



Dietitian Backgrounder: Truth About Fad Diets

The first thing most people will ask a Registered Dietitian is, "What's the best way to lose weight?" That question is almost as hard to answer as, "What's the healthiest food?" Just as there are lots of healthy foods, there are lots of ways to lose weight. The questions really should be, "Does it make sense to lose weight?" And, if it does make sense, "What will help me lose weight permanently?"

The obvious answer to losing weight is to eat less and exercise more. And while this method works, it takes time and effort, leaving many people stuck on details like:

- *How do I cut calories?*
- *How many calories should I eat?*
- *How can I keep track of my calories?*
- *I don't have time for counting calories.*
- *Do I have to give up my favorite foods?*
- *I hate dieting.*
- *What kind of exercise do I need to do?*
- *How much exercise do I need to do?*
- *I don't have time for exercising.*
- *I hate exercising.*
- *PLEASE, MAKE THIS EASY and FAST....*

And, this is why "fad" diets are very, very attractive. Fad diets appeal to people because they promise magical cures or easy weight loss that will "melt" away the pounds. They are relatively simple to follow because they eliminate one or more food groups entirely or recommend eating only a few foods or types of foods exclusively. For example, no white foods, only raw foods, no carbohydrates, etc.)

Typically, a fad begins with a best selling book, often written by a medical professional. The book advocates what seems to be a novel approach based on science that flies in the face of the current expert advice.



Throw in a few celebrities or sports figures that have had good results with the approach and then talk about it publicly in national media (TV, magazines, etc), and “presto,” a fad is born.

They aren’t new either. According to one author, dieting of one kind or another has existed for at least 2,000 years. The Greek physician and philosopher Hippocrates (360 BC) had specific dietary recommendations for managing health (Foxcroft 2012). In the US, fad diets have existed for more than 180 years. Here are few interesting examples:

- **1830’s:** Sylvester Graham, a Presbyterian minister who invented the “graham” cracker, introduced the concept of eating a high fiber diet. He frequently lectured on the connection between diet and health, advocating a vegetarian diet of pure food (brown bread, no refined flour), no caffeine and no alcohol with the goal of spiritual purity and health, not weight loss.
- **1860s:** William Banting, a casket maker, wrote a “Letter on Corpulence” describing how he lost 50 pounds in one year by following a low carbohydrate, high protein diet on the advice of his physician.
- **1876:** Dr. John Harvey Kellogg, MD, a Seventh Day Adventist, advocates vegetarianism, pure foods, slow chewing, calorie counting, and colon cleansing for health purposes. He invents cereal as a health food and the company bearing his name still exists today.
- **1920s:** Dr. William Howard Hay introduces the concept of avoiding certain food combinations while encouraging others. His theory was that mixing protein foods and starchy foods leads to acid formation and imbalances. Therefore, he promoted the consumption of vegetables, salads, and fruits as the main part of the diet, and suggested eating protein foods, fats and starches sparingly.

Dieting for either health or weight loss has been around for a long time. Although diets may tout themselves as new or different, they have all been tried before. The only difference today is that scientists have actually studied what seems to work and what does not.

Fact vs. Fads: What Diets Can and Cannot Do

Fad diets share a few common traits:

1. *They promise weight loss.*
2. *They have a unique hook of allowing just a few foods or types of foods or completely avoiding certain types of foods. This approach cuts calories sharply and leads to rapid weight loss at first, followed by less dramatic results.*
3. *Most people can only follow the diet for a short while before it becomes too burdensome, expensive or boring to follow.*



Using these criteria, many diets are “fads” but some have been studied for their effectiveness in producing weight loss. For example, a 2007 randomized control study looked at four well-known approaches to weight loss: Atkins (very low carbohydrate), Zone (low carbohydrate), Ornish (very high carbohydrate) and LEARN (behavioral approach; low fat, high carbohydrate) (Gardner 2007). All four approaches produced weight losses in premenopausal, obese and overweight women studied over a period of 12 months. However, participants following the Atkins approach lost an average of 4.7 kg (approximately 10 pounds) or 5% of body weight vs. 1.6 kg (approximately 3.5 pounds) (Zone), 2.2 kg (approximately 5 pounds)(LEARN), and 2.6 kg (approximately 6 pounds) (Ornish) lost by women following other diets. In addition, lipid profiles and blood pressure levels were more improved by the Atkins approach. However, weight loss is rarely permanent. The data from this study also show that within the 12 month period following the study, the Atkins group regained the most weight. While their overall loss was greater than the other groups at 12 months, they had also regained more weight in the next 12 months than the other three groups. Data were not collected beyond the 24 month period of the study, so it is unknown whether the weight gain trend would have continued.

Unfortunately, most research conducted with carefully selected participants indicates that the vast majority of dieters will regain most of the weight they lose within 5 years and many will regain more weight than what they originally lost (Mann 2007). However, information about long term, “successful losers” does exist. The National Weight Control Registry (NWCR) (<http://www.nwcr.ws>) is a database that tracks over 10,000 individuals who have lost at least 30 pounds and kept it off for one year or longer. While data from the National Weight Control Registry are from self-reported “successful losers” and therefore subject to bias, the participants tend to follow similar patterns both in terms of how they lose weight and maintain their losses. For example:

- 98% report that they changed their food intake in some way to lose weight.
- 94% increased their physical activity, with the most frequently reported form of activity being walking.
- 75% weigh themselves at least once a week.
- 90% exercise, on average, about 1 hour per day.

These approaches are not glamorous or magical. Perhaps that’s why they have worked well for the people using them.

Fad Diets May Work Temporarily BUT....

For many years, nutrition experts cautioned that “yo-yo” dieting (repeatedly losing and regaining weight) causes people to lose lean body mass (muscle) and gain excess fat, so that over a period of weight cycling



episodes the net result was weight gain not loss. Although research existed which countered this premise, it never received much attention.

Recently, nutrition experts seem to be conflicted about repeated weight loss efforts. Epidemiological studies indicate that obesity is closely associated with increased risk of death and disease from a variety of causes. Therefore, weight loss seems prudent, especially since successful “losers” typically need multiple attempts to lose weight before achieving permanent weight loss (weight control registry data).

Some research and public opinion have long supported the idea that obesity is unhealthy. What’s interesting is that while obesity may be associated with increased disease risk, causality between obesity and disease risk and early death has not been established. A vocal minority of nutrition scientists argue that it is actually weight cycling which puts people at increased risk for early death and disease and not obesity per se. For example, an analysis of NHANES I, II and III found greater longevity in the overweight category (Flegal, 2005) while a meta-analysis of 350,000 participants in 26 studies also found that overweight people live longer than those classified as normal weight (McGee, 2005). Additionally, research has identified the “obesity paradox” which shows that obese people with chronic diseases such as type 2 diabetes, hypertension and cardiovascular disease live longer than thinner people with these same diseases (Lavie 2007).

Finally, a growing body of research has focused on the benefits of shifting public health efforts away from weight management and focusing instead on health promotion. Randomized controlled trials (RCTs) studying the effects of a “Health at Every Size” approach have shown significant improvements in both physiologic (e.g., blood pressure, lipids), health behaviors (e.g., physical activity, disordered eating patterns), as well as psycho-social factors (e.g., mood, self-esteem, body image) (Bacon 2011).

Facing Fads: What to Say When They Appear

Health is much more than a number on a scale. Permanent health behavior change (such as healthy eating patterns, adopting physical activity, etc.) is what most health professionals recommend and in some cases, will likely lead to modest weight loss for most people. Realistically, weight maintenance (i.e. not gaining weight) rather than weight loss would be a huge improvement for many people in the long term.

But, people being people, fad diets will continue. What’s a health professional to say when faced with a reporter’s, client’s or friend’s question about the latest diet? One approach is to ask and provide answers to the following questions about the diet:

- **Effectiveness: Will the diet induce weight loss?**
 - Most “diets” cause weight loss—not because of any magical properties of the foods or combination of food properties. It’s always about the calories if weight is lost: fewer calories = weight loss. Depending on a few other factors, weight loss might be more in the first week



due to water weight loss (e.g., low carbohydrate diets). However, if the diet cannot be easily followed for longer than a week or two, it's probably not worth starting in the first place.

- **Harmful vs. Helpful: Does the diet recommend eliminating certain foods or food groups permanently so that key nutrients will be missing from the diet (e.g. calcium, iron, B vitamins, etc)?**
 - If following the diet will lead to unintended nutritional consequences like bone loss from low calcium intake, anemia from low iron intake, or deficiencies in B vitamins from lack of fortified foods (cereals or breads), it is not a good approach to use for a long period of time unless you are being supervised by a healthcare professional.
- **Exit Strategy: Is there a plan for what to do when the diet “ends?”**
 - Eventually, all diets reach an end point, either because the dieter becomes bored with the approach or the desired amount of weight loss has been achieved. In either case, it's important that the dieter know how to maintain their losses or they'll quickly resume old habits and the weight will return. A diet without an exit strategy is not a good approach to long term weight loss.

As health professionals and consumer advisors, the best approach is to stick to sound, science-based principles. For most people, variety, balance, fewer calories, moderation and increased physical activity are what work over time: not necessarily the most exciting advice but arguably the most effective.

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