



Article 17\*

## The Non-Medicated Life: Strategies for Weight Management

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*This is the seventeenth in a series on optimal diet and lifestyle to help prevent disease and responsibly avoid an over reliance on medications. This complementary approach is based in the medical evidence of the most successful research trials and the best science available. Any planned change in diet, exercise or treatment should be discussed with and approved by your personal physician before implementation. Consultation with a registered dietitian is strongly advised.*

Medicines are a mainstay of American life and the healthcare system not only because they are perceived to work by the individual taking them, but also because their benefit may be shown by the objective assessment of scientific study. Clinical research trials have shown that some of the medicines of Western science may reduce the risk of heart attacks, strokes and cardiovascular death.

In the first 16 installments of The Non-Medicated Life, informed diet and lifestyle have been shown to accomplish naturally for the majority of individuals, many, if not most of the benefits of medications. As was shown in the last column (see The Non-Medicated Life Article 16: The Benefits of Weight Management), this is especially true when diet and lifestyle are directed to achieving a normal body weight. For individuals who are overweight or obese, weight reduction, even when modest, may lower blood pressure, lower blood sugar, improve cholesterol and decrease the risk for heart attack or stroke. Unfortunately, for many overweight or obese individuals, weight loss is easier said than done. With the plethora of diets and drugs offered to aid in weight loss, is there a single effective strategy which is superior?

All effective weight loss strategies for those who are overweight or obese require that more calories be burned as activity or physical work than is supplied by food. This may be

accomplished by either decreasing caloric intake, increasing activity or physical work or a combination of both.

Decreasing caloric intake is the strategy used in most diets. Fewer calories may be consumed by an across the board decrease in fats, carbohydrates and protein achieved with smaller portion size. This is the approach utilized in most Weight Watchers diet plans. Fewer calories may also be achieved by decreasing fat in the diet. Because fat contains the greatest density of calories with nine kilocalories per gram of food and because decreasing saturated fat will decrease LDL or the bad cholesterol, this was the approach suggested by the medical community for many years. Finally, fewer calories may also be achieved by decreasing carbohydrates or starches and sugars in the diet. This is the approach utilized in the Atkins and South Beach diet plans. But which diet has proved superior in weight loss?

The answer, not surprisingly, is none. All of these approaches work in the short run, meaning less than one year. A calorie is a calorie is a calorie. For all intents and purposes, restricting calories sufficiently will result in weight reduction regardless of the source of the calorie. While there may be very slight differences, these are not clinically significant. That being said, there are arguments for and against each of the

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approaches. While across the board restrictions by controlling portion size work and may lend greater variety to the diet, hunger is a major drawback of any significant restriction. Thus, the practice is to decrease total intake a few hundred calories below pre-diet levels. While this will result in weight loss, it is not rapid enough many times to give the psychological jump start that many folks look for to maintain motivation.

Low fat diets also result in weight loss because, as describes above, fat is the most concentrated form of food energy. By restricting total fat one also tends to restrict saturated fat which results in lower LDL or bad cholesterol levels— from a cardiovascular perspective certainly a good result. For many years low fat diets were the preferred recommendation of the medical community for the purpose of weight reduction and did work for many folks for a time. However, in an attempt to help physicians give patients low fat options which were acceptable, the American food industry began putting out low fat and thus higher carbohydrate alternatives to high fat foods. Because a calorie is a calorie regardless of its source, the result was that the weight of the American population went up and not down and led many to criticize the low fat diet as a failure. Additionally, people figured, if fat was bad, then carbohydrates must be OK, and thus people could eat all of the carbohydrates they wished.

Enter the low carbohydrate diet. If people gained weight on low fat, higher carbohydrate diets, then carbohydrate must be the culprit and thus a number of low carbohydrate diets appeared. Lower carbohydrate diets have the advantage of inducing an altered biochemistry in the body with an increase in the blood of substances called ketones. Ketones are produced during fasting and whenever carbohydrates are restricted sufficiently. Since the human brain runs preferentially on glucose, a state of relative glucose depletion, such as occurs in carbohydrate restriction, will force the body to look to alternative energy sources for the brain. Ketones serve as that alternative source and have an interesting side effect – they blunt appetite. Thus the Atkins diet, an example of a keto-genic

or ketone producing low carbohydrate diet, works because appetite is blunted and folks are less hungry and thus eat less. Weight loss occurs on an Atkins diet simply because fewer calories are consumed.

Scientific studies comparing low carbohydrate and low fat diets show them to be about equally effective in weight loss over one year. The effect on blood cholesterol is mixed. Low fat diets tend to lower LDL or the bad cholesterol more. Low carbohydrate diets tend to lower triglycerides and raise HDL or the good cholesterol more. Part of the problem with low carbohydrate diets is that carbohydrates are present in many fruits, vegetables and grains which are known to be healthful and are part of the major cuisines of the world. Concerns with the high consumption of saturated fats and problems with the long-term compliance with a low carbohydrate diet has led to more palatable healthful alternatives such as the South Beach diet. South Beach allows some carbohydrates but tries to avoid simple sugars and refined carbohydrates.

The major problem with all these approaches is that they involve a diet – an alteration in the eating pattern which by its very nature is temporary. A successful strategy for weight loss and maintenance greater than one year cannot simply use a diet – it must utilize a more fundamental change in lifestyle. One must learn to eat in a way that is both satisfying and healthful, and balance caloric intake with caloric expenditure in the form of exercise. If you want to eat 2,500 calories per day and not gain weight, you can – but you must burn 2,500 calories to do so. It's that simple and, unfortunately, that difficult.

What about other less difficult options? For those who look to drugs for weight loss, the basic strategy is flawed. While drugs which decrease appetite and calories may result in weight loss, discontinuation of the drug results in weight gain. Drugs for help in weight maintenance would need to be taken lifelong. In general, surgical options such as laparoscopic banding or  
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gastric bypass, which work by restricting the size of the meal that may be consumed, should be reserved only for those greater than 100 pounds above ideal body weight.

In summary, strategies for weight loss and weight management all work by reducing total caloric intake below caloric expenditures. While a variety of diets have been shown to work about equally well for weight loss over the span of one year, long-term success requires a lifestyle change which incorporates healthy food choices and sufficient exercise. For the great majority of overweight and obese, controlling weight through healthy eating and lifestyle may be seen as a viable alternative to a bottle of pills to treat one of our most important health problems.

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