

# Learning Your Body Type

ANYONE WHO HAS spent time at a beach, swimming pool, or gym locker room can attest to the fact that human beings are born with a variety of different physical characteristics. Some are taller or shorter, lighter or darker, wider or narrower in the shoulders, longer and shorter in the leg; they have higher or lower natural levels of endurance, differing types of muscle cells, more or fewer muscle and fat cells.

One popular method of categorizing all these various body types recognizes three fundamentally different physical types, called somatotypes:

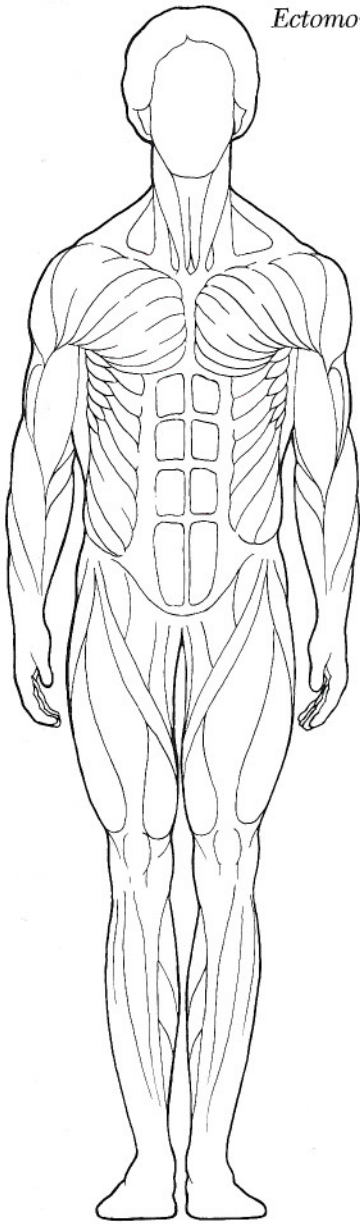
The *ectomorph*: characterized by a short upper body, long arms and legs, long and narrow feet and hands, and very little fat storage; narrowness in the chest and shoulders, with generally long, thin muscles.

The *mesomorph*: large chest, long torso, solid muscle structure, and great strength.

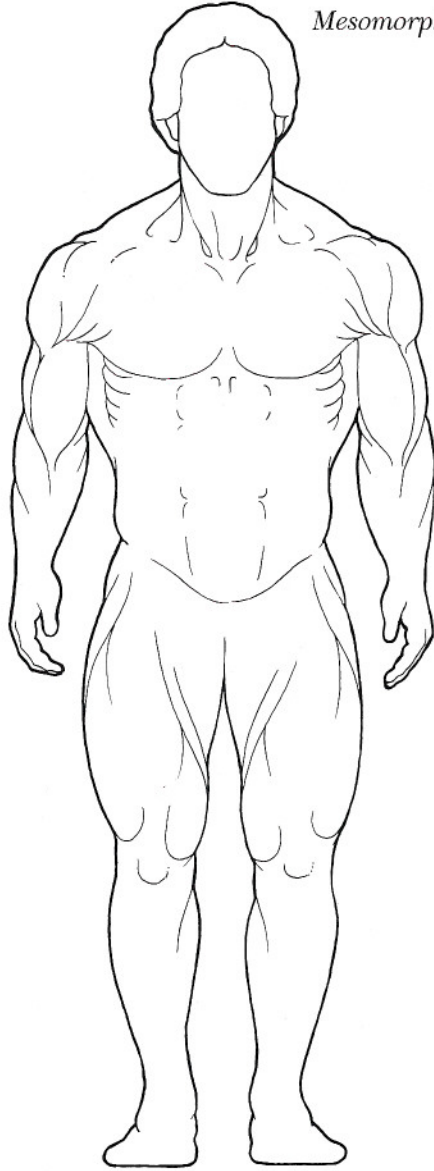
The *endomorph*: soft musculature, round face, short neck, wide hips, and heavy fat storage.

Of course, no one is entirely one type but rather a combination of all three types. This system of classification recognizes a total of eighty-eight subcategories, which are arrived at by examining the level of dominance of each basic category on a scale of 1 to 7. For example, someone whose body characteristics were scored as ectomorphic (2), mesomorphic (6), and endomorphic (5) would be an endo-mesomorph, basically a well-muscled jock type but inclined to carry a lot of fat.

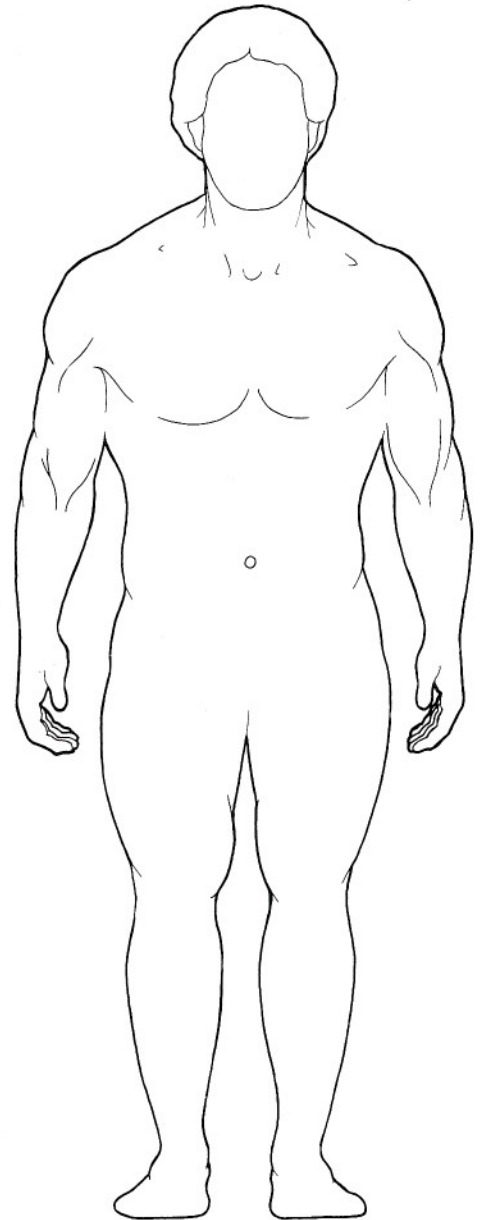
*Ectomorph*



*Mesomorph*



*Endomorph*

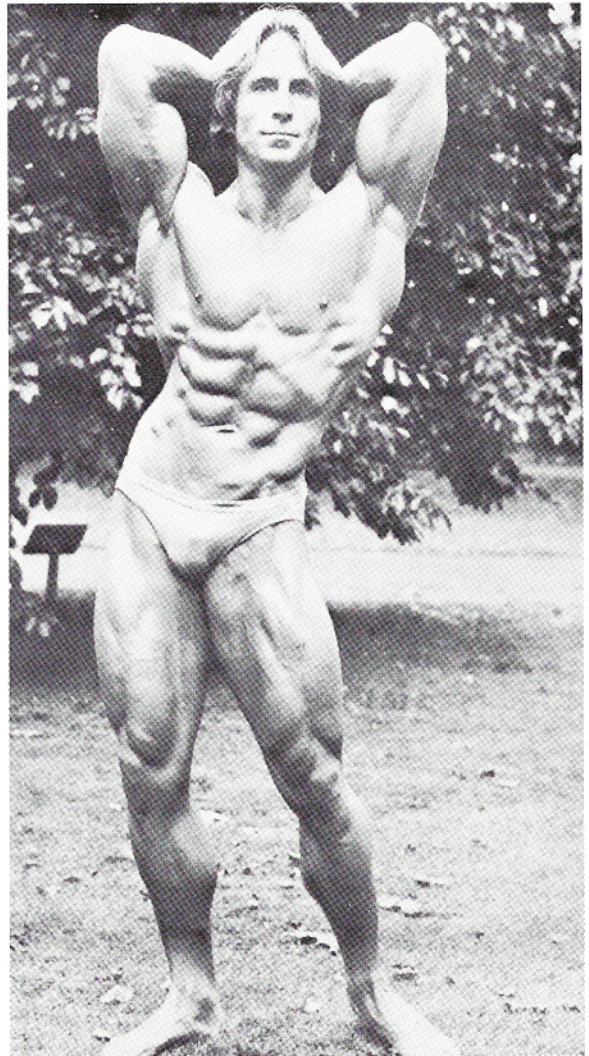
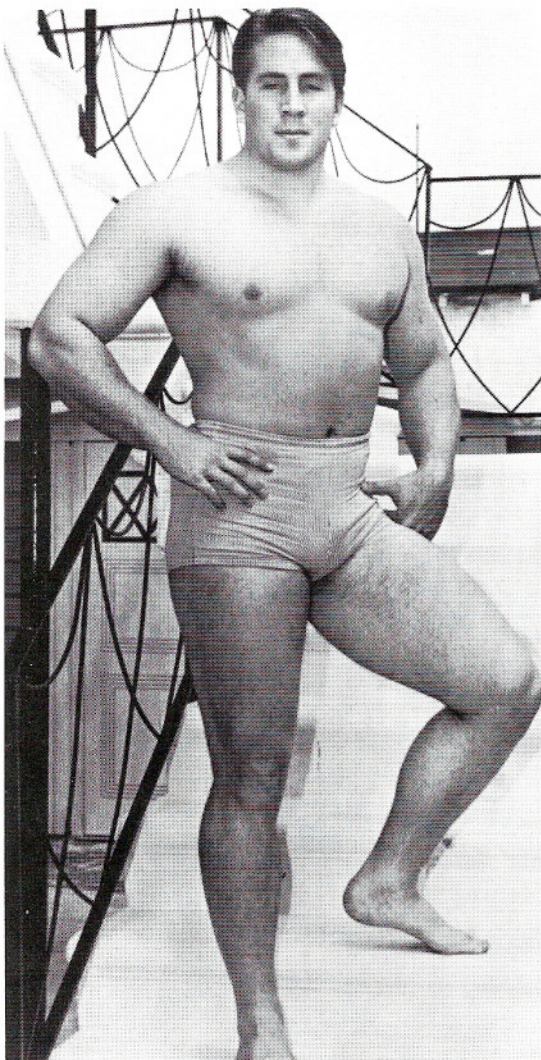


Although the fundamentals of bodybuilding training apply to all the somatotypes, individuals with different body types often respond very differently to training, and what works for one type may not necessarily work for another. Any body type can be developed by proper training and nutrition, but individuals with different body types will find it necessary to initially approach their training with different objectives, even though they may share the same long-term goals.

## UNDERSTANDING YOUR BODY TYPE

There have been champions with every kind of body type. Steve Davis, a well-known competitor in the 1970s, once weighed in at around 270 pounds, which meant he tended heavily toward the endomorphic. It was necessary for Steve to lose a lot of fat while maintaining muscle mass in order to win bodybuilding titles. Mr. Olympia Dorian Yates is one of

*Here is a good example of how bodybuilding can change your body. Steve Davis before, looking very endomorphic . . .*



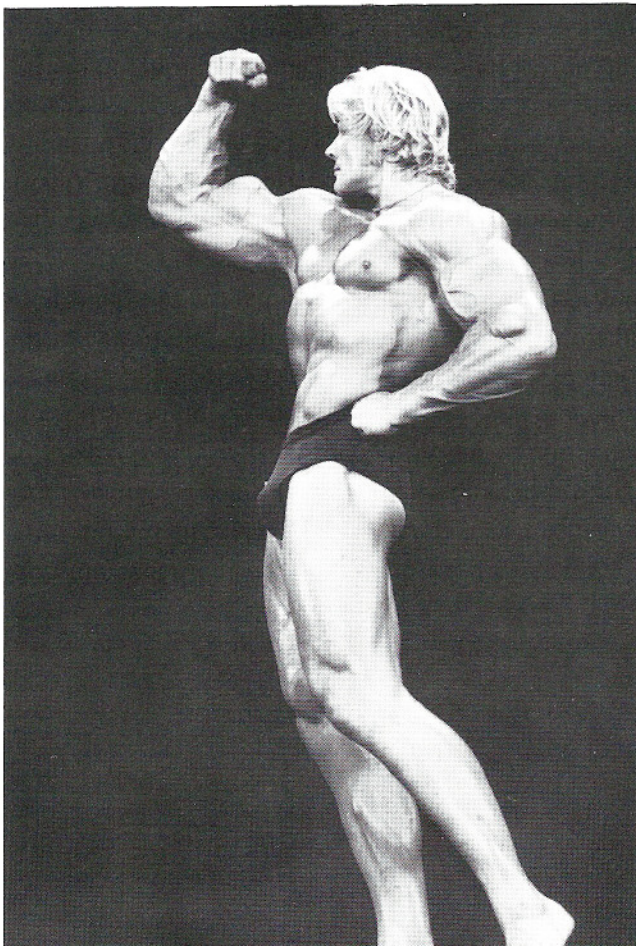
*. . . and after, looking very mesomorphic*



*Nasser El Sonbaty, an endo-mesomorph*



*Frank Zane, an ecto-mesomorph*

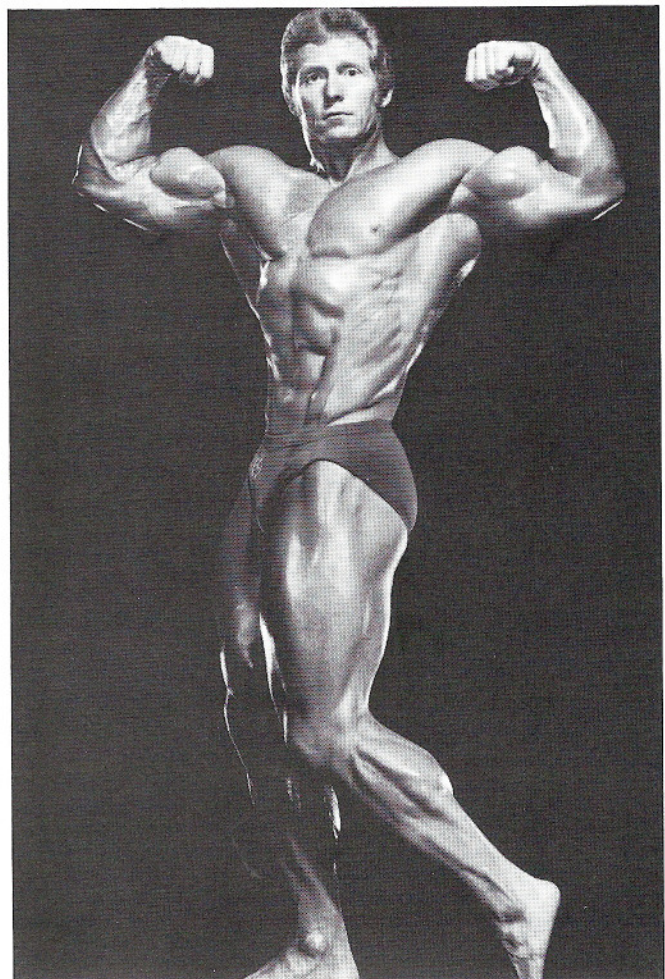


*Dave Draper—classic endo-mesomorph*

*Chris Dickerson—endo-mesomorph*



*Flex Wheeler—ecto-mesomorph*



*Ken Waller—endo-mesomorph*

*Lee Priest—endo-mesomorph*



*Dorian Yates—mesomorph*



*Tom Platz—another classic mesomorph*

the biggest champions of all time; in contest shape he weighs in at close to 270 pounds. However, during the off-season Dorian gets up to well over 300 pounds, which indicates his body type tends toward the endo-mesomorphic. The legendary Dave Draper was another endo-mesomorph (although, having less muscle, he'd be classified as more endomorphic than Dorian), tending to get heavy and smooth easily, but able to stay lean and hard for competition by hard training and strict diet.

Frank Zane, on the other hand, is much more ectomorphic. Muscle-mass gains have always taken Frank a long time to achieve, but this did not keep him from becoming Mr. Olympia three times. Bodybuilders like Frank and Shawn Ray, who at 200 pounds have managed to defeat most of the more massive competitors, are not naturally powerful, muscular individuals. Their muscular development and bodybuilding excellence have come about mostly by a lot of hard, dedicated work. "Muscle did not come to me naturally," says Larry Scott, the first Mr. Olympia and another bodybuilder tending toward the ectomorphic. "I was one of those 98-pound weaklings who was motivated to use bodybuilding training to get bigger."

In my own case, I am mesomorphic enough to be able to build muscle mass relatively easily, and at one point bulked up to a solid 240 pounds, but my natural physique has always tended to be lean, which makes me more an ecto-mesomorph than pure mesomorph or an endo-mesomorph.

Flex Wheeler, who is so renowned for his shape and proportion, is yet another ecto-mesomorph. Look at Flex and you'll see how relatively small his bones and joints are, despite his muscle size, especially compared to a powerfully built competitor like Dorian. In bodybuilding terms, Flex, Frank Zane, and I would be characterized as having Apollonian physiques (muscular, but tending toward the ectomorphic, more aesthetic than brute powerful), while thicker bodybuilders like Dorian, Nasser El Sonbaty, Tom Platz, Casey Viator, and Mike Mentzer would be classified as Herculean (very mesomorphic or endo-mesomorphic). Both Apollonian and Herculean physiques can have outstanding aesthetics, but the look is very different. Nowadays, the Apollonian physique is generally considered more artistic or beautiful because of its lines and proportion, but if you look back at classic art you frequently find the Herculean physique to be the more admired.

Of course, the top pro bodybuilders nowadays are so massive and well developed that it's sometimes hard to separate them into different body-type categories. But go to almost any amateur contest and the difference between the various body types will be much more apparent.

Really, though, no top bodybuilder can be *too much* an ectomorph or an endomorph. His body would lack proper proportion, symmetry, muscle mass, and definition. Remember, bodybuilding is not just about building muscle; it involves the maximum *aesthetic* development of muscle. Lifeguard-type physiques (lean and defined) can be very pleasing to look at, but lack the mass necessary to compete at the top levels in bodybuild-

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ing. Thick, massive, super-mesomorphic bodies are great for weightlifters, shot-putters, and football linemen, but the aesthetics of this kind of physique don't make it on the bodybuilding stage.

Understanding your own body type can save you a lot of time and frustration. An ectomorph who trains like an endomorph is likely to overtrain and not grow. The endomorph who thinks he is more mesomorphic will grow, but will always have trouble keeping his body fat down. Certain principles of training are the same for everybody. But how you organize your training and how you integrate it with diet and nutrition can be profoundly different depending on what kind of body type nature has given you.

## **METABOLISM AND MUSCLE-BUILDING**

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One of the factors that helps create different body types is metabolism. Some people naturally burn more calories than others. Some bodies seem naturally designed to turn food energy into muscle or fat while others turn this energy into fuel for exercise. However, as your body changes, so does your metabolism. Muscle burns calories, so a naturally heavy endomorph will find it easier to get lean as he builds more and more muscle mass. Also, the body is very adaptable, and the literally thousands of various metabolic processes that are going on all the time tend to alter in response to the demands you put on them—turning protein intake into muscle, for example, or increasing your ability to metabolize body fat for energy.

If you are extremely lean or extremely heavy, you should take the precaution of having your thyroid function checked by a physician. The thyroid gland plays a major role in regulating metabolism. When it is underactive (hypothyroid) it is very difficult to burn off excess body fat, and when it is overactive (hyperthyroid) putting on any additional body weight becomes almost impossible. However, I am strongly *against* using thyroid as a means of increasing your metabolism and “cutting up” (achieving a state of high definition) when your own thyroid levels are within normal limits. This is dangerous in a number of ways, including the risk that you will permanently damage your natural thyroid function.

## **ECTOMORPH TRAINING**

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The extreme ectomorph's first objective is gaining weight, preferably in the form of quality muscle mass. He will not have the strength and endurance for marathon training sessions, will find that muscle mass develops very slowly, and will often have to force himself to eat enough to ensure continued growth. Therefore, for the ectomorph I recommend:



1. Include plenty of power moves for a program that builds maximum mass. Your program should tend toward heavy weight and low reps (in the 6- to 8-rep range after proper warm-up).

2. Learn to train intensely and make every set count. That way you can keep your workouts relatively short and still make substantial gains (perhaps 14 to 16 sets per major body part rather than 16 to 20). Make sure to get enough rest between sets and give yourself enough time to recuperate between workouts.

3. Pay careful attention to nutrition; take in more calories than you are accustomed to, and if necessary, use weight-gain and protein drinks to supplement your food intake.

4. Remember, you are trying to turn food energy into mass, so be careful not to burn up too much energy with *excessive* amounts of other activities such as aerobics, running, swimming, and other sports. Some cardio exercise is both desirable and necessary for good health, but anyone who spends hours a day expending large amounts of physical energy outside the gym will have a lot more trouble building muscle while in the gym.

## MESOMORPH TRAINING

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The mesomorph will find it relatively easy to build muscle mass, but will have to be certain to include a sufficient variety of exercises in his program so that the muscles develop proportionately and well shaped rather than just thick and bulky. Therefore, for the mesomorph I recommend:

1. An emphasis on quality, detail, and isolation training, along with the basic mass and power exercises. You build muscle easily, so you can begin working on shape and separation right from the beginning.

2. Mesomorphs gain so easily that they don't have to worry much about conserving energy or overtraining. A standard workout of 16 to 20 sets per body part is fine, and you can train with as much or little rest between sets as suits you.

3. A balanced diet with plenty of protein which maintains a calorie level that keeps the physique within 10 to 15 pounds of contest weight all year long. No bulking up 30 to 40 pounds and then having to drop all of that useless weight for competition.

## ENDOMORPH TRAINING

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Generally, the endomorph will not have too much difficulty building muscle, but will have to be concerned with losing fat weight and then being very careful with diet so as not to gain that weight back. Therefore, for the endomorph I recommend:

1. A higher proportion of high-set, high-repetition training (no lower than the 10- to 12-rep range), with very short rest periods so as to burn off as much fat as possible. Doing a few extra sets of a few extra exercises while you are trying to get lean is a good idea.

2. Additional aerobic exercise such as bicycle riding, running, or some other calorie-consuming activity. Training in the gym burns calories, but not as much as cardio exercise done on a continuous basis for 30 to 45 minutes or more at a time.

3. A low-calorie diet that contains the necessary nutritional balance (see page 703). Not zero anything, but the minimum amount of protein, carbohydrates, and fats, with vitamin and mineral supplements to be certain the body is not being deprived of any essential nutrients.

## BODY COMPOSITION TESTING

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Even though nature has given you a particular body type, when you add lean body mass and cut down on fat weight you are actually changing the composition of your body. It is often difficult to keep track of these developments because your training is creating more muscle mass, so your body composition can change quite a lot without your realizing it. The mirror, the scale, and the tape measure are always useful, but sometimes they don't tell you enough.

In addition to simply studying yourself in the mirror, the best way to keep track of these physical changes is by some form of body composition testing. This testing gives you an indication of the percentage of muscle your body has compared to the amount of fat. So the test will help track your progress as you gain muscle and lose fat. The most common types of body composition testing are:

- skin-fold testing. Calipers are used to pinch folds of skin at various parts of your body, which indicates how much fat is under the skin, and this is used to calculate body composition.
- water-emersion testing. The subject is weighed out of the water, then in the water, and certain measurements such as the residual capacity of the lungs are taken. The numbers are applied to a formula to determine the ratio of fat to lean body mass—which is composed of muscle, bone, and internal organs.
- electrical impedance testing. A low-voltage current is passed through the body. Since fat, muscle, and water create different amounts of resistance to electrical current, the amount of resistance encountered allows for calculation of body composition.

However, while measuring body composition is useful in ascertaining the results of a diet or what changes training is creating in your physique,

be aware that the *direction of change* from one test to another is more significant than the specific results you get in any one test. The reason is that all the test numbers are run through formulas that make certain assumptions about the body that don't necessarily apply very well to the extreme development of serious bodybuilders. So if you are tested as 12 percent body fat in one session and 9 percent two weeks later, you can be pretty sure you're headed in the right direction—assuming you are taking the same type of test administered in the same way, so that the retest accuracy is high.

I have heard some ridiculous claims made for body fat testing, such as by athletes asserting they have as little as 3 percent body fat. Any doctor will tell you that 3 percent might be the fat level of a *cadaver*, but not a strong, healthy athlete. In tests conducted at IFBB and NPC contests, using a variety of methods, it was shown that the bigger the bodybuilder the higher the fat percentage when the competitor is really ripped. So a massive bodybuilder might be ripped at 12 percent body fat measurement, while a lightweight amateur might look great at 7 or 8 percent.

Why is this? Because what we traditionally think of as fat is not the only fat in your body. There is also intramuscular fat, which is the fat in the muscle itself. So if a really big bodybuilder continues to diet past a certain point he is likely to just *shrink* rather than getting more cut-up. So while body composition testing is useful, don't forget to use the mirror or photographs to keep track of how you look. Remember, the judges don't take body fat tests into consideration during a contest. They go only by what they see. And you need to do the same thing.