



# An Overview of *Popular* Diets

By Jacqueline Jacques, ND

Americans seemingly have a love affair with dieting. In the year 2000, American consumers spent \$34.7 billion out-of-pocket dollars on weight-loss products and programs – a number that experts suspect continues to climb<sup>1</sup>. On any given day if you check out the New York Times best-seller list, you will likely find at least two diet books in the top 10 list for non-fiction. When I looked this week, it was The Volumetrics Eating Plan by Barbara Rolls, PhD and The Extreme Fat Smash Diet by Ian K. Smith. Wait a month, and these will likely be replaced by something new.

Since roughly two-thirds of the American public is either overweight or obese, the real question is: *Do any of these plans result in the desired goal of getting weight off and keeping it off?* After all, the advice always given to those who need to lose weight is to diet and exercise. When this fails to produce the desired result, the blame is always put

Diet (*v. intr.*): To eat and drink according to a regulated system, especially so as to lose weight.

– American Heritage Dictionary

back on the dieter. Naturally then, the golden ticket everyone is looking for is the perfect program that will help people both lose weight and maintain weight-loss. So, those seeking the answer invest year after year in new diet books and programs and new hope.

## Benefits to Diets

What will follow here is a brief overview and review of a handful of popular diet systems. Since it is currently impossible and unreasonable to state that any of them will produce a long-term result for weight-loss, I tried to place the emphasis on other factors, such as how healthy and scientifically sound the program is.

While short-term weight-loss can be achieved by many means, healthier programs that teach good dietary habits seem more likely to have other positive health outcomes. Moreover, there are some weight-loss trends that are potentially unhealthy in terms of the foods and eating habits they promote.

Another important way to evaluate the potential benefit of a diet is to look at what has worked for the people who have effectively lost weight and kept it off. The National Weight Control Registry is an ongoing investigation that started in 1994.

The registry enrolls adults over the age of 18 who have lost 30 or more pounds and maintained their weight-loss for more than 12 months. They are currently monitoring the behaviors and characteristics of approximately 5,000 successful individuals, and have published more than a dozen papers on their findings. Some of the keys to success found to be common among their subjects are listed in the box to the right.

## Popular Diet Systems

Sometimes it is true that there is nothing new under the sun. Though there are hundreds of diets all claiming to have the single best method for you to lose weight, there are really very few differences between them. It is, therefore, easiest to look at diets by classifying them into their basic strategies.

Despite the many names they go by and the small variations, most diets can fit easily into a few discrete categories. Therefore, rather than look at dozens of programs individually, this article will focus on the categories and give examples for each. This list breaks down the diets as follows:

- 1. Low Calorie.** While virtually all the programs mentioned here restrict calories to some degree, there are programs that use calorie control or reduction as the primary method or philosophy of weight-loss.
- 2. Low Fat.** Fat is the most caloric of the macronutrients and diets high in fat may contribute to some chronic diseases. For these reasons, low-fat diets have been a mainstay of the weight-loss world for many decades.

## Dieting Keys to Success

**Eat breakfast.** Approximately 78 percent of those successfully maintaining an average weight-loss of approximately 70.5 pounds for six years eat breakfast every single day<sup>4</sup>.

**Restrict serving sizes.** There is no successful weight-loss or maintenance that does not restrict overall intake of food<sup>5</sup>.

**Limit fat intake.** Successful dieters also tend to limit calories from fat to between 23 and 25 percent of their total calories<sup>6</sup>.

**Select healthy foods.** Along with selecting low fat foods, successful dieters tend to eat more foods that are high in fiber, more fruits and vegetables and fewer high calorie drinks (especially soda).

**Use a scale.** While some diet programs promote other means such as measurements or the fit of your clothes, 75 percent of those with long-term success report weighing themselves at least once per week<sup>7</sup>.

**Exercise regularly.** Not all diet programs have their own exercise regimen, although many recommended physical activity. Exercise has been shown to be important to weight-loss maintenance, with one-hour per day of moderate intensity exercise being a common habit among those keeping their weight off long-term<sup>8</sup>.

**Limit food variety.** A common diet strategy is the limitation of food choices – the extreme being meal replacement programs where dieters are only given the choice of shakes or bars for many months. Studies of successful dieters show that they tend to limit their food variety from all food groups<sup>9</sup>.

- 3. Insulin Controlling.** Insulin is a hormone that helps regulate both blood sugar and the way that the body stores calories as fat. Especially with the surge in diabetes, diets that focus on the control of insulin and blood sugar using a variety of methods have become increasingly popular.

There are also strategies that fall into some other classifiable categories:

1. **Food Combining**
2. **Mono-Diets**
3. **Cultural Diets**

Finally, there are few diets that are so unique that they don't readily fall into any of these categories, and for the purpose of our discussion will simply be classified as "other."

### *Low Calorie Diets*

The gold standard of dieting is the low calorie diet. Fundamentally, for any weight-loss program to work, the calories taken in have to be less than calories taken out. There are actually two classes of low calorie diets.

The Low Calorie Diet (LCD) restricts food intake to between 800 and 1500 calories per day and the Very Low Calorie Diet (VLCD) generally restrict dieters to between 500 and 800 calories per day. VLCDs should only be

done under strict physician supervision because of the medical risk associated with them. LCDs are often done under physician supervision, but many programs are also available direct to consumers.

LCDs and VLCDs tend to produce very good short-term weight-loss, with 12-week averages of 13 to 40 pounds lost. While more weight is initially lost with a VLCD, the weight-loss tends to equalize at around six months due to decreased compliance with the VLCD over time. For this reason, the safer LCDs are more commonly used.

The biggest challenge with either type of program is keeping weight off. Most of these programs utilize some form of meal replacements such as shakes, bars, soups or pre-packaged foods to help dieters in making food choices, and in accurate calorie control. However, when people stop using the fixed meal replacements; however, many migrate back to pre-diet foods at pre-diet portions. Studies looking at five year results on either form of program show that most people regain all weight initially lost<sup>10</sup>. Dieters who adhere to behavior modification and exercise have been shown to be more successful at keeping weight off long term<sup>11</sup>.

## Research in *Diets*

When we look at research on long-term outcomes of diet as a treatment for obesity, the results are not encouraging. In a recent review using Medicare treatment criteria, researchers from the University of California Los Angeles reviewed controlled trials of a variety of dietary interventions for weight-loss. They concluded the following:

*"... the benefits of dieting are minimal. Sustained weight-loss was only found in a small minority of participants, whereas complete weight regain was found in the majority. Beneficial health outcomes have not been consistently or frequently demonstrated in the long term, and very few studies were able to show clinically significant health benefits that persisted after weight regain<sup>2</sup>."*

The UCLA researchers found more evidence that dieting behavior is predictive of weight gain than it is of weight-loss. They concluded this because by and large, studies that tracked long-term maintenance of weight after a diet found that not only did people regain weight, they regained more than they lost initially.

This is not entirely new news in the medical community. The American Dietetic Association 2002 position paper on Weight Management also projected minimal benefit for diet and exercise plans. They state:

*"Currently, available data on lifestyle weight-loss interventions indicate that they produce low levels of sustained loss. Typically reported weight-losses remaining after four to five years are about three to six percent of initial body weight<sup>3</sup>."*

This means that from the data they reviewed, a 250-pound dieter could expect to maintain a weight-loss of seven to 15 pounds after four to five years.

It is important to note that there are health benefits from even small amounts of sustained weight-loss, especially for control of blood sugar and blood pressure. Still, if we consider the resolution of overweight or obesity to be a primary goal of dieting, the results are simply not there for most people.

## Examples of Low Calorie Diets and Very Low Calorie Diets include:

Optifast® (Novartis Medical Nutrition), Medifast® (Jason Pharmaceuticals, Inc), Slimfast (Unilever), HMR (Health Management Resources) and the Cambridge Diet.

### Low Fat Diets

Low fat diets were very popular in the 1980's and 1990's and many low fat programs have maintained a large base of adherents. The principle of low fat diets is simple: fat has more calories per gram (nine) compared to carbohydrate and protein (which each have four). Reduce the fat in your diet, and you reduce the calories and you lose weight.

Most low fat diets reduce intake from fat to between 20 and 30 percent of total calories. There are some very low fat diets (Pritikin being an example) that reduce fat intake to below 20 of total calories. As the general public grows weary of the high-protein regimens that have held sway for the past 10 years, some of these low-fat principles are re-emerging with more modern twists. Volumetrics, with its emphasis on bulky/filling low fat foods (bigger volumes to fill you up, with low fat to keep calories in check) is an excellent example.

As with many diets, short-term weight-loss has been demonstrated with low fat programs. Reviews of randomized controlled trials have shown that overall results vary little from other types of plans, and that maintained weight-loss after 12-18 months only averages 4.4 to 8.8 pounds<sup>12</sup>.

Low fat diets have often been pointed out as healthier than other types of diets, and it has been proposed that they may reduce other health risks such as heart disease and cancer. While some small trials do demonstrate these benefits, larger trials have not shown the benefits to be significant.

The Women's Health Initiative Dietary Modification Trial followed approximately 19,000 women on a low fat diet for 13 years. They found no reduced risk of breast cancer<sup>13</sup>, colon cancer<sup>14</sup>, or cardiovascular disease<sup>15</sup>. They also did not see any difference in weight from women who did not modify their diet to lower fat<sup>16</sup>. The primary reason proposed for the lack of health risk reduction was the lack of weight-loss. Excess body weight is a known risk factor for all of these conditions. Thus, it appears that following a low fat diet without

losing weight does not impart any reduction in cancer or heart disease risk.

Currently the best selling diet book in the U.S., and having been given thumbs up by Consumer Reports<sup>17</sup>, Volumetrics (Barbara J. Rolls, PhD), is rapidly recharging the interest in low fat dieting. The general difference between Volumetrics and other low fat diets is the emphasis on eating large portions of foods that provide minimal calories (soups, salads, fruits and vegetables) so that you feel full due to the volume of food eaten.

A recent study compared a standard low calorie diet to the Volumetrics diet. At one year, researchers found that those following the Volumetrics principles lost 3.5 pounds more (17.5 pounds versus 14 pounds) while eating about 25 percent more food<sup>18</sup>. The Weight Watchers program, which has been around for about 45 years, is not only still popular, but has been studied in controlled trials. Weight Watchers is famous for their patented formula that assigns points to servings of foods with the goal of simplifying calorie counting. Studies of Weight Watchers show that long-term (two year) adherents tend to maintain a 5 percent weight-loss, and have improvements in blood pressure, cholesterol, blood sugar and insulin levels<sup>19</sup>.

### Insulin Control

Following two decades of low-fat dieting, Americans were swept up by a new wave of weight-loss plans that were focused around controlling the hormone that signals the body to store fat – insulin. There are really two versions of insulin controlling diets: Low Carbohydrate (also called High Protein) and Low Glycemic.

The general principles are the same – some foods (especially simple sugars and starches) cause a greater surge of blood sugar and a bigger release of the hormone insulin. The low carbohydrate programs take the strategy of dramatically reducing overall carbohydrate content of the diet in place of a much greater percentage of protein (and, in some cases, fat). The Low Glycemic (Low GI) diets allow adherents to eat a much greater range of food so long as the carbohydrates they eat have a minimal impact on raising blood sugar levels. Some of these programs also

**Examples of Low Fat Diets include:** Volumetrics, the Ornish Plan, the Pritikin Diet, Weight Watchers, vegetarian diets and Fit for Life.

## Examples of diets that use insulin control

**include:** the South Beach Diet, the Atkins Diet, The Zone, Protein Power, Sugar Busters, Nutrisystem, The 3-Hour Diet and the Extreme Fat Smash Diet.

encourage more frequent eating of smaller meals, the theory being that this helps to keep blood sugar from rising and falling throughout the day.

Most studies have not shown insulin controlling diets to be any better than other forms of dieting for overall weight-loss. A 2004 study that compared low-carb to low-fat dieting found that after 11 months, the weight-loss in the two groups was virtually identical<sup>20</sup>.

A much more recent study, however, came up with different and interesting results. In this trial, researchers randomly assigned dieters to either a low-glycemic or low fat diet<sup>21</sup>. They followed participants for 18 months, tracking not only weight but also insulin secretion, cholesterol and triglycerides. After 18 months, it was found that those with the highest baseline insulin secretion that followed the low-glycemic diet lost the most weight and had the greatest health improvements.

What this may tell us is that some diets work better for people with specific health conditions – in this case, that people who have high insulin secretion have better success on a diet that helps to control their insulin secretion.

These programs vary a lot in the way they allow dieters to select foods, when and how they suggest eating and in supportive areas like exercise. Several of them are “phased,” meaning that dieters start with a very low carbohydrate introductory period and work their way up to a more varied eating plan.

In these programs (such as Atkins and South Beach), the goal is to have the body in a state of ketosis (where the body is actively burning and using fat for energy instead of carbohydrate). Because of this, individuals with kidney disease should not engage in low-carbohydrate dieting without physician supervision.

### *Cultural*

Cultural diets are often based on the thinking that because people from a certain place who eat a certain way are healthier than you are, eating like they do will allow you to obtain a similar health status. The Mediterranean Diet is probably the best example of a cultural diet that has attracted a lot of attention from the medical community. This diet is high in fish, whole grains, beans, vegetables, olive oil (monounsaturated fat), red wine and fiber.

While not specifically studied for weight-loss, the large scale Lyon Diet Heart Study, did suggest that the Mediterranean diet is very beneficial for the cardiovascular system. After 46 months, subjects following the Mediterranean-style diet had a 50 to 70 percent lower risk of recurrent heart disease<sup>22</sup>. Other examples of cultural diets include the Okinawa Diet and the Sonoma Diet.

### *Food Combining*

Adherents to food combining diets believe that the body processes particular combinations of foods differently from other combinations. Some examples of this thinking include the idea that starches should be eaten separately from proteins and fats, fruits should be eaten on an empty stomach, or that foods should be eaten at specific times of the day.

While some of these programs are healthy in the foods that they recommend and are low calorie (which can result in weight-loss), there is no scientific evidence that specific combinations of foods will produce more weight-loss, burn fat more efficiently or impart other health benefits. Some examples of food combining diets include Fit for Life, the Schwarzbein Principle, the Beverly Hills Diet and the Suzanne Somers diet.

### *Mono Diets and Miracle Foods*

Every once in a while you may be standing in the checkout line at the grocery store and catch a magazine cover praising some miracle food for weight-loss. These diets are usually based on eating large amounts of a single food for a period of time, or adding a “miracle” food to a strictly

controlled diet to enhance metabolism or weight-loss.

Virtually all mono diets and miracle food diets will produce acute weight-loss, but they are not healthy, balanced or sustainable as a real



weight-loss method. Examples of these concepts include the Grapefruit Diet, the Cabbage Soup Diet, the Apple Cider Vinegar Diet and the Milk Diet.

## Other

The Fat Flush diet was developed by Anne Louise Gittleman<sup>23</sup>. The program claims to promote weight-loss by cleansing and detoxifying the liver and thereby promoting better metabolism. The program is phased and eventually it ends up looking like a standard low-carbohydrate diet. While the idea is interesting, there is no current scientific evidence to support the concept of “fat flushing.”

The Blood Type Diet was developed by Dr. Peter D’Adamo who published the book Eat Right for Your Type in 1996<sup>24</sup>. The theory put forth by Dr. D’Adamo is that blood type is a genetic fingerprint more powerful than race, culture or geography.

He believes that sickness is caused by negative reactions between complex molecules in foods (lectins) and markers on the cells of the body. The book purports that eating foods that “agree” with your blood type will reduce your risks for cancer, heart disease, diabetes, infections and cancer. The author and other adherents believe that eating the foods deemed appropriate for your blood type will assist with weight-loss.

Conversely, eating the wrong foods can cause all sorts of health problems. If carefully examined, the blood-type diet is really a low calorie diet with intakes of 1,150 to 1,250 calories per day. Beyond that, the diet may be difficult to follow due to many restrictions and hard-to-find foods, and no evidence exists to prove that it would be more beneficial than any other low-calorie program.

---

## About the Author:

*Jacqueline Jacques, ND, is a Naturopathic Doctor with more than a decade of expertise in medical nutrition. She is the Chief Science Officer for Catalina Lifesciences LLC, a company dedicated to providing the best of nutritional care to weight-loss surgery patients. Her greatest love is empowering patients to better their own health. Dr. Jacques is a member of the OAC National Board of Directors.*



## References:

1. Bryant, J., *Fat is a \$34 Billion Business*, Atlanta Business Chronicle (Sept. 24, 2001), citing research by Marketdata Enterprises, Inc.
2. Mann, T, et al. *American Psychologist*, April 2007; vol 62: pp 220-233.
3. *Weight Management*. J Am Diet Assoc. 2002;102:1145-1155
4. Wyatt HR, Grunwald OK, Mosca CL, Klem ML, Wing RR, Hill JO (2002). Long-term weight-loss and breakfast in subjects in the National Weight Control Registry. *Obesity Research*; 10:78-82.
5. Shick, S.M., Wing, R.R., Klem, M.L., McGuire, M.T., Hill, J.O., & Seagle, H. Persons successful at long-term weight-loss and maintenance continue to consume a low calorie, low fat diet. *Journal of the American Dietetic Association*, 1998, 98, 408-413.
6. *Ibid*.
7. Klem, M.L., Wing, R.R., McGuire, M.T., Seagle, H.M., & Hill, J.O. A descriptive study of individuals successful at long-term maintenance of substantial weight-loss. *American Journal of Clinical Nutrition*, 1997, 66, 239-246.
8. McGuire, M.T., Wing, R.R., Klem, M.L., Seagle, H.M., & Hill, J.O. Long-term maintenance of weight-loss: Do people who lose weight through various weight-loss methods use different behaviors to maintain their weight? *International Journal of Obesity*, 1998, 22, 572-577.
9. Raynor, H., Wing, R.R., Phelan, S. (2005) Amount of food group variety consumed in the diet and long-term weight-loss maintenance. *Obesity Research*, May;13(5):883-890.
10. *Methods for voluntary weight-loss and control*. NIH Technol Assess Statement Online 1992 Mar 30-Apr 1 [2007 Jun 10]; (10).
11. Wing RR, Jeffery RW, Burton LR, Thorson C, Nissinoff K, Baxter JE: Food provisions vs. structured meal plans in the behavioral treatment of obesity. *J Consult Clin Psychol* 20:56-62, 1996.
12. S. Pirozzo, C. Summerbell, C. Cameron, P. Glasziou (2003) Should we recommend low-fat diets for obesity? *Obesity Reviews* 4 (2), 83-90.
13. Prentice RL, Caan B, Chlebowski RT, et al. Low-fat dietary pattern and risk of invasive breast cancer: the Women’s Health Initiative Randomized Controlled Dietary Modification Trial. *JAMA* 2006; 295:629-42.
14. Beresford SA, Johnson KC, Ritenbaugh C, et al. Low-fat dietary pattern and risk of colorectal cancer: the Women’s Health Initiative Randomized Controlled Dietary Modification Trial. *JAMA* 2006; 295:643-54.
15. Howard BV, Van Horn L, Hsia J, et al. Low-fat dietary pattern and risk of cardiovascular disease: the Women’s Health Initiative Randomized Controlled Dietary Modification Trial. *JAMA* 2006; 295:655-66.
16. Howard BV, Manson JE, Stefanick ML, et al. Low-fat dietary pattern and weight change over 7 years: the Women’s Health Initiative Dietary Modification Trial. *JAMA* 2006; 295:39-49.
17. *Consumer Reports*, June 2007; pp 12-17. Nancy Metcalf, senior project editor, *Consumer Reports*
18. Ello-Martin JA, Roe LS, Ledikwe JH, Beach AM, Rolls BJ. Dietary energy density in the treatment of obesity: a year-long trial comparing 2 weight-loss diets. *Am J Clin Nutr* 2007 85: 1465-1477.
19. Heshka S, Anderson JW, Atkinson RL, Greenway FL, Hill JO, Phinney SD, et al. Weight-loss with self-help compared with a structured commercial program: a randomized trial. *JAMA*. 2003;289:1792-8.44.
20. Stern L, Iqbal N, Seshadri P, et al.: The effects of low-carbohydrate versus conventional weight-loss diets in severely obese adults: One year follow-up of a randomized trial. *Ann Intern Med* 140:778-785, 2004.
21. Ebbeling CB, Leidig MM, Feldman HA, Lovesky MM, Ludwig DS. Effects of a Low-Glycemic Load vs Low-Fat Diet in Obese Young Adults: A Randomized Trial. *JAMA*. 2007;297:2092-2102. Vol. 297 No. 19, May 16, 2007.
22. Kris-Etherton P, Eckel RH, Howard BV, St Jeor S, Bazzarre TL. AHA Science Advisory: Lyon Diet Heart Study. Benefits of a Mediterranean-style, National Cholesterol Education Program/American Heart Association Step I Dietary Pattern on Cardiovascular Disease; *Circulation*. 2001;103:1823.
23. Gittleman, Ann Louise and Sears, Barry. The Fat Flush Plan. Mc-Graw Hill, New York 2001.
24. D’Adamo, Peter. Eat Right for Your Type: The Individualized Diet Solution to Staying Healthy, Living Longer & Achieving Your Ideal Weight. Putnam. New York 1996.



# ABOUT THE OBESITY ACTION COALITION (OAC)

The Obesity Action Coalition (OAC) is a National non-profit organization dedicated to giving a voice to individuals affected by obesity and helping them along their journey toward better health. Our core focuses are to elevate the conversation of weight and its impact on health, improve access to obesity care, provide science-based education on obesity and its treatments, and fight to eliminate weight bias and discrimination.



VIBRANT COMMUNITY



NATIONAL AWARENESS CAMPAIGNS



ANNUAL CONVENTION



ADVOCACY



PUBLIC EDUCATION

## LEARN, CONNECT, ENGAGE

The OAC knows that the journey with weight can be challenging but we also know that great things happen when we learn, connect and engage. That is why the OAC Community exists. Our Community is designed to provide quality education, ongoing support programs, an opportunity to connect, and a place to take action on important issues.

### Through the OAC Community, you can get access to:

- Weight & Health Education • Community Blogs
  - Community Discussion Forum
  - Ongoing Support • Meaningful Connections
- AND MUCH MORE**



**JOIN TODAY: GO TO [OBESITYACTION.ORG/JOIN](http://OBESITYACTION.ORG/JOIN)**

[info@obesityaction.org](mailto:info@obesityaction.org)

(800) 717-3117 | (813) 872-7835 | Fax: (813) 873-7838



@ObesityActionCoalition

@ObesityAction