare meals in advance so you avoid the temptation of fast food. Keeping a food diary will help with your meal planning. Often the reason we resort to fast food is that we haven't made the effort to plan what we are going to eat.

To achieve consistency in your meal planning, you must be disciplined. Too many trainees fail to achieve their goals because they lack discipline. Don't be one of them: Commit to your eating plan.

TIP 6: Eat more protein

Protein builds muscle; strive to include it every time you eat. Here are four other reasons to consume protein at every meal:

1. Protein prevents the yo-yo pattern in blood sugar levels so you won't experience the intense hunger pains associated with low blood sugar.
2. Protein prevents overeating when you finally eat.
3. Protein makes digestion much easier by keeping the flow of food

Skipping meals leads to excessive hunger, which can result in overeating.

food. The greater quantity of food will overload the digestive system, resulting in poorly digested food and weight gain.

TIP 3: Consume fewer carbohydrates

Contrary to popular belief, it's not the fat in food that makes us fat but the

used to be ridiculed by their peers are now applauded for their brilliance. More and more people are becoming better educated and realizing that the former staples of the famous Food Guide Pyramid (such as pasta, grains and rice) are actually the enemy. Foods that used to be considered intrinsically

throughout the digestive tract moving at an even pace.

4. Protein elevates the metabolism rate so that bodyfat levels remain low.

Americans tend to concentrate on only four solid protein sources: beef, eggs, poultry and tuna. The problem with relying solely on these protein foods is you could become allergic to them; among the most common allergens are beef, eggs, chicken and milk. Avoid eating the same protein source two days in a row; choose from a variety of other protein foods such as shrimp, scallops, turkey, buffalo, venison and ostrich.

TIP 7: Favor solid foods over liquid nutrition

Although there is no problem with an occasional protein shake, most meals should be solid instead of liquid. Here are four reasons why solid is better:

- Solid food burns fat more effectively than liquid food.
- Solid food, particularly low-glycemic choices, provides more even insulin levels throughout the day and regulates cortisol output more favorably.
- Solid food provides a wider variety of nutrients.
- Solid food satisfies the appetite.

TIP 8: Take a complete multivitamin/mineral nutritional aid

It's difficult to exercise to keep your weight under control if you're sick. The American Medical Association recommends a multivitamin/mineral nutritional aid to avoid nutrient deficiencies that may cause illness or disease. Use only pharmaceutical-grade products as one out of four nutritional aids are tainted with substances that may cause you to fail a drug test.



Fish oils are one of the most important nutritional aids for helping you achieve rapid physique transformation.

TIP 9: Take a fish oil nutritional aid

Fish oils are one of the most important nutritional aids for helping you achieve rapid physique transformation. Fish oils increase utilization of fat stores and decrease fat storage. One reason is that two components in fish oils (eicosapentaenoic acid, or EPA; and docosahexaenoic acid, or DHA) help maintain the flexibility of cell membranes and make the insulin receptors more sensitive to circulating levels of insulin.

There are numerous other benefits of taking fish oils. Fish oils can markedly reduce morning stiffness and reduce inflammation. They also help regulate the blood supply to the brain, which is essential in maintaining focus in weight training sessions.

TIP 10: Have your bodyfat accurately measured

Weight loss in terms of pounds lost on the scale doesn't always reflect progress in bodyfat reduction. For example, in a severely restricted diet you will at first lose glycogen and water, giving the illusion of rapid progress. However, trying to lose too fast can be quite detrimental to your health. For these reasons, you should use only bodyfat levels as your true measure of fat loss.

To accurately assess your bodyfat levels, go to a skilled exercise physiologist for a skin caliper test. It is largely agreed among body composition experts that the sum of 10 sites can accurately measure changes in bodyfat.

TIP 11: Don't count calories

Although diets that focus on counting calories are still popular, counting calories is largely a waste of time. When you count calories you tend to become obsessive about it or you get so bored with counting that you tend to eat the same bland diet so you don't have to count. Instead of focusing on calories, concentrate on good nutrition. **BFS**



Strength Coach Charles Poliquin performs a bodyfat test using skin calipers.

FIGURE 1

1100 CALORIES PER DAY

Breakfast: 3 oz. smoked salmon, sliced cucumbers and tomatoes

Lunch: 4 oz. broiled sole or flounder cooked with 1 tsp. butter and sprinkled with Parmesan cheese (or other serving of seafood), 1/2 cup cooked vegetable, mixed green salad with 1 tsp. oil

Dinner: 4 oz. wood-smoked or broiled salmon, 1/2 cup cooked brown rice or vermicelli pasta (Pastariso brand), 1/2 cup tomato sauce with extra oregano, thyme and garlic, grilled vegetables with 1 tsp. olive oil

Snacks: Your choice of . . . Roasted garlic or almond butter on whole-grain cracker or celery; protein shake with freshly ground flaxseed added; handful of raw almonds, hazelnuts, walnuts, brazil nuts or pumpkin seeds; fresh green vegetable juice; an organic apple, pear or grapes; sugar-free yogurt; rice cakes with nut butter; 1 whole-grain muffin with 1 tsp. no-sugar-added jam; guacamole and fat-free chips; fresh or dried organic fruit of any kind; 2 oz. cheese; 2 oz. lean hormone-free meat with mustard; hard-boiled egg

Beverages: Your choice of . . . Green drinks: Green Magma, Kyogreen or Green Kamut: 1 tsp. 1-3 times per day in water; Herbal teas: cinnamon, chamomile or green tea with cinnamon stick

FIGURE 2

1800 CALORIES PER DAY

Breakfast: 3 eggs, 3/4 cup oatmeal, 1 tsp. slivered almonds, 1 tsp. butter

Lunch: 5 oz. turkey white meat, Dijon mustard, gravy, or other sugar-free sauce or condiment, 2 cups spinach salad with 2 Tbsp. Caesar dressing, handful of cashews

Dinner: 6 oz. almond-crusted broiled red snapper, 1 cup steamed broccoli, 1 baked yam, 1 tsp. butter

Snacks: Your choice of . . . 1/2 small fruit, 1 oz. cheese, 1 small handful of nuts; 1 oz. cheese, 36 calories of crackers, 1 thin slice avocado; 1 oz. meat, 1 slice bread, 1 tsp. canola mayonnaise; 1 hard-boiled egg; small handful of grapes and nuts

Beverages: Your choice of . . . Green drinks: Green Magma, Kyogreen or Green Kamut: 1 tsp. 1-3 times per day in water; Herbal teas: cinnamon, chamomile or green tea with cinnamon stick

FIGURE 3

2400 CALORIES PER DAY

Breakfast: 1-8 oz steak, 1 handful of pecan nuts

Lunch: 2 broiled lamb chops, 1 cup barley (herbs and rice wine vinegar), 8 cooked asparagus, spinach salad, 2 tsp. vinaigrette dressing

Dinner: 6 oz. stir-fried fish with 1 cup snow pea pods, onions, bean sprouts, red pepper

Snacks: Your choice of . . . Handful of raw nuts (almonds, brazil nuts, cashews, hazelnuts, sesame seeds, walnuts); small sugar-free yogurt; raw vegetables; 1 fruit (organic apple, pear or grapes); air-popped popcorn; fiber bar; hard-boiled egg; sugar-free rice cakes with nut butter; roasted garlic or almond butter on celery; protein shakes with freshly ground flaxseeds added; 1 whole-grain muffin with 1 tsp. no-sugar-added jam; guacamole and fat-free chips; 2 oz. cheese; 2 oz. lean hormone-free meat

Beverages: Your choice of . . . Green drinks: Green Magma, Kyogreen or Green Kamut: 1 tsp. 1-3 times per day in water; Herbal teas: cinnamon, chamomile or green tea with cinnamon stick

FIGURE 4

3400 CALORIES PER DAY

Breakfast: 4-egg omelet with onions, pepper, tomato, mushrooms, 1/2 pink grapefruit, 1 Tbsp. almond butter on spelt bread

Lunch: 8 oz. tuna, 1 Tbsp. mayonnaise, 2 avocado slices, onions, 2 pieces whole-grain bread, 4 oz. cole slaw, 1 apple

Dinner: 8 oz. roast beef, 1 slice cheese, tomato, onion, lettuce, Dijon mustard, 1 cup brown rice, 1 orange

Snacks: Your choice of . . . Handful of raw nuts (almonds, brazil nuts, cashews, hazelnuts, sesame seeds, walnuts); small sugar-free yogurt; raw vegetables; 1 fruit (organic apple, pear or grapes); air-popped popcorn; fiber bar; hard-boiled egg; sugar-free rice cakes with nut butter; roasted garlic or almond butter on celery; protein shakes with freshly ground flaxseeds added; 1 whole-grain muffin with 1 tsp. no-sugar-added jam; guacamole and fat-free chips; 2 oz. cheese; 2 oz. lean hormone-free meat with mustard.

Beverages: Your choice of . . . Green drinks: Green Magma, Kyogreen or Green Kamut: 1 tsp. 1-3 times per day in water; Herbal teas: cinnamon, chamomile or green tea with cinnamon stick

FIGURE 5

BIGGER FASTER STRONGER



DAILY FOOD PLANNER

Day: _____

MEAL	FOODS TO EAT	QUANTITY	FOODS CONSUMED	QUANTITY
BREAKFAST				
LUNCH				
DINNER				
SNACKS				

On a scale of 1 to 10, how would you rate your diet today? _____

A single diet plan does not work for everyone, and the research now available about proper nutrition is overwhelming. One extremely readable and practical book for coaches and high school students that provides easy-to-follow nutrition

guidelines and numerous sample diets is *The German Body Comp Program*, available through BFS. And for serious athletes who want to learn more about good nutrition theory, two excellent books to start with are *The Paleo Diet* and the *Paleo Diet for Athletes* by Loren Cordain, PhD. Happy reading, good luck with your personal nutrition program, and don't be a couch potato—no stale TV flashbacks for you! BFS