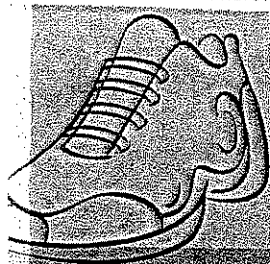


Eating and physical activity patterns that are focused on consuming fewer calories, making informed food choices, and being physically active can help people attain and maintain a healthy weight, reduce their risk of chronic disease, and promote overall health. The *Dietary Guidelines for Americans, 2010* exemplifies these strategies through recommendations that accommodate the food preferences, cultural traditions, and customs of the many and diverse groups who live in the United States.

By law (Public Law 101-445, Title III, 7 U.S.C. 5301 et seq.), *Dietary Guidelines for Americans* is reviewed, updated if necessary, and published every 5 years. The U.S. Department of Agriculture (USDA) and the U.S. Department of Health and Human Services (HHS) jointly create each edition. *Dietary Guidelines for Americans, 2010* is based on the *Report of the Dietary Guidelines Advisory Committee on the Dietary Guidelines for Americans, 2010* and consideration of Federal agency and public comments.

Dietary Guidelines recommendations traditionally have been intended for healthy Americans ages 2 years and older. However, *Dietary Guidelines for Americans, 2010* is being released at a time of rising concern about the health of the American population. Poor diet and physical inactivity are the most important factors contributing to an epidemic of overweight and obesity affecting men, women, and children in all segments of our society. Even in the absence of overweight, poor diet and physical inactivity are associated with major causes of morbidity and mortality in the United States. Therefore, the *Dietary Guidelines for Americans, 2010* is intended for Americans ages 2 years and older, including those at increased risk of chronic disease.

*Dietary Guidelines for Americans, 2010* also recognizes that in recent years nearly 15 percent of American households have been unable to acquire adequate food to meet their needs.<sup>1</sup> This dietary guidance can help them maximize the nutritional content of



## Executive Summary



their meals. Many other Americans consume less than optimal intake of certain nutrients even though they have adequate resources for a healthy diet. This dietary guidance and nutrition information can help them choose a healthy, nutritionally adequate diet.

The intent of the *Dietary Guidelines* is to summarize and synthesize knowledge about individual nutrients and food components into an interrelated set of recommendations for healthy eating that can be adopted by the public. Taken together, the *Dietary Guidelines* recommendations encompass two overarching concepts:

- **Maintain calorie balance over time to achieve and sustain a healthy weight.** People who are most successful at achieving and maintaining a healthy weight do so through continued attention to consuming only enough calories from foods and beverages to meet their needs and by being physically active. To curb the obesity epidemic and improve their health, many Americans must decrease the calories they consume and increase the calories they expend through physical activity.

- **Focus on consuming nutrient-dense foods and beverages.** Americans currently consume too much sodium and too many calories from solid fats, added sugars, and refined grains.<sup>2</sup> These replace nutrient-dense foods and beverages and make it difficult for people to achieve recommended nutrient intake while controlling calorie and sodium intake. A healthy eating pattern limits intake of sodium, solid fats, added sugars, and refined grains and emphasizes nutrient-dense foods and beverages—vegetables, fruits, whole grains, fat-free or low-fat milk and milk products,<sup>3</sup> seafood, lean meats and poultry, eggs, beans and peas, and nuts and seeds.

2. Added sugars: Caloric sweeteners that are added to foods during processing, preparation, or consumed separately. Solid fats: Fats with a high content of saturated and/or trans fatty acids, which are usually solid at room temperature. Refined grains: Grains and grain products missing the bran, germ, and/or endosperm; any grain product that is not a whole grain.

3. Milk and milk products also can be referred to as dairy products.

4. Information on the type and strength of evidence supporting the *Dietary Guidelines* recommendations can be found at <http://www.nutritionevidencecenter.gov>.

A basic premise of the Dietary Guidelines is that nutrient needs should be met primarily through consuming foods. In certain cases, fortified foods and dietary supplements may be useful in providing one or more nutrients that otherwise might be consumed in less than recommended amounts. Two eating patterns that embody the Dietary Guidelines are the USDA Food Patterns and their vegetarian adaptations and the DASH (Dietary Approaches to Stop Hypertension) Eating Plan.

A healthy eating pattern needs not only to promote health and help to decrease the risk of chronic diseases, but it also should prevent foodborne illness. Four basic food safety principles (Clean, Separate, Cook, and Chill) work together to reduce the risk of foodborne illnesses. In addition, some foods (such as milks, cheeses, and juices that have not been pasteurized, and undercooked animal foods) pose high risk for foodborne illness and should be avoided.

The information in the *Dietary Guidelines for Americans* is used in developing educational materials and aiding policymakers in designing and carrying out nutrition-related programs, including Federal food, nutrition education, and information programs. In addition, the *Dietary Guidelines for Americans* has the potential to offer authoritative statements as provided for in the Food and Drug Administration Modernization Act (FDAMA).

The following are the *Dietary Guidelines for Americans*, 2010 Key Recommendations, listed by the chapter in which they are discussed in detail. These Key Recommendations are the most important in terms of their implications for improving public health.<sup>4</sup> To get the full benefit, individuals should carry out the Dietary Guidelines recommendations in their entirety as part of an overall healthy eating pattern.

## Key Recommendations

### BALANCING CALORIES TO MANAGE WEIGHT

- Prevent and/or reduce overweight and obesity through improved eating and physical activity behaviors.
- Control total calorie intake to manage body weight. For people who are overweight or obese, this will mean consuming fewer calories from foods and beverages.
- Increase physical activity and reduce time spent in sedentary behaviors.
- Maintain appropriate calorie balance during each stage of life—childhood, adolescence, adulthood, pregnancy and breastfeeding, and older age.

### FOODS AND FOOD COMPONENTS TO REDUCE

- Reduce daily sodium intake to less than 2,300 milligrams (mg) and further reduce intake to 1,500 mg among persons who are 51 and older and those of any age who are African American or have hypertension, diabetes, or chronic kidney disease. The 1,500 mg recommendation applies to about half of the U.S. population, including children, and the majority of adults.
- Consume less than 10 percent of calories from saturated fatty acids by replacing them with monounsaturated and polyunsaturated fatty acids.
- Consume less than 300 mg per day of dietary cholesterol.
- Keep *trans* fatty acid consumption as low as possible by limiting foods that contain synthetic sources of *trans* fats, such as partially hydrogenated oils, and by limiting other solid fats.
- Reduce the intake of calories from solid fats and added sugars.
- Limit the consumption of foods that contain refined grains, especially refined grain foods that contain solid fats, added sugars, and sodium.
- If alcohol is consumed, it should be consumed in moderation—up to one drink per day for women and two drinks per day for men—and only by adults of legal drinking age.<sup>5</sup>

## FOODS AND NUTRIENTS TO INCREASE

Individuals should meet the following recommendations as part of a healthy eating pattern while staying within their calorie needs.

- Increase vegetable and fruit intake.
- Eat a variety of vegetables, especially dark-green and red and orange vegetables and beans and peas.
- Consume at least half of all grains as whole grains. Increase whole-grain intake by replacing refined grains with whole grains.
- Increase intake of fat-free or low-fat milk and milk products, such as milk, yogurt, cheese, or fortified soy beverages.<sup>6</sup>
- Choose a variety of protein foods, which include seafood, lean meat and poultry, eggs, beans and peas, soy products, and unsalted nuts and seeds.
- Increase the amount and variety of seafood consumed by choosing seafood in place of some meat and poultry.
- Replace protein foods that are higher in solid fats with choices that are lower in solid fats and calories and/or are sources of oils.
- Use oils to replace solid fats where possible.
- Choose foods that provide more potassium, dietary fiber, calcium, and vitamin D, which are nutrients of concern in American diets. These foods include vegetables, fruits, whole grains, and milk and milk products.

## Recommendations for specific population groups

### *Women capable of becoming pregnant<sup>7</sup>*

- Choose foods that supply heme iron, which is more readily absorbed by the body, additional iron sources, and enhancers of iron absorption such as vitamin C-rich foods.
- Consume 400 micrograms (mcg) per day of synthetic folic acid (from fortified foods and/or supplements) in addition to food forms of folate from a varied diet.<sup>8</sup>

### *Women who are pregnant or breastfeeding<sup>7</sup>*

- Consume 8 to 12 ounces of seafood per week from a variety of seafood types.
- Due to their high methyl mercury content, limit white (albacore) tuna to 6 ounces per week and do not eat the following four types of fish: tilefish, shark, swordfish, and king mackerel.
- If pregnant, take an iron supplement, as recommended by an obstetrician or other health care provider.

### *Individuals ages 50 years and older*

- Consume foods fortified with vitamin B<sub>12</sub>, such as fortified cereals, or dietary supplements.

## BUILDING HEALTHY EATING PATTERNS

- Select an eating pattern that meets nutrient needs over time at an appropriate calorie level.
- Account for all foods and beverages consumed and assess how they fit within a total healthy eating pattern.
- Follow food safety recommendations when preparing and eating foods to reduce the risk of foodborne illnesses.

6. Fortified soy beverages have been marketed as "soymilk," a product name consumers could see in supermarkets and consumer materials. However, FDA's regulations do not contain provisions for the use of the term soymilk. Therefore, in this document, the term "fortified soy beverage" includes products that may be marketed as soymilk.

7. Includes adolescent girls.

8. "Folic acid" is the synthetic form of the nutrient; whereas, "folate" is the form found naturally in foods.

## Rules to eat by

*New dietary guidelines ease up on fat and avoid a hard line on sugar. But you'd better get in shape, because you're supposed to be getting an hour of exercise each day.*

In September, the Institute of Medicine's (IOM) Food and Nutrition Board released new dietary guidelines for fat, carbohydrates (sugar and starch), and protein. Because these nutrients are our chief sources of energy (calories), the guidelines also took up the issues of energy balance, exercise, and keeping a healthy weight.

### Fat

As expected, the guidelines said it was OK to get more calories from fat: 20%–35% of the daily total instead of the usual recommendation of 30%. Nutrition experts have been pushing for a more relaxed attitude about fat intake for some time. People who stick to low-fat diets often end up consuming more — not fewer — calories because they compensate for the lack of fat with more carbohydrates. Furthermore, low-fat eating per se doesn't really help you lose weight: you're no more likely to trim down on a low-fat diet than on a high-fat one if the calories of the two are the same. Finally, some types of fat can truly benefit your health. Monounsaturated fat (in olive and canola oils) and polyunsaturated fat (in other vegetable oils) cause a favorable change in the ratio of "good" HDL cholesterol to your total cholesterol, a number that translates into a lower risk for heart disease.

But there are only two types of fat that you must have in your diet: alpha-linolenic acid (found in milk and vegetable oils) and linoleic acid (found in safflower and corn oils). Deficiencies cause scaly skin and dermatitis. Don't worry: it's extremely rare for the relatively fatty American diet to be short on these fats.



Carbohydrates (starch and sugar) The guidelines say we should get 45%–65% of our calories from carbohydrates, which isn't a major departure from previous advice.

The IOM panel split on the glycemic index (GI), a measurement of how fast starches and sugars get metabolized into blood sugar. Studies are showing that high-GI diets may increase the risk of diabetes, heart disease, obesity, and certain cancers. Some of the experts wanted the carbohydrate guidelines to reflect these findings and steer people away from high-GI foods. Others, however, insisted the evidence is incomplete, and they eventually held sway.

Another carbohydrate controversy is the role of sweeteners like corn syrup, high-fructose corn syrup, fructose sweeteners, various kinds of dextrose, as well as white and brown sugar. Some experts believe that foods containing these added sugars (soft drinks, fruit drinks, cookies, candy) are insidiously fattening, particularly for children, because they entice us with hard-to-resist calories. But so far, the studies on the sugar-obesity connection are inconsistent. The IOM guidelines, therefore, didn't set a separate upper limit on overall sugar intake, and sanctioned getting up to 25% of calories from added sugars.

### Protein

The protein recommendations don't differ much from what experts have said in the past. The Recommended Dietary Allowance (RDA) for adult men and women was set at 0.36 grams per pound of body weight per day. That comes out to 55 grams of protein daily for a person weighing 150 pounds. Six ounces of lean meat or poultry contain about 50 grams of

protein; a like amount of fish, 40 grams; and a cup of yogurt or milk, 8 grams. A few studies indicate that older people need less protein because they have less muscle, but the results are inconsistent. Therefore, the protein RDA was left the same for all adults.



### Exercise

It's odd to find exercise advice in food and nutrition guidelines. But the panel reasoned — as others have — that they couldn't make recommendations about healthy levels of energy intake without dealing with energy expenditure.

The recommendation that everyone get 60 minutes of exercise daily was a surprise. A steady stream of studies has shown that 30 minutes per day, even when it's broken up into 10- and 15-minute sessions, gives you most of the benefits (and there are many) of exercise.

People dispensing health advice (including the *Health Letter*) pounced. Here was research that put exercise into the realm of the possible! But the sobering IOM guidelines say that a half-hour per day is just not enough to maintain a healthy body weight (a body mass index of 18.5–25) and "achieve all the identified health benefits fully."

It's refreshing that the IOM experts didn't pull any punches on the effort it takes to keep weight off in a calorie-rich, activity-poor world. On the other hand, their guidelines didn't invalidate all the "exercise-lite" research showing considerable benefits at a much more realistic level of a half-hour per day. To borrow (and abuse) a phrase, the optimum needn't be the enemy of the good when it comes to healthy exercise. ■



**Diet Articles**

Name \_\_\_\_\_

Period \_\_\_\_\_ Date \_\_\_\_\_

*Executive Summary, Dietary Guidelines for Americans, 2010*

1. According to the article, what are three benefits of making informed food choices and being physically active?
  - a.
  - b.
  - c.

2. What are the two most important factors that contribute to the obesity epidemic?
  - a.
  - b.

3. Outline the main points of the overarching concepts that are recommended by the Dietary Guidelines:

**Maintain calorie balance over time to  
achieve and sustain healthy weight**

**Focus on consuming nutrient-dense foods and  
beverages**

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4. List at least three dietary recommendations for fats (lipids):

- a. A
- b. B
- c. C

5. List at least two dietary recommendations for carbohydrates (grains).

- a. A
- b. B

6. List at least two dietary recommendations for proteins.

- a. Z
- b. B

7. How are dietary recommendations different for different groups of people?

Rules to Eat, Harvard Health, 2002

8. What risks are there for those following a strict low fat diet?
9. What types of fats are beneficial and why?
10. What does GI mean?
11. What are some of the effects of a high GI diet?
12. What are some examples of foods containing added sugars?
13. Why is exercise important? What is the recommendation for the amount of exercise your body needs?