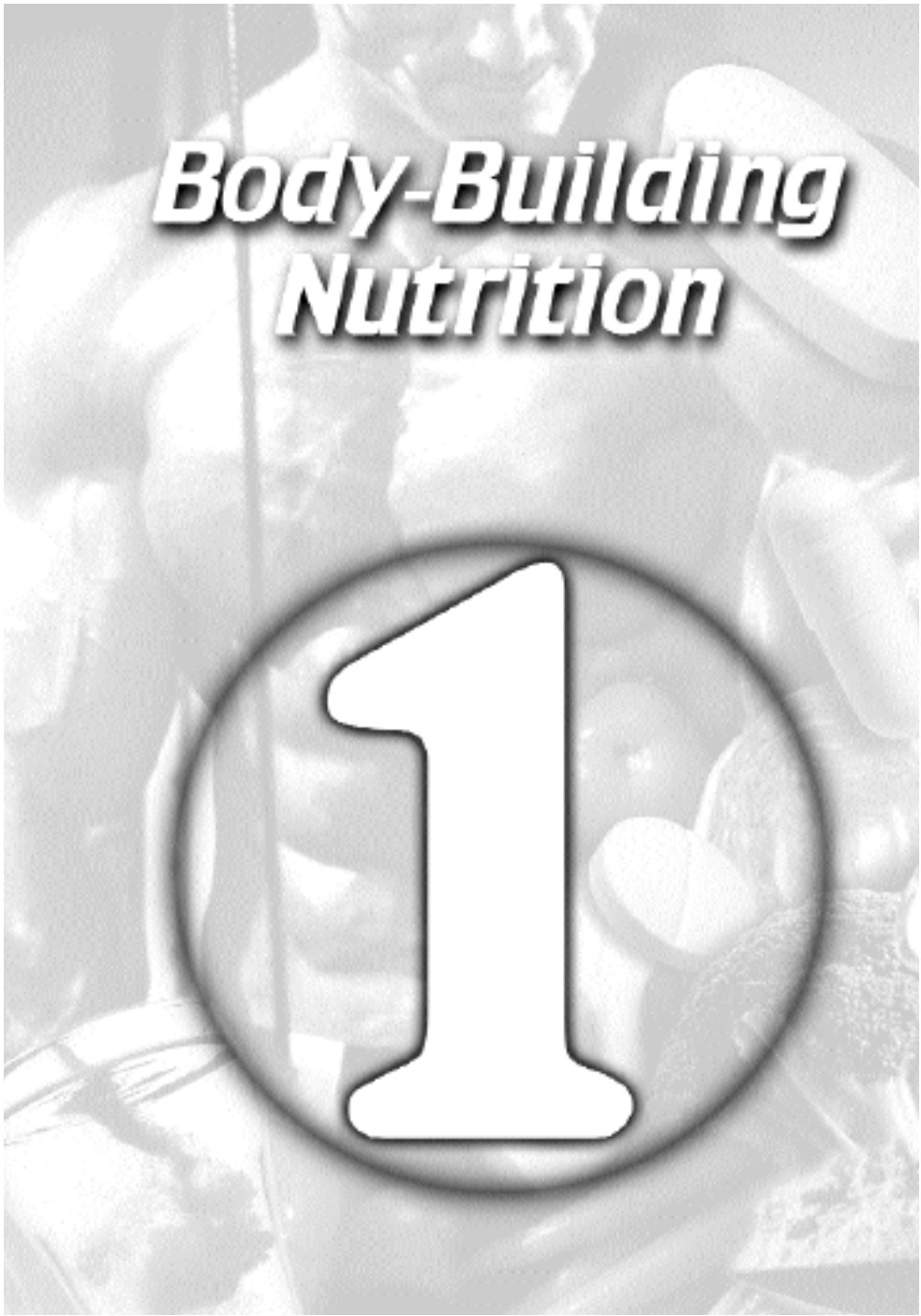
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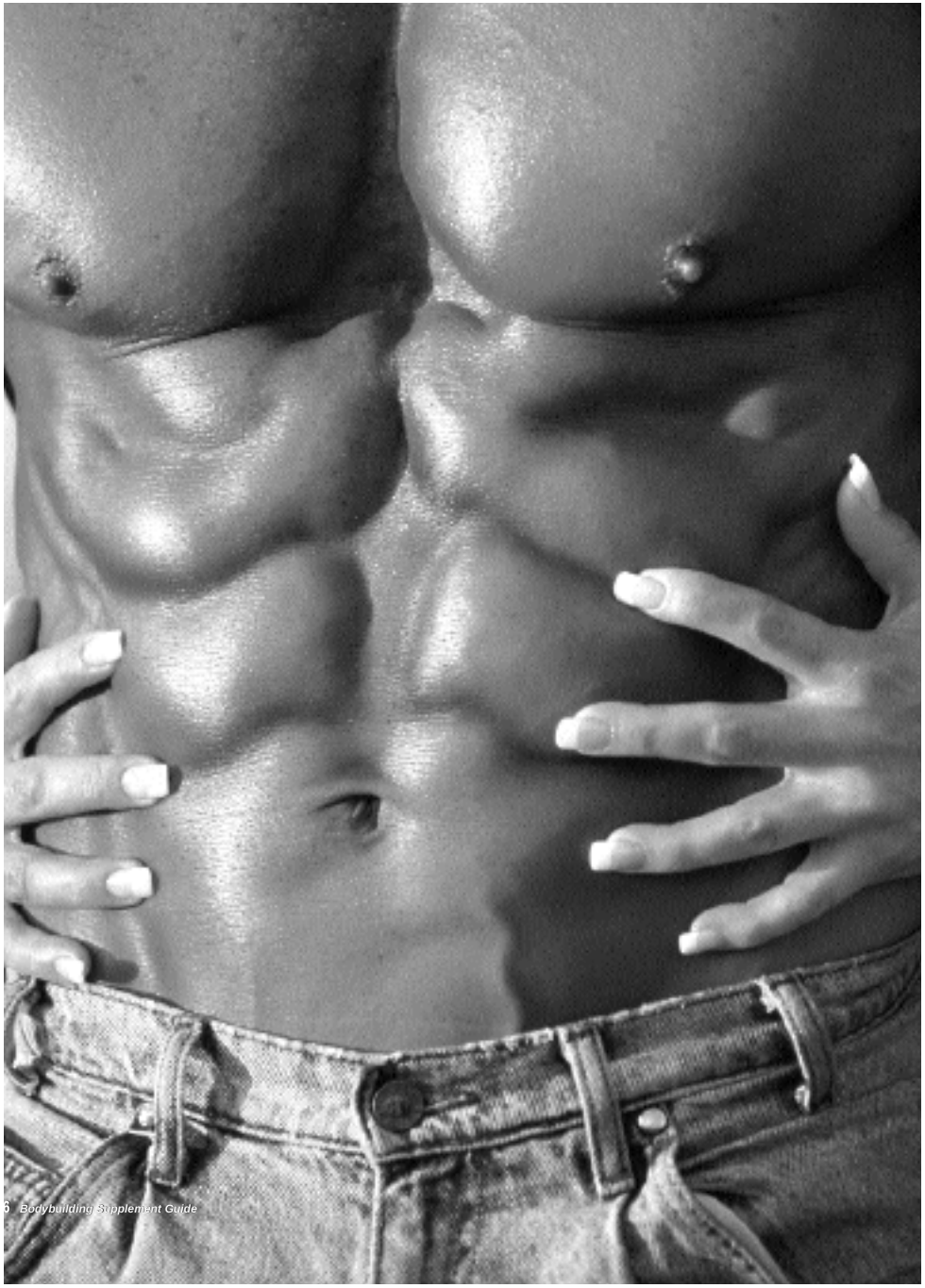

Diet Facts, Fallacies and Strategies for Building Muscle and Burning Fat

by Jeffery Stout, Ph.D.

If the human body could list its top-10 most efficient processes, adaptation would probably rank number one. Evolution over millions of years has turned the species into a form that's geared not for the production of a slim waist or muscular arms, but for survival. In ages past, periods of famine were common. Yet the human race prevailed. The catch, unfortunately, is that those who have a considerable propensity to store fat survived. Thus, the 20th-century human is someone who has adapted to years of food shortages through a nauseating ability to maintain a pear-shaped torso. So much for survival of the fittest.

Consequently, when the innocent dieter initiates a restrictive diet, the body's response is to kick into survival mode. That, in essence, is a signal to store fat to offset an anticipated period of insufficient calorie intake. Compounding matters is a gradual decline of the body's metabolism, rendering the task of fat loss even more difficult.

The process is no different from any other the body performs when encountering change—it adapts. Instead of perceiving food as the culprit, you should view it as fuel. Food is fuel for an increasing metabolism, fuel for the release of fat-burning and muscle-building hormones and, finally, fuel for a healthy diet and a normal lifestyle. When you eat food in precise amounts, your body must adapt; however, it adapts to the notion that it will get the energy it needs. When it does, your body will respond with its own goodwill gesture, a liberation of its suddenly unnecessary fat stores.

Facts and Fallacies of Food

All food can be separated into three basic types: proteins, carbohydrates and fats. Together they form the basis of all diets and, along with exercise, ultimately determine changes in body composition. You achieve such changes through hormonal release, an increase in metabolism and the preservation and enhancement of muscle tissue.

Proteins are considered the body's building blocks for muscular repair, maintenance and growth. Adequate protein intake ensures the preservation of muscle tissue and enhances recovery from both strenuous workouts and daily activities. Since exercise causes significant damage to muscular tissue and subsequent growth requires adequate recovery, protein is often the missing factor. If you don't take in enough protein, your muscle may not be spared and you'll experience appreciable decreases in metabolism.

Fallacy 1: The RDA for Protein Is Sufficient

The recommended dietary allowance, or RDA, for protein is approximately .36 grams per pound of bodyweight. Based on that, a 200-pound man would require a mere 72 grams of protein daily. That may be sufficient for a sedentary individual, but when you factor in strenuous activity such as endurance or weight training, the RDA is grossly inadequate. In fact, research studies have suggested that consuming the RDA for protein during periods of intense training may lead to loss of muscular tissue.[1,2] It's apparent that protein requirements depend on an individual's activity level, to the extent that a range between .64 and .91 grams of protein per pound of bodyweight is appropriate.[1,,2]

The body's primary fuel for energy is derived from carbohydrates. They're especially important for aerobic activities and high-volume weight training and are also used during periods of recovery. As with protein, inadequate intake of carbohydrates can compromise exercise performance and duration; however, based on the recommendations of most dietitians, you might mistakenly believe

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that there are no perils involved in carbohydrate consumption.

Fallacy 2: The More Carbs the Better

Contrary to what's often uttered about the merits of carbohydrates, the fact remains that excess carbs lead to excess inches. With the exception of the overly lean individual who has a speedy metabolism, a situation in which weight gain is often the goal, overindulgence in high-carb foods can be as detrimental to waistlines as excess fat. While many people believe that spare carbohydrates are in large part stored for energy, it's more likely that excess carbs will be converted to bodyfat.[3] Furthermore, studies have shown that subjects can achieve identical improvements in body composition, strength and muscular endurance with diets in which as little as 40 percent of the calories come from carbohydrates vs. those that contain more than 60 percent carb.[4,5] Studies have also repeatedly demonstrated that the total calorie intake is the dominant factor in weight loss.[6,7]

It's obvious that fats have endured more than their share of abuse. Saturated fats, in particular, are considered a key contributor to heart disease, an epidemic that's claimed more lives than the flood in Genesis. Fats also carry more than twice as many calories per gram as either carbohydrates or protein. Though it's true that an excessive fat intake is the best way to make yourself resemble a blimp, it's also a fact that fat is necessary for proper metabolic function, for hormone production and as an energy source.

Table 1: Glycemic-Index Rankings of Foods
(All foods are rated in comparison to white bread, which is scored 100)

High	Moderate	Low
Instant rice (128)	Ice cream (87)	Grapefruit juice (69)
Crispix cereal (124)	Cheese pizza (86)	Green peas (68)
Baked potato (121)	White rice (83)	Grapes (66)
Cornflakes cereal (119)	Popcorn (79)	Linguine (65)
Rice Krispies cereal (117)	Oatmeal cookies (79)	Macaroni (64)
Pretzels (116)	Brown rice (79)	Orange (63)
Total cereal (109)	Spaghetti, durum (78)	Peach (60)
Doughnut (108)	Sweet corn (78)	All-Bran cereal (60)
Watermelon (103)	Oat bran (78)	Spaghetti, white (59)
Bagel (103)	Sweet potato (77)	Apple juice (58)
Cream of Wheat (100)	Banana (77)	Apple (54)
Grapenuts cereal (96)	Special K cereal (77)	Vermicelli (50)
Nutri-grain bar (94)	Orange juice (74)	Barley (49)
Macaroni and cheese (92)	Cheese tortellini (71)	Fettucine (46)
Raisins (91)	Chocolate (70)	Lentils (41)

Fallacy 3: Avoid Fat Entirely

Most American diets contain either too little or too much fat. Neither method is a successful tactic for weight loss. When examining what occurs with most restrictive diets, people assume that all dietary fat can only be deposited in adipose tissue. That's absurd. In reality the body uses dietary fat for energy when it's in a state of negative energy balance.[8] As long as your total calorie intake is less than what you expend, the percentage of fat in the diet isn't as significant as was once thought. Studies have also affirmed that subjects can achieve equivalent differences in weight loss with diets consisting of approximately 10 to 50 percent fat, as long as the total calorie consumption is identical. [6,7]

It's evident that the low-calorie, lowfat, high-carbohydrate diets that dietitians and others have been advocating for years are in fact fallacies. (More on the essential fats in Chapter 6.)

All Carbohydrates Are Not Created Equal

Now that you know to avoid excess carbohydrates, it's time to look at the type of carbs you should eat. Though all carbohydrates break down into glucose and are released into the bloodstream, the speed at which the process occurs varies drastically with different carbohydrates. The absorption rate is a critical factor in energy levels, fat reduction and overall health. Foods have been assigned a glycemic-index rating, a measure of how fast their carbohydrates enter the bloodstream to be used as energy or stored as glycogen, a preserved form of energy. High-glycemic foods are available quickly for use as energy; while that may seem optimal, in actuality they trigger a hormonal reaction that has reverse effects.

High-glycemic carbohydrates produce a rush of glucose into the bloodstream, elevating blood sugar levels dramatically. The sudden rise stimulates a release of the hormone insulin, which essentially negates the high-energy effects of glucose. The rapid release of insulin shuttles the glucose out of the bloodstream, effectively dropping energy levels to lethargic lows. To make matters worse, it also takes the fatty acid energy source with it, shoveling it into the fat cells for storage. High-glycemic foods, therefore, carry a double curse, keeping you fat and lazy.

While insulin promotes fat storage, growth hormone, or GH, effectively burns fat, builds muscle and improves the immune system.