



# What you should know about low-carbohydrate diets

## What are low-carbohydrate diets?

Low-carbohydrate diets are those that reduce the amount of carbohydrate-containing foods you eat each day, from about 60% of total calories in the typical American diet down to as little as 5%. Foods that contain mostly protein and fat are substituted.

Low-carbohydrate diets have not been scientifically proven to be effective for long-term weight management, and their long-term safety is questionable and unproven.

## Disadvantages of low-carbohydrate diets

- Important nutrients are missing from these diets and cannot be replaced by supplements.
- These diets are hard to follow because they lack variety, resulting in cravings for high-carbohydrate, high-fat foods. Eating less than 100 grams of carbohydrates a day is very hard in the long run, since Americans are accustomed to eating 275 grams a day.
- Although low-carbohydrate diets produce rapid weight loss initially, the weight loss does not come from fat loss alone. Instead, it comes from loss of water and electrolytes (dissolved salts and minerals in the blood).
- Maintaining weight loss is difficult, and if a dieter “cheats,” a surge of insulin can cause sodium and water retention and subsequent weight gain.
- Poor athletic performance may result from depletion of stored glycogen, which the

body burns for energy during exercise.

Carbohydrates—not proteins and fats—are the body’s main source of glycogen.

- Potential health risks: these diets include too much fat and protein, which can increase the risk of chronic disease. A diet low in fruits, vegetables, and whole grains increases the risk of heart disease, cancer, and stroke. Other health risks include mild dehydration, which can cause dizziness, headaches, confusion, nausea, fatigue, sleep problems, irritability, bad breath, and worsening of gout and kidney problems; osteoporosis, since a high ratio of animal to vegetable protein intake may increase bone loss and the risk of hip fracture in elderly women; a rise in blood pressure with age due to the lack of high-carbohydrate, high-fiber foods, which protect against high blood pressure; and rapid falls in blood pressure upon standing up (orthostatic hypotension), which can occur with rapid weight loss and can put older patients at higher risk for falls.

## The smart way to lose weight

Follow official dietary guidelines, such as those of the USDA Food Guide Pyramid (FIGURE 1) and the American Heart Association. A safe rate of weight loss is no more than 1 to 2 pounds per week.

- Make small, consistent changes in food selection and control portion sizes
- Eat a variety of grains (preferably whole grains), fruits, and vegetables daily

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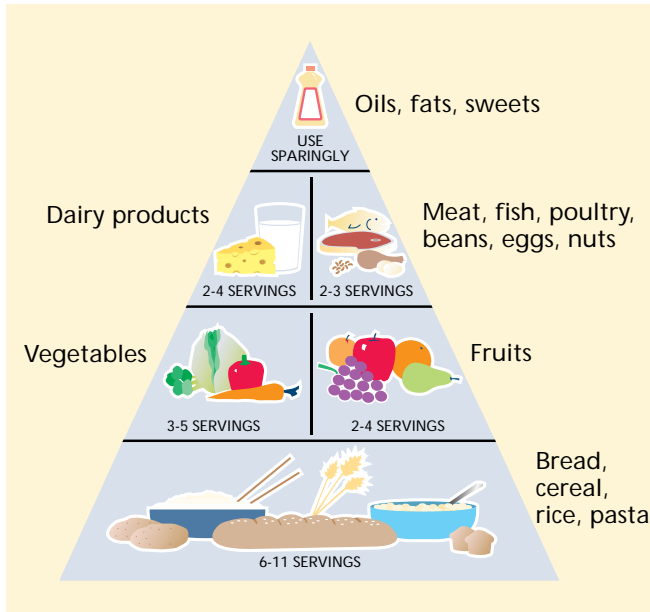
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**FIGURE 1.** USDA Food Guide Pyramid

- Select foods low in saturated fat and cholesterol and moderate in other fats
- Reduce sweets, desserts, and beverages that contain sugar
- Drink alcoholic beverages in moderation, if at all
- Stay physically active
- Record your body weight frequently.

If by making small dietary changes you can cut your daily caloric intake by as few as 100 calories while at the same time burn off as few as 100 calories through exercise, you will lose 10 to 15 pounds a year without changing your life in any other way.

### Benefits of weight loss

Obesity-related conditions such as high blood pressure improve with a weight loss of only 5% to 10%, even though a weight loss of 30% or more

may be needed to reach your ideal body weight. A 5% reduction in weight maintained for 1 year is considered successful long-term weight loss.

### What successful dieters do

The National Weight Control Registry found that dieters who lost at least 30 pounds and maintained the loss for at least 1 to 2 years did so by eating a high-fiber, low-fat diet and exercising regularly. Walking was the most popular activity. The Registry reported no such success with low-carbohydrate diets.

### Keeping weight off

Anyone can lose weight on a diet. The hardest part is maintaining the weight loss. Low-carbohydrate diets fail because, like all fad diets, they do not deal with the underlying causes of being overweight, nor do they teach better lifelong eating and exercise habits. No food or diet provides a magic answer. Good habits are the key.

Eliminating certain food groups simply decreases variety and nutrition, not weight. Humans are by nature omnivores. Diets that restrict the variety of foods are bound to fail because of our inherent desire to eat a variety of foods.

Ultimately, there is no escaping the fact that weight loss boils down to eating less (of the wrong foods) and moving more.

### For more information

- **Dietary guidelines for Americans.** From the US Department of Agriculture and the US Department of Health and Human Services. <http://www.nal.usda.gov/fnic/dga/dga95.html>
- The Cleveland Clinic Health Information Center. <http://www.clevelandclinic.org/health/search>