

The Skinny On Popular Fad Diets

Do You Know Fact From Fad? People are losing weight eating bacon and eggs-others by eating only grapefruit or cabbage. Some claim to lose weight in their sleep or by breathing differently. Are these diets safe and based on scientific research? Or are marketing teams using isolated testimonials to dazzle the public with a diet's reputed success? The following diets are ten of the most popular on the market today. Click on each for an analysis of the benefits and disadvantages of each and whether they can be maintained for life.

Thousands of diet plans contribute to a \$40-billion-a-year weight-loss industry. The public wants to get thin and the entrepreneur wants to get fat with profits. Anyone can become a weight-loss guru with a hot marketing team, a few choice testimonials and a smooth presentation. However, while the weight-loss industry continues to grow, obesity has reached epidemic proportions.

Most diet plans are nothing more than low-calorie nutrition plans disguised by clever marketing gimmicks. Scientific-sounding "facts" and hocus-pocus "research" can dazzle and confuse the average consumer. Diet-plan marketers go to great lengths to explain how their diet can work for everyone, or claim that it is carbohydrate intake (or any other dieters "enemy-of-the-month) that is the culprit. However, the bottom line is that a caloric deficit (more calories burned than consumed) causes weight loss. The average American consumes 300 calories more today than he did 30 years ago. He also burns 260 less calories each day due to increased automation, technology and sedentary occupations. Increased caloric intake and decreased caloric expenditure means that the waistline of America is growing at an alarming rate.

While fad diets may initially offer rapid weight loss, the result is too often temporary, leaving the dieter defeated, angry and often with a few extra pounds just for good measure. The problem with fad diets is that they are just that—fads. The key to long-term weight loss is adopting a healthy lifestyle *for life*.

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Dr. Atkins Diet Revolution

This best-seller claims that dieters can lose all the weight they want by eliminating carbohydrates and sugar from their diets. With the lure of eating "forbidden foods," Dr. Atkins charges that processed carbohydrates and insulin, not excess calories, are responsible for obesity in the United States. The low-carb, high-protein plan consists of between 1,200 and 1,800 calories. This calorie range would result in weight loss no matter what combination of foods (carbohydrate, protein and fat) was employed.

Advantages:

The benefit to this diet is its simplicity and the fact that it is initially enjoyable for dietary fat lovers. Additionally, sticking to the proper calories (until the carbohydrate cravings overwhelm you) can be easy because a person can only consume so much protein and fat before getting sick of it for the day.

Disadvantages:

The downside to the plan is its reliance on protein. High-protein diets put the body into a state of ketosis, causing headaches, bad breath, nausea and carbohydrate cravings due to depleted glycogen stores. The plan is too high in saturated fats and too low in fruits, whole grains, calcium and fiber.

Plain and simple - rebound, which is exactly what happened to everyone who followed this same plan in the 1970s. The program did not work then and it will have no lasting success now.

An exhaustive search of peer-reviewed literature related to maintaining weight loss, including the only true records located at the National Weight Control Registry; revealed that not a single person accomplished this feat with this exact or similar regime.

Is this type of diet good for anyone?

If a person had medical complications due to obesity and refused to exercise and reduce calories appropriately for weight loss, a higher than traditionally recommended protein and fat intake may be an alternative to ameliorate symptoms.

*It takes more than insulin to store fat. Insulin is a complex hormone with myriad life giving functions and is only a mechanism that is used in the accumulation of fat stores when a person supplies the calories. The hormone does not cause the body to continually accrue fat unless a person regularly eats too much. Since humans can not live 5 minutes without insulin we must learn to live without eating in excess and then looking for something else to blame it on.

Long-Term Success:

Information from the National Weight Control Registry indicates that high-protein, low-carbohydrate diets are not maintained for life. After the initial weight loss, the dieter eventually rebounds if carbohydrates are reintroduced into the diet.

Dr. Atkins Diet Revolution was created by Robert C. Atkins, M.D.

Mastering the Zone

Mastering The Zone claims most people suffer from insulin imbalances that cause them to gain weight. According Barry Sears, consumption of protein, carbohydrate and fat in exact proportions, the imbalance is corrected and excess weight drops off. Living in the Zone also can prevent heart disease, diabetes, PMS, depression and cancer, according to Sears, who also claims that this plan can slow the aging process. Average caloric intake ranges from 1,000 to 1,700 calories per day.

Sears states that carbohydrates stimulate the release of insulin* which affects eicosanoids but neglects to tell you that protein also elicits an insulin response. An eicosanoid is a hormone that among other functions helps regulate inflammation, the blood's tendency to clot and the immune system. Bad eicosanoids are the result of insulin release according to Sears' book. No research exists to support Sears' proposed relationship between performance, fatness, diet, insulin, bad eicosanoids and disease.

Advantages:

The plan recommends lean protein sources, minimizing consumption of saturated fat. The typical American diet is not far from the 40/30/30 ratio of carbohydrate/protein/and fat.

One advantage to this type of diet is that the carbohydrate recommendations are higher than Atkins' plan. The typical American diet is not far from the recommended 40/30/30 ratio of carbohydrate/protein/and fat and may be ideal for certain individuals. However, just like the Atkins diet, the Zone removes carbohydrates to achieve the lower caloric intake necessary to promote weight loss.

Disadvantages:

Carbohydrates such as grains, fruit juices, pasta, starchy vegetables and bread are not prohibited by serving sizes are minute (1/4 c. cooked pasta, 1/8 c. baked beans, one-square-inch of corn bread). Choices, combinations and portions can be odd and unappetizing. For example, a snack choice includes two hard-boiled egg whites, half an apple and three almonds.

The concept is the same as other high-protein diets but less aggressive and the smoke screen differs. Although the suggested foods are healthier than the typical American diet and fall into a percentage they normally eat, the science is incorrect and used to disguise the low-calorie recommendations. Because calories are based on protein requirements, the number of calories that the average female consumes on this food plan is approximately 975. For the average male, meanwhile, the amount is 1,700 calories. Based on the first law of thermodynamics, at this caloric intake, weight loss is guaranteed no matter what you consume. However, due to the very low calories, long-term success would be very challenging, and there is no such thing as a "one size fits all" diet as the author claims.

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Long-Term Success:

Because the plan is based on very low calories and strict combinations of protein, carbohydrate and fat at every meal, long-term success would be very challenging.

Created by Barry Sears, Ph.D.

Eat Right For Your Type

Peter J. D'Adamo, a licensed naturopath, claims that an individual's blood type should determine what foods to eat and which ones to avoid. He asserts that when a particular blood type consumes "off-limit" foods, the effect is akin to a transfusion of mismatched blood. His theory attempts to tie the evolution of man to changing blood types and diets. Recommended caloric intake varies widely from day to day.

The rationale behind this plan is the biggest stretch of all and reaches comic proportions. His theory tries to tie in the evolution of man with changing blood types and diets. Any long term success with this plan is an accident based on switching food intake to something more agreeable to your digestive physiology or your frame of mind when you entered the program (in other words, how important was it for you to lose weight).

Advantages:

The plan emphasizes lean sources of protein in addition to recommending several servings of fruits and vegetables for all diets.

Disadvantages:

Current scientific research does not support D'Adamo's claim that blood type determines an individual's response to certain foods. Further, most critics of the plan cite the lack of a relationship between blood type and disease as well as the false assumptions made about the diet of early man. And, of course, there is no record of success with this plan.

Long-term Success:

Recommended menus include unusual and hard-to-find foods, and meal preparation for families with varied blood types could prove challenging over the long term.

Sugar Busters!

Similar to Mastering the Zone and Dr. Atkins New Diet Revolution, the Sugar Busters diet claims that carbohydrate (sugar) causes obesity and insulin resistance in the United States. The authors advocate the elimination of carbohydrate from the diet, claiming that one will not overeat foods high in sugar and become insulin resistant. Again, by removing carbohydrate and sugar from the diet, a significant number of calories are eliminated, creating a caloric deficit and, thus, weight loss. An analysis performed by the American Dietetic Association indicates that the menu plans recommended in the book yield approximately 1,200 calories a day. It is not the lack of carbohydrates that cause one to lose weight but rather the very low calorie intake.

Advantages:

The authors recommend consuming lean cuts of meat in addition to fruits and vegetables. Regular exercise is also encouraged.

Disadvantages:

Similar to other high-protein plans, rebound is inevitable due to eventual carbohydrate cravings and the unrealistic restrictions proposed by the diet.

The deception here is brilliant because an increase in body fat can lead to insulin resistance (IR). Therefore, lowering body fat with any method can reverse IR.

They make you believe that your carbohydrate intake (not weight gain) leads to the IR and that starts the increase in body fat. By removing carbohydrates, the calories decline, and succinctly body weight, leading to a reversal of IR. The authors win because you lost weight and became insulin sensitive again, but you lose because once you grow tired of protein and are starved for carbohydrates, you will rebound with a vengeance.**

The American Dietetic Association analyzed the recipes recommended by the book and found that each menu averaged a mere 1,200 calories a day. This is an unrealistic restriction on food intake that cannot be maintained. **Keep in mind that weight loss itself reduces the disease symptoms of obesity; not necessarily the method in which one achieves it.**

Long-term success:

Due to inevitable carbohydrate cravings, long-range success is unlikely.

**The bottom line is that this food plan is not the best way to lower your food intake unless you are strictly throwing out junk food. You must maintain a healthy balance of good carbohydrates within a caloric allotment that promotes a healthy and desired level of body fat.

Sugar Busters diet was created by: H. Leighton Steward, Morrison C. Bethea, M.D., Sam S. Andrews, M.D., Ralph O. Brennan and Luis A. Balart, M.D.

Eat More, Weigh Less

Contrary to the wash of high-protein diets, this plan is very low in fat (10 percent of the total calories), high in carbohydrates and primarily vegetarian in nature. The basic premise is that calories from fat cause one to become fat; however, Dean Ornish does concede that calories consumed above maintenance levels contribute to weight gain. The average amount of calories ranges between 1,200 and 1,350 calories a day.

The concept of this diet is based on dietary fat being responsible for weight gain and its related diseases. Dr. Ornish did publish a study on this type of food plan demonstrating that it can reduce and possibly reverse heart disease in some individuals. It is unlikely that anyone could argue that the suggested foods are not healthy. Epidemiological evidence supports the health benefits of such foods and the replacement of dietary fat with carbohydrates (grains, fruits and vegetables) will significantly increase the volume of daily food intake while maintaining equal calories.

Advantages:

The benefit to this diet is that a small percentage of the population would feel good with very low fat and high carbohydrates.

Disadvantages:

Studies by the National Weight Control Registry indicate that the majority of those who have lost weight and kept it off were successful with a diet comprised of 55 percent carbohydrate, 20 percent protein and 25 percent fat. This diet encourages minimal fat and protein intake. Again like most other diets, by cutting down on a particular substrate, is the easiest way to reduce intake when all other macronutrients are not changed.

Long-term Success:

Dietary fat is important to success for a number of reasons including the transportation of vitamins, satiety (feelings of fullness) and the simple pleasure of consuming food with some fat content. The bottom line to any diet plan relates to the Law of Thermodynamics: When energy (calories) in exceeds energy (calories) out, weight gain results. When energy out exceeds energy in, weight loss is the result.

Eat More, Weigh Less was created by Dean Ornish, M.D.

The Pritikin Weight Loss Breakthrough

The son of Nathan Pritikin, founder of the Pritikin Longevity Center, has introduced a plan that encourages consumption of a very high volume of complex, fibrous carbohydrates. His claim is based around the "Fat Instinct," a biological drive to overeat high-fat foods and avoid exercise.

Very similar to Dr. Dean Ornish's Eat More, Weigh Less, the Pritikin plan calls for limiting fat intake to 10-15% of your total calories, but incorporates lean meats. His claim is based around the "Fat Instinct," which has been copyrighted for his program. He states that we consume more fat due to a biological drive to conserve calories. Pritikin proposes that we consume a very high volume of complex, fibrous carbohydrates. Due to the high food-volume-to-calorie ratio of these types of foods, stomach distention may occur quickly, leading to early meal termination and thus a reduction in calorie intake.

Advantages:

The plan recommends choosing lean cuts of meats over higher-fat varieties. This is sound advice and helps to lower caloric intake, which may reduce the risk of coronary heart disease.

Regardless of his theory, the plan includes healthy foods but has the same limitations as the Ornish program. Very low-fat, high-carbohydrate diets are difficult to maintain but may be appropriate for a small minority.

Disadvantages:

Due to the high volume of bulk in the diet, swelling of the stomach occurs very quickly, leading to early termination of the meal, thereby reducing the number of calories consumed. While a low-fat diet is certainly healthful, very few people can stay satiated for a long period of time on diet with only 10-15 percent of calories coming from fat. This may lead to overeating and consumption of calories above a level necessary for weight maintenance.

Always beware of a "one size fits all" diet. Any time you remove a significant portion of any macronutrient (protein, fat or carbohydrate), it can sabotage your success by eventually causing an uncontrollable desire to consume the missing food type, or worse, it may lead to cravings you never had before

Long-term Success:

Not everyone will feel good on such a low-fat diet. This will lead to overeating of calories above maintenance levels and weight gain.

The Pritikin Weight Loss Breakthrough was created by Robert Pritikin.

New Cabbage Soup Diet

Claims that one can lose as much as 20 pounds in seven days by following a strict plan of a vegetable-based soup (consisting of cabbage, onions, peppers, tomatoes, celery and onion soup mix) and one other specified food. Because the plan consists of less than 1,000 calories a day, rapid weight loss occurs. The author stresses throughout the book that this type of diet should only be done for seven days.

Advantages:

Other than rapid weight loss, there are no advantages to this plan.

Disadvantages:

The downside to such an extreme approach to this method is weight loss is temporary. Weight loss either represents water weight or lean body tissue. Furthermore, many dieters report nausea, light-headedness and gas as common side effects of the plan.

Long-term Success:

Maintenance of the new weight is virtually impossible. Lifestyle changes regarding healthy eating and exercise are not addressed in the plan.

The New Cabbage Soup Diet was created by Margaret Danbrot.

The Grapefruit Diet

According to various Internet sites, this diet is one of the most popular word-of-mouth plans in the United States. Grapefruit is believed to have a fat-burning enzyme and thus the plan calls for a grapefruit at every meal. Most of the meals also include some protein (egg, chicken or beef), vegetables and coffee or tea. Calories add up to about 800 a day, which leads to dramatic weight loss.

Advantages:

The plus side to this diet is grapefruit is a great source of vitamin C and high in fiber.

Disadvantages:

Any plan that restricts dieters to certain foods is bound to eliminate vital nutrients and vitamins. The plan simply has too few calories to be safe.

Long-term Success:

Weight rebound is inevitable.

The New Beverly Hills Diet

This 1980's blockbuster encourages the "food combining" or separating certain foods, theoretically allowing the body to properly digest each food. A mixture of foods leads to "confused" enzymes, the author professes. During the initial 35-day diet plan, calories can range wildly based on the all-you-can eat principle for certain foods.

Benefits:

The only benefit seen with this strict and sometimes confusing food plan is its extremely low calorie intake—weight loss is virtually assured.

Disadvantages:

Science reveals that the digestive tract was designed to handle all sorts of different food mixtures. While fat can slow the digestive process, it does hinder the absorption of nutrients. The plan is extremely low in protein, vitamins and minerals and is likely to cause stomach distress as a result of large quantities of fruit.

The New Beverly Hills Diet was created by Judy Mazel.

Neander-Thin

Generically named the "Caveman Diet," this plan claims that modern processed and cultivated foods cause obesity. The creators of "paleolithic nutrition" claim that the caveman was very lean due to his diet, which consisted of lean meats, fish, fresh vegetables and fruits, nuts berries and seeds.

Advantages:

The elimination of processed foods means that the dieter consumes more "whole" foods, which do contain more vitamins and nutrients.

Disadvantages:

To date, there is no scientific research that links carbohydrates such as wheat and grains to obesity and certain diseases.

Long-term Success:

Eventual carbohydrate cravings will develop from depleted glycogen stores and weight rebound is inevitable.

Neander-Thin was created by Ray Audette.

High-Protein Diets

Some of the most frequently asked questions deal with high-protein and fat diets that brand carbohydrates as evil and as the reason for the prevalence of obesity in our society today.

Such diets are not new. They have waxed and waned in popularity over the years, with the previous crescendo occurring in the '70s. The recent popularity most likely stems from the fact that, in spite of previous dietary recommendations and the prevalence of low-fat and non-fat foods, more and more of the population continues to reach obesity. This increase in obesity is because people are not following current diet and exercise recommendations. Let's examine how proponents or marketers of high protein diets trick their patrons. The following are the most prevalent claims made in support of these diets:

Claim 1. People are not getting fat from consuming too many calories, but from the consumption of carbohydrates, especially high glycemic index (GI) ones.

Despite the claims of these diets, obesity and weight gain are the result of positive energy balance. If one consumes more calories than they expend, then there will be an increase in mass. One's genetics and lifestyle determine how easy it is for this to occur. The problem is that society's caloric intake has increased (by about 300 calories in the last decade) and its caloric expenditure has decreased (due to technology and labor-saving devices).

Glycemic index refers to the effect on the blood sugar (BS) level of equivalent amounts of CHO contained in different foods. In other words, how quickly BS rises and how much insulin is released in response to a particular food. GI measures a single food source eaten by itself and on an empty stomach. Several studies have shown that high GI foods do not have the same glycemic response when given as part of a mixed meal. Many, if not most, high GI foods eaten today are refined foods, high in added sugar, and would not be considered wise food choices by any standard.

We must still face the truth, which is that high GI foods, while possibly not the wisest use of calories, are not responsible for weight gain. People get fat when they consume too many calories in relation to expenditure.

Claim 2. Carbohydrates stimulate insulin release, causing the body to store fat. This accompanying insulin production causes insulin resistance (IR) and the development of obesity and NIDDM (type II diabetes). It is interesting that none of these diet proponents mention that protein also stimulates insulin release. Other than genetic IR, most scientists acknowledge that it is obesity itself (due to an excessive energy intake) that leads to IR, not the other way around.

Insulin resistance is often accompanied by several other conditions collectively known as "Syndrome X." Characterized by insulin resistance, hypertension, hyperlipidemia and an increased risk of cardiovascular disease, Syndrome X is usually associated with obesity (especially abdominal), a high-fat diet and a sedentary lifestyle. A result of these factors is high levels of circulating free fatty acids (FFA). In the presence of high FFA concentrations, the body will favor their use as energy, decreasing glucose oxidation, glycogen synthesis, and inhibiting glucose transport. The result of this is hyperglycemia. If blood sugar levels are chronically high, insulin will also be elevated, leading to the conversion of the excess blood sugar to other products such as sugar proteins, and fatty acids. These facts alone seem to bolster the idea that carbohydrates lead to health problems. The truth is that a healthy person would need to eat an extremely high percentage of simple carbohydrates (sweets), a high fat diet, be in an energy excess, or overweight to have chronically elevated blood sugar. The average American eats about 34 percent fat and less than 50 percent carbohydrate in their diet. The consumption of mixed meals with these percentages will not allow blood sugar to be chronically high in a healthy exercising individual. There is some evidence that diets high in sucrose or fructose and fat can lead to insulin resistance and obesity in rats. In either case, the solution is a low-fat diet high in complex carbohydrates. So, how does one become insulin resistant? If one constantly overeats, excess calories are stored as fat. Fat cells then increase in size. The growing fat cell itself becomes insulin resistant and the prevalence of FFA as mentioned earlier will cause the body to favor the use of fat for energy, at the expense of glucose. This becomes a viscous cycle that continues to perpetuate itself. The fatness leads to IR. This leads to impaired glucose use. BS levels rise. Insulin levels rise. Cholesterol, TG and blood pressure rise as well. To make matters worse, the impaired ability of glucose to enter muscle cells keeps glycogen stores lower, which can increase appetite, motivating the individual to eat more, increasing fat stores, exacerbating IR, round and round we go.

As numerous studies point out, high-fat diets are strongly associated with obesity, thus insulin resistance and diabetes. Of course eating fat does not make one fat (same with carbohydrate, as explained later) unless consumed in excess of energy requirements.

However, it is easier to consume excess energy (hyperphagia) on a high-fat diet due to fat's small volume of food per calorie. Couple the high intake of dietary fat with excess calories and a sedentary lifestyle and it is easy to envision an abundance of free fatty acids floating around in the blood stream. It is much more likely that a high-fat diet leads to the excess consumption of calories, obesity, insulin resistance and eventually NIDDM than it is that carbohydrates cause insulin resistance and, as a result, obesity. The solution, again, is a diet with the appropriate amount of energy, high in fibrous or starchy carbs, and exercise. In fact, a study of type II diabetics, people with insulin resistance and normal weight people found that three weeks of a high-carbohydrate, low-fat diet and exercise significantly lowered insulin levels.

Claim 3. Low-carbohydrate diets are more effective for weight loss. If one's goal is simply to lose as much weight as possible without regard to composition of weight loss, knocking out carbs may be the way to go. A study comparing short-term weight loss on a ketogenic (very low CHO and high in fat, leading to ketosis) and nonketogenic diet illustrate this point quite clearly. Even though total weight loss was greater on the ketogenic diet, fat loss was essentially equal, water loss was 177 percent greater (due to decreased muscle glycogen and muscle water loss), and protein loss was 88 percent greater on the ketogenic diet. So, for the goal of fat loss, there is no benefit to the ketogenic diet.

The disadvantages, however, would likely be a decrease in 24-hour energy expenditure due to dehydration and loss of lean body mass. Additionally, for most athletes participating in high-intensity exercise, the decreased muscle glycogen stores would impair performance significantly and high-protein diets would decrease testosterone levels when compared with appropriately mixed food intakes, thus having a negative impact on recovery. Finally, there is increasing evidence that a high-fat diet may actually promote body-fat storage in genetically predisposed obese and post obese individuals.

Claim 4. A ketogenic diet offers a "metabolic advantage".

Dr Atkins, in his book *Dr. Atkins' New Diet Revolution*, states that following his ketogenic diet will allow one to lose weight on a number of calories that once led to weight gain. 26 The state of ketosis that Atkins seeks can be measured by testing for ketones in the urine. This leaves us with the knowledge that in the production and use of ketones for energy, some is excreted (wasted) in the urine. Essentially, calories are just eliminated. For those interested in losing fat while gaining muscle, eating a ketogenic, isocaloric diet sounds very appealing (i.e., eat the calories your body requires but have some wasted in the urine, creating a calorie deficit and, therefore, fat loss). However, this excretion of ketones most likely amounts to only 50 to 60 calories a day, hardly what would be considered a metabolic advantage. The low glycogen stores that are an inevitable result of a ketogenic diet would more likely have negative effects on exercise intensity and appetite, yielding a metabolic disadvantage. 27 Another flaw in the "metabolic advantage" theory is related to the thermic effect of food (TEF). Thermic effect of food measures the increase in metabolic rate in response to the ingestion of food. Studies put this contribution at 5-15 percent of basal metabolic rate (BMR), when consuming a mixed diet. The low end of the range is seen in those eating a high fat diet, and the high end is seen in those eating a high complex-carbohydrate diet. 3 If a person had an absurdly low BMR of 1000 calories, this would translate into a TEF of 50 calories on the high fat diet versus a TEF of 150 calories for a high complex CHO diet. So much for "metabolic advantage".

Missing the Point

What proponents of low-carbohydrate diets seem to miss is the obvious. Even though CHO and protein stimulate insulin release and lead to storage of substrate as FA, it will not lead to long-term fat accumulation unless caloric intake exceeds caloric expenditure for that day, or week, etc. These proponents take a complex series of events (human metabolism), highlight the portion that supports their claim and ignore the big picture. Because humans are periodic eaters, we will always eat more at a sitting than can be immediately used for energy. This influx of glucose, amino acids, glycerol

and fatty acids stimulate insulin release so that these materials can be used for energy and stored for later use (as glycogen in liver and muscle and fat stores). 5 As an individual goes through the next several hours without food intake, fatty acids and glucose are liberated from storage depots to fuel metabolic activity that is always occurring.

By the way, in a resting state, fatty acids provide the majority of energy used, regardless of diet composition. We are storing and liberating fat continuously throughout the day. There is absolutely no evidence that a high CHO diet will lead to weight gain if one eats at or below maintenance. In fact, it is impossible. In the end it is caloric intake versus expenditure that determines if one increases or decreases fat stores.

Also, if one looks at the energy cost of converting macronutrients to fat, it requires much less energy to convert dietary fat to body fat than to convert CHO to body fat (5 percent of calories vs. 20-25 percent). 28 A study designed to measure lipoprotein lipase (LPL, a fat storage enzyme) activity in adipose tissue and skeletal muscle on a high carbohydrate or high fat diet inadvertently illustrated this. The study design was to keep participants in calorie balance, so that weight was not gained or lost. Due to the increased TEF, the participants on the high carbohydrate diet had to eat approximately 300 calories more to maintain body weight than the high fat diet group.

Lastly, one of the biggest concerns associated with high-fat and protein diets, is the impact on health of the individual. High-protein diets are known to increase bone-mineral losses (calcium in particular) and tend to include greater intakes of saturated fats and cholesterol, which contribute to dyslipidemia. 29,30 Populations that eat diets lower in protein and fat, and higher in carbohydrates, have the lowest incidences of cardiovascular disease. It is when a culture adopts a Western diet, high in calories, fat and sugar and increases their reliance on technology that obesity and its health problems emerge.

If the preceding information is not convincing enough that high-protein diets are not the answer for long-term fat loss in exercising individuals, consider this: of the 438 initial enrollees of the National Weight Control Registry (having lost an average of 66.0 lbs. for over five years), none were successful by following a low-carbohydrate, high-fat diet. In fact, the common denominator for success dietarily was a low-fat diet with a macronutrient profile of approximately 20 percent protein, 25 percent fat and 55 percent carbohydrate.

This information, from a study published in the Journal of the American Dietetic Association, is the most comprehensive study of its kind to date. Data from many other studies support this.

Before concluding, consider these real-world examples: Endurance athletes, who typically consume between 60-75 percent of their calories from CHO, are some of the leanest people on the planet. Conversely, Inuit Eskimos, who consume only protein and fat, comprise the fattest culture in the world.

A final thought

Much time and energy is spent searching for the causes of obesity. Blame is placed on specific foods, classes of macronutrients and genetics. Adding to the confusion is the erroneous belief that the obese maintain very high bodyweights despite low caloric intakes. Many studies show that as body weight increases, reported caloric intake decreases. A recent study showed that self reported energy intakes in American women are approximately 750-1000 calories below energy expenditures as calculated by the doubly labeled water method. This discrepancy increases as body mass index (BMI) increases. This is more proof that obesity is, at its most basic level, an issue of energy imbalance. This imbalance perpetuates itself through a combination of constantly available, palatable food and a society that promotes a sedentary lifestyle.