Dietary Guidelines for Americans 2010

for a Healthier Life

Slides provided by
the USDA Center for Nutrition Policy and Promotion


Nutrition and Your Health
Dietary Guidelines for Americans
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2 Maintain Ideal Weight page 7
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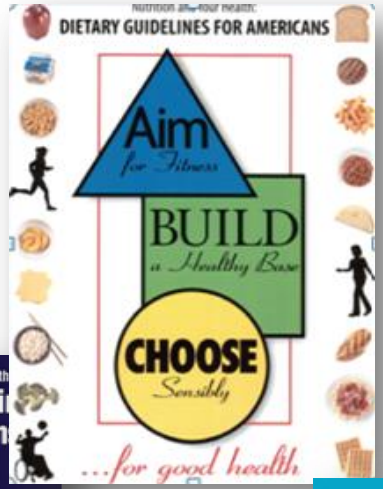
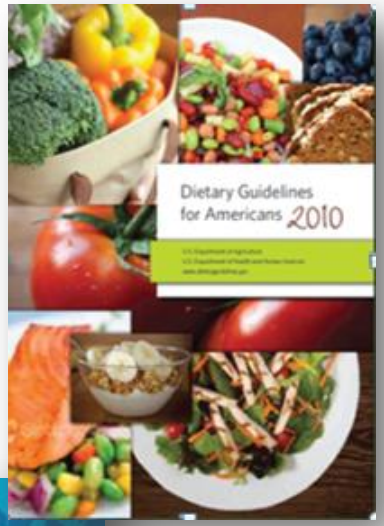
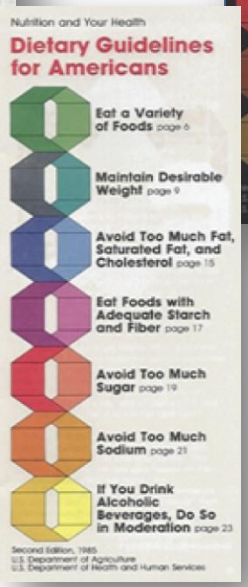
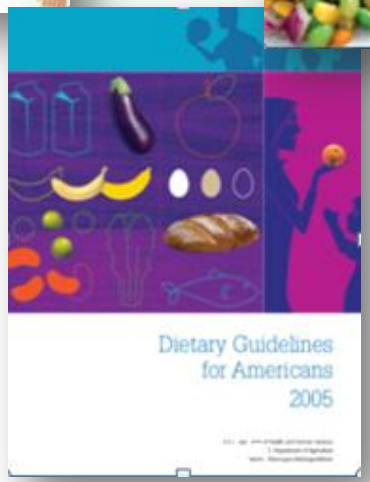
Choose a diet low in fat, saturated fat, and cholesterol page 13
Choose a diet with plenty of vegetables, fruits, and grain products page 18
Use sugars only in moderation page 21
Use salt and sodium only in moderation page 23
If you drink alcoholi beverages, do so in moderation page 25


DIETARY GUIDELINES FOR AMERICANS
Aim for Fitness
BUILD a Healthy Base
CHOOSE Sensibly
...for good health


Dietary Guidelines for Americans 2010


Nutrition and Your Health
Dietary Guidelines for Americans
Eat a Variety of Foods page 6
Maintain Desirable Weight page 9
Avoid Too Much Fat, Saturated Fat, and Cholesterol page 15
Eat Foods with Adequate Starch and Fiber page 17
Avoid Too Much Sugar page 19
Avoid Too Much Sodium page 21
If You Drink Alcoholic Beverages, Do So in Moderation page 23
Second Edition, 1985
U.S. Department of Agriculture
U.S. Department of Health and Human Services


Nutrition and Your Health
Dietary Guideli
for American
Balance the food you eat with physical activity—maintain or improve your weight
Choose a diet with plenty of grain products, vegetables, and fruits
Choose a diet low in fat, saturated fat, and cholesterol
Eat a variety of foods
Choose a diet moderate in salt and sodium
Choose a diet moderate in sugars
If you drink alcoholic beverages, do so in moderation
Fourth Edition, 1995
U.S. Department of Agriculture
U.S. Department of Health and Human Services


Dietary Guidelines for Americans 2005

1995

Focus of the Dietary Guidelines

Purpose

- Provide science-based advice for ages 2 years and older
- Including those at increased risk of chronic disease

Target audience

- Policymakers, nutrition educators, and health professionals

Produced by

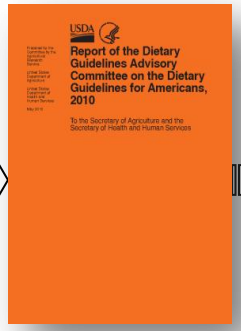
- USDA and HHS

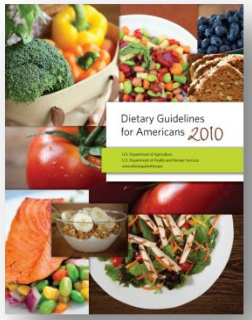
How often

- Updated every 5 years

Phase 1

DGAC Charter





Phase 2

Phase 3

Phase 4

Dietary Guidelines, 2010
Development Process

Phase 1: Dietary Guidelines Advisory Committee

- 13 member Advisory Committee from academia and medical institutions
  - Highly credentialed and experienced in public health
- Systematic evidence-based review methodology for 130 scientific questions
- Consistent and transparent process
- Data analyses, food pattern modeling analyses, and reviews of existing evidence-based reports
- Public comments received and reviewed throughout
- 445-page advisory report provided scientific basis

USDA's Nutrition Evidence Library (NEL)

- Created to conduct evidence-based reviews to inform Federal nutrition policy and programs
  - Preferred foundation for policy development and guidance
- Meets Federal mandates requiring that all agencies ensure the quality, objectivity, utility, and integrity of information used to form Federal guidance
- Uses a systematic process that is rigorous, transparent, and minimizes bias

Evidence-Based Review Methodology

1. Develop research questions
2. Create and implement literature search and sort plans
3. Develop evidence portfolios
4. Synthesize the bodies of evidence
5. Develop conclusion statements and grade the evidence
6. Describe research recommendations

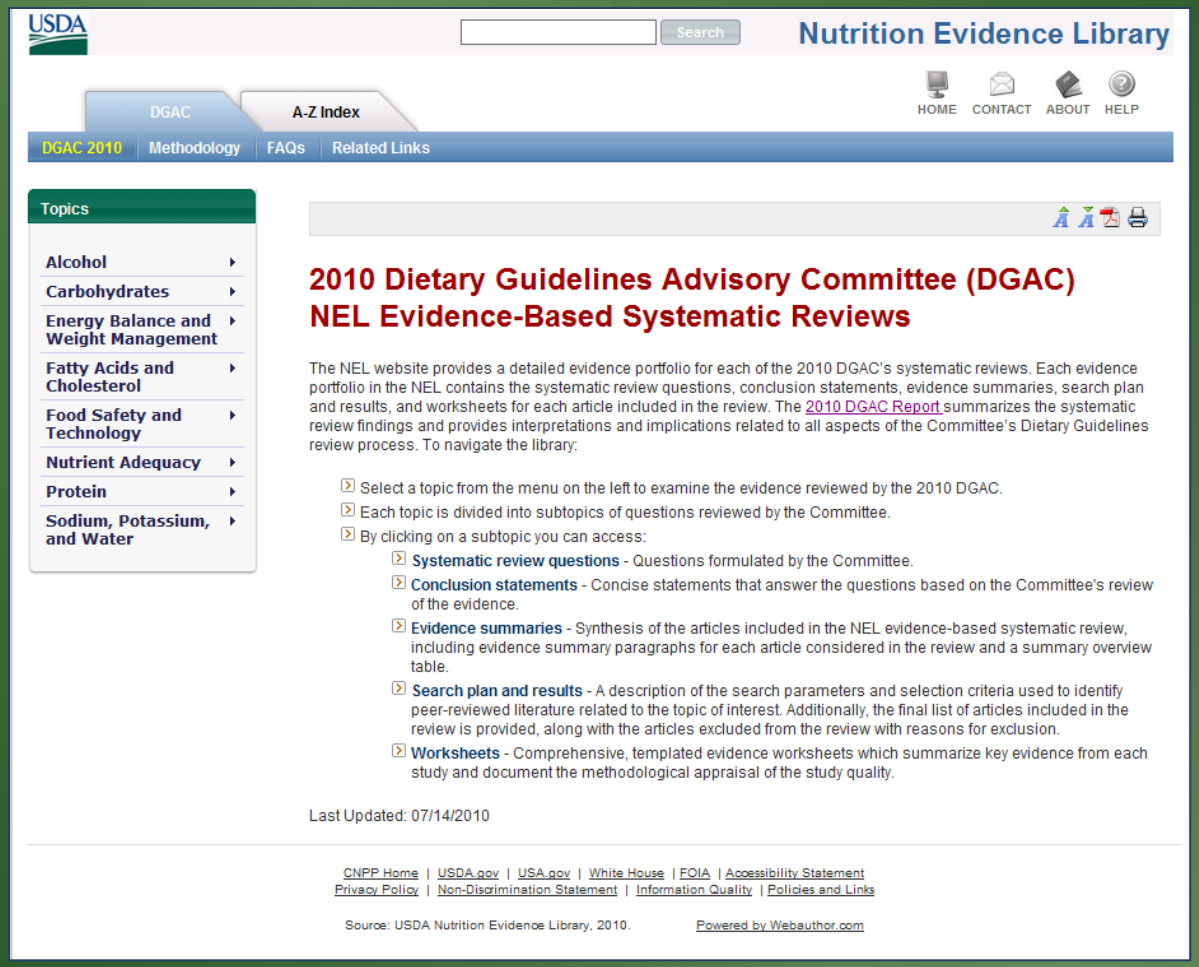
Spahn JM, et al. The systematic review methodology used to support the 2010 Dietary Guidelines Advisory Committee. JADA. (In Press).

Grading the Strength of the Evidence

- DGAC grading criteria:
  - Quality of studies
  - Quantity of studies and subjects
  - Consistency of findings across studies
  - Magnitude of the effect or public health impact
  - Generalizability to the population of interest
- Qualitative words used to describe the strength of the evidence:
  - *Strong*, *Moderate*, *Limited*, *Expert Opinion*, and *Grade Not Assignable*

Transparency and Availability

www.NutritionEvidenceLibrary.gov



Dietary Guidelines, 2010
Development Process

Phase 2: Review of and comment on DGAC Report

- Public comments
  - 1159 written comments posted to public comments database between June 15 through July 15, 2010
  - 50 organizations and individuals provided oral testimony on July 8, 2010
  - Staff reviewed and considered all public comments in development of policy document
  - All comments available at www.dietaryguidelines.gov for public view
- USDA and HHS agency review for program-specific policy implications

Dietary Guidelines, 2010
Development Process

Phase 3: Drafting and review of DGA

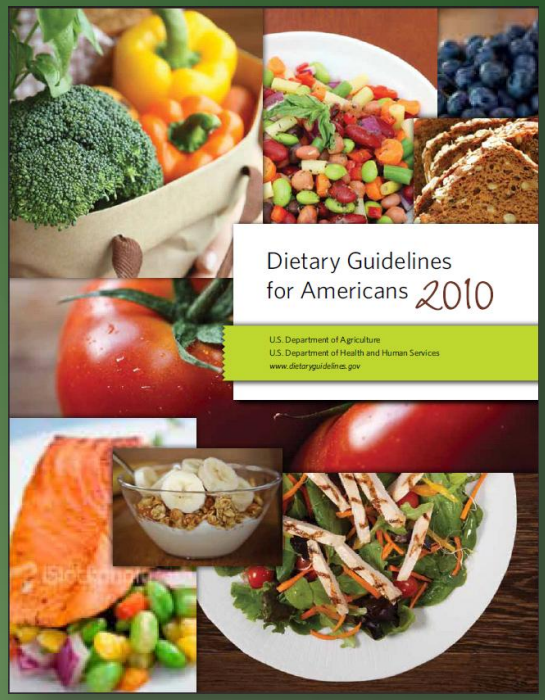
- Writing team formed
  - USDA and HHS nutritionists -- most worked closely with DGAC in developing their Report
  - Structure for DGA followed the four main integrated findings identified in Report's Translation and Integration Chapter
- Reviews of drafts included
  - USDA and HHS Agency review for policy implications
  - Independent peer review for compliance with Quality of Information Act for clarity, technical accuracy, and consistency with Advisory Report
  - Clearance by Departments in December 2010

Transparency

- Six open Committee meetings
- Nutrition Evidence Library available to public at www.NutritionEvidenceLibrary.gov
- Public comments accepted throughout deliberations
- Advisory Report posted online for public comment
  - Published version now online
- Agency review of DGAC Report
- Several rounds of agency review of draft Policy Document
- Peer review of Policy Document

Dietary Guidelines, 2010 at a Glance

- Executive Summary
- Chapter 1. Introduction
- Chapter 2. Balancing Calories to Manage Weight
- Chapter 3. Foods and Food Components to Reduce
- Chapter 4. Foods and Nutrients to Increase
- Chapter 5. Building Healthy Eating Patterns
- Chapter 6. Helping Americans Make Healthy Choices
- Appendices



Executive Summary

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.[1] This dietary guidance can help them maximize the nutritional content of

1. Nord M, Coleman-Jensen A, Andrews M, Carlson S. Household food security in the United States, 2009. Washington (DC): U.S. Department of Agriculture, Economic Research Service. 2010 Nov. Economic Research Report No. ERR-108. Available from http://www.ers.usda.gov/publications/err108.

Dietary Guidelines, 2010
Executive Summary

- Describes purpose, uses, and major concepts
- Includes individuals at high risk of chronic disease ***new***
- Identifies two overarching concepts ***new***
  - *Maintain calorie balance over time to achieve and sustain a healthy weight*
  - *Focus on consuming nutrient-dense foods and beverages*
- Lists all Key Recommendations

Chapter 1
Introduction

In 1980, the U.S. Department of Agriculture (USDA) and the U.S. Department of Health and Human Services (HHS) released the first edition of *Nutrition and Your Health: Dietary Guidelines for Americans*. These Dietary Guidelines were different from previous dietary guidance in that they reflected emerging scientific evidence about diet and health and expanded the traditional focus on nutrient adequacy to also address the impact of diet on chronic disease.

Subsequent editions of the *Dietary Guidelines for Americans* have been remarkably consistent in their recommendations about the components of a health-promoting diet, but they also have changed in some significant ways to reflect an evolving body of evidence about nutrition, the food and physical activity environment, and health. The ultimate goal of the *Dietary Guidelines for Americans* is to improve the health of our Nation's current and future generations by facilitating and promoting healthy eating and physical activity choices so that these behaviors become the norm among all individuals.

The recommendations contained in the *Dietary Guidelines for Americans* 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. Its recommendations accommodate the reality that a large percentage of Americans are overweight or obese and/or at risk of various chronic diseases. Therefore, the *Dietary Guidelines for Americans, 2010* is intended for Americans ages 2 years and older, including those who are at increased risk of chronic disease.

Poor diet and physical inactivity are the most important factors contributing to an epidemic of overweight and obesity in this country. The most recent data indicate that 72 percent of men and 64 percent of women are overweight or obese, with about one-third of adults being obese.[9] Even in the absence of overweight, poor diet and physical inactivity are associated with major causes of morbidity and mortality. These include cardiovascular disease, hypertension,

9. Flegal KM, Carroll MD, Ogden CL, Curtin LR. Prevalence and trends in obesity among U.S. adults, 1999-2008. JAMA. 2010;303(3):235-241.

Chapter 1
Introduction

- Describes 2010 Dietary Guidelines development
- Identifies their uses
- Explains their importance for health promotion and disease prevention
  - Highlights the heavy toll of diet-related diseases
- Provides a “roadmap” to the rest of the document
  - Explains strength of the evidence
  - Defines several key terms

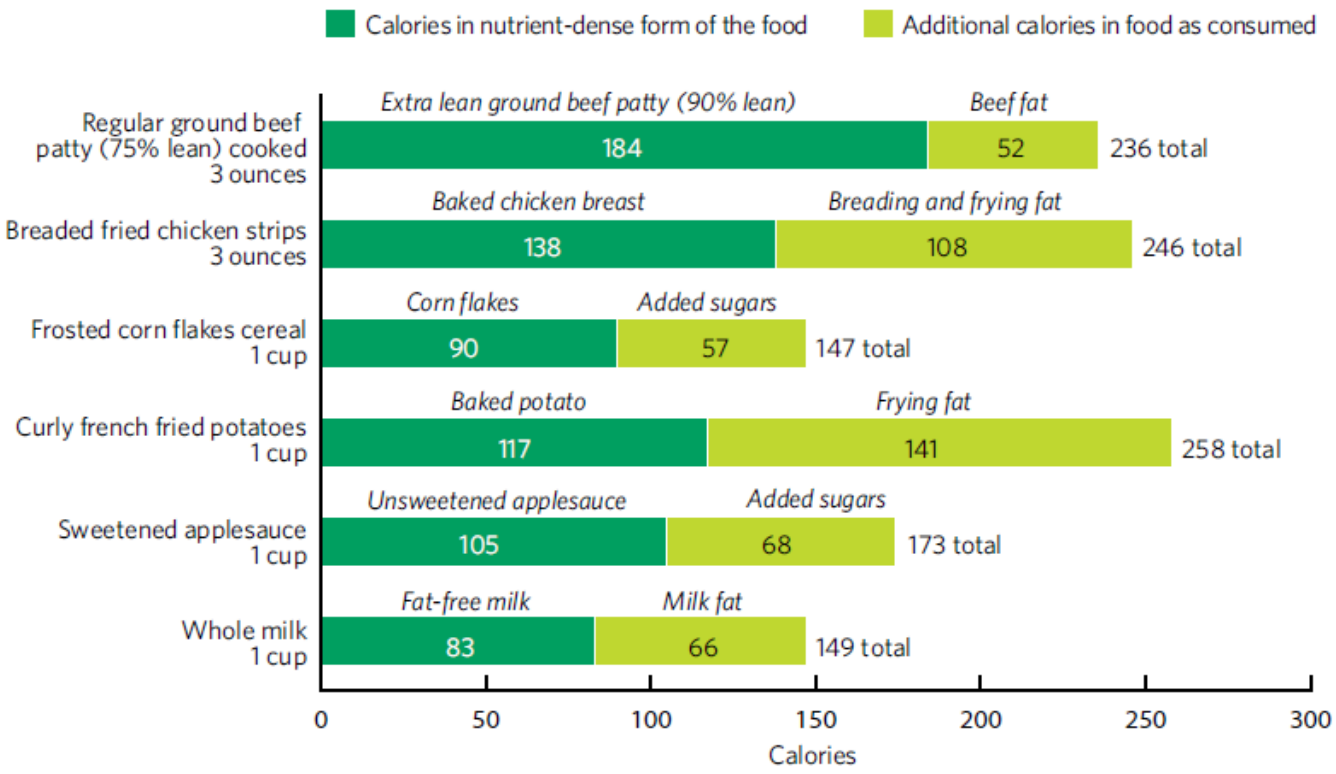
Key term definition
"Nutrient Dense"

Nutrient-dense foods and beverages:

- Provide vitamins, minerals, and other beneficial substances and relatively few calories without
  - Solid fats in the food or added to it
  - Added sugars
  - Added refined starches
  - Added sodium
- Retain naturally occurring components, such as dietary fiber
- All vegetables, fruits, whole grains, seafood, eggs, beans and peas, unsalted nuts and seeds, fat-free and low-fat dairy, and lean meats and poultry are nutrient dense when prepared without solid fats or sugars

Nutrient Dense and Non-Nutrient Dense Forms of Sample Foods

FIGURE 5-2. Examples of the Calories in Food Choices That Are Not in Nutrient Dense Forms and the Calories in Nutrient Dense Forms of These Foods



Chapter 2

Balancing Calories to Manage Weight

Achieving and sustaining appropriate body weight across the lifespan is vital to maintaining good health and quality of life. Many behavioral, environmental, and genetic factors have been shown to affect a person's body weight. *Calorie balance over time is the key to weight management.* Calorie balance refers to the relationship between calories consumed from foods and beverages and calories expended in normal body functions (i.e., metabolic processes) and through physical activity. People cannot control the calories expended in metabolic processes, but they can control what they eat and drink, as well as how many calories they use in physical activity.

Calories consumed must equal calories expended for a person to maintain the same body weight. Consuming more calories than expended will result in weight gain. Conversely, consuming fewer calories than expended will result in weight loss. This can be achieved over time by eating fewer calories, being more physically active, or, best of all, a combination of the two.

Maintaining a healthy body weight and preventing excess weight gain throughout the lifespan are highly preferable to losing weight after weight gain. Once a person becomes obese, reducing body weight back to a healthy range requires significant effort over a span of time, even years. People who are most successful at losing weight and keeping it off do so through continued attention to calorie balance.

The current high rates of overweight and obesity among virtually all subgroups of the population in the United States demonstrate that many Americans are in *calorie imbalance*—that is, they consume more calories than they expend. To curb the obesity epidemic and improve their health, Americans need to make significant efforts to decrease the total number of calories they consume from foods and beverages and increase calorie expenditure through physical

FOR MORE INFORMATION
See **Chapter 5** for discussion of healthy eating patterns that meet nutrient needs within calorie limits.

Chapter 2
Balancing Calories to Manage Weight

- Epidemic of overweight and obesity in all segments of our society ***new***
  - Environmental factors contribute to weight gain
- Calorie balance over time is key
- Important modifiable factors
  - Calories consumed in foods and beverages
  - Calories expended in physical activity
- Strong evidence for no optimal proportion of macronutrients for weight loss

Top Sources of Calories Among Americans 2 Years and Older

1. **Grain-based desserts**
   - Cake, cookies, pie, cobbler, sweet rolls, pastries, and donuts
2. **Yeast breads**
   - White bread and rolls, mixed-grain bread, flavored bread, whole-wheat bread, and bagels
3. **Chicken and chicken mixed dishes**
   - Fried and baked chicken parts, chicken strips/patties, stir-fries, casseroles, sandwiches, salads, and other chicken mixed dishes
4. **Soda/energy/sports drinks**
   - Sodas, energy drinks, sports drinks, and sweetened bottled water including vitamin water
5. **Pizza**

Source: NHANES 2005-2006, Available at http://riskfactor.cancer.gov/diet/foodsources/

Top Sources of Calories by Age Group

- Alcoholic beverages are a major calorie source for adults
- Sodas and pizza contribute more calories among adolescents than younger children
- Fluid milk is a top calorie source for younger children

Principles for Promoting Calorie Balance

- Monitor food and beverage intake, physical activity, and body weight
- Reduce portion sizes
- When eating out, make better choices
- Limit screen time

Chapter 2
Balancing Calories to Manage Weight

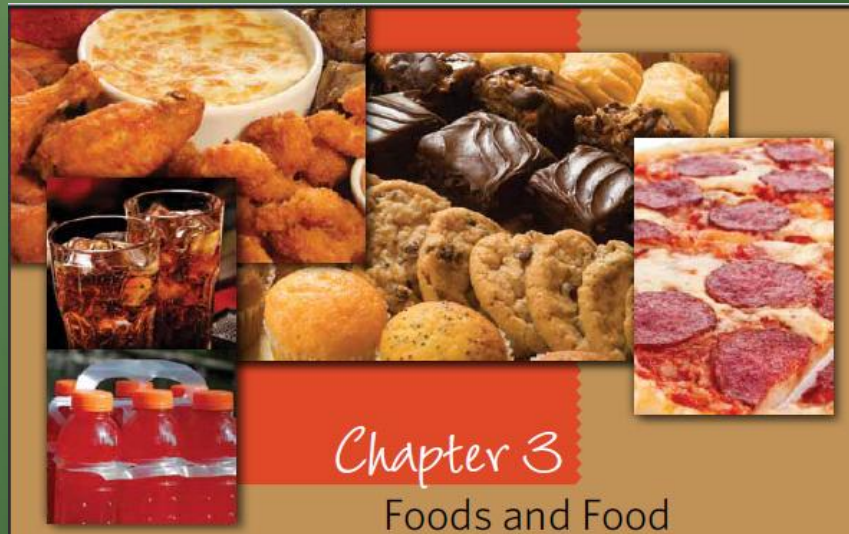
Key Recommendations

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.



Chapter 3

Foods and Food Components to Reduce

The *Dietary Guidelines for Americans* provides science-based advice to promote health and reduce the risk of major chronic diseases through diet and physical activity. Currently, very few Americans consume diets that meet Dietary Guideline recommendations. This chapter focuses on certain foods and food components that are consumed in excessive amounts and may increase the risk of certain chronic diseases. These include sodium, solid fats (major sources of saturated and *trans* fatty acids), added sugars, and refined grains. These food components are consumed in excess by children, adolescents, adults, and older adults. In addition, the diets of most men exceed the recommendation for cholesterol. Some people also consume too much alcohol.

This excessive intake replaces nutrient-dense forms of foods in the diet, making it difficult for people to achieve recommended nutrient intake and control calorie intake. Many Americans are overweight or obese, and are at higher risk of chronic diseases, such as cardiovascular disease, diabetes, and certain types of cancer. Even in the absence of overweight or obesity, consuming too much sodium, solid fats, saturated and *trans* fatty acids, cholesterol, added sugars, and alcohol increases the risk of some of the most common chronic diseases in the United States. Discussing solid fats in addition to saturated and *trans* fatty acids is important because, apart from the effects of saturated and *trans* fatty acids on cardiovascular disease risk, solid fats are abundant in the diets of Americans and contribute significantly to excess calorie intake. The recommendations in this chapter are based on evidence that eating less of these foods and food components can help Americans meet their nutritional needs within appropriate calorie levels, as well as help reduce chronic disease risk.

Chapter 3
Foods and Food Components to Reduce

Topics covered

- Sodium
- Fats
  - Saturated fatty acids
  - *Trans* fatty acids
  - Cholesterol
- Calories from solid fats and added sugars
- Refined grains
- Alcohol

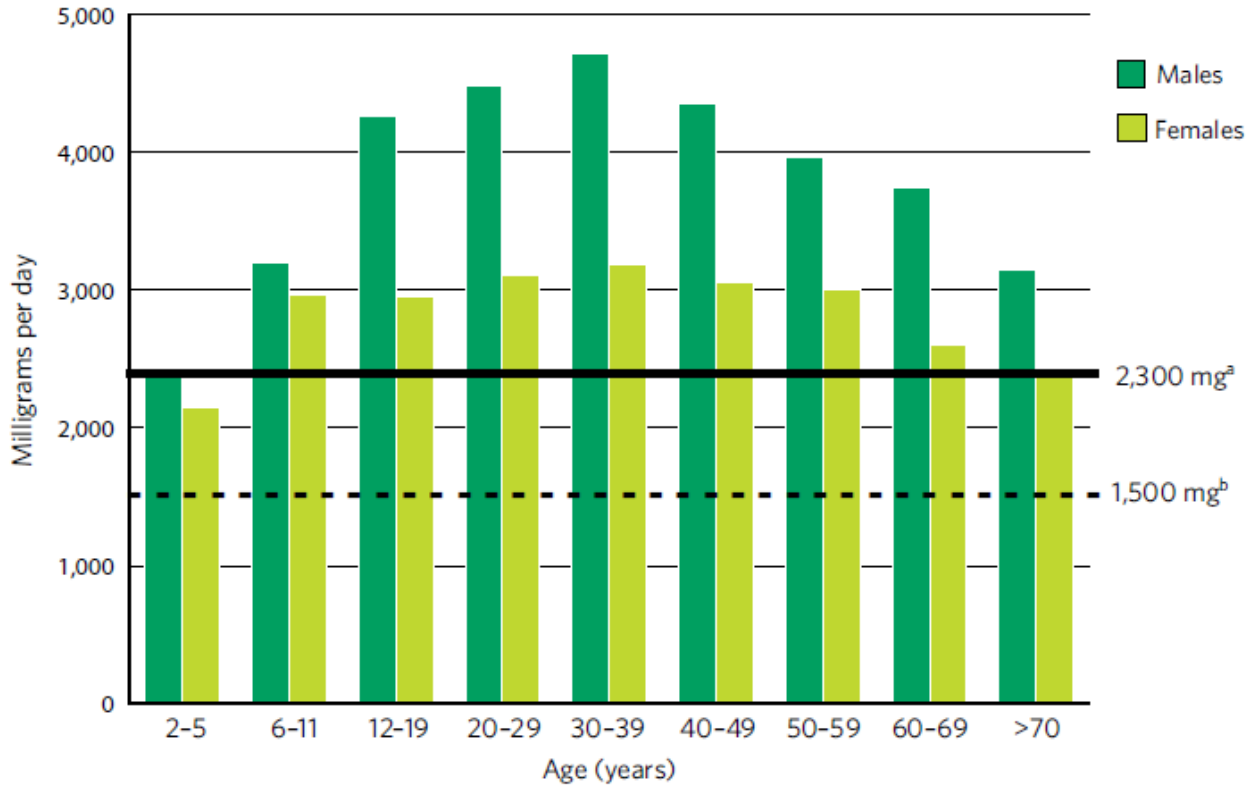
Chapter 3
Foods and Food Components to Reduce

Sodium

- Reduce intake to less than 2300 mg per day
- Further reduce intake to 1500 mg per day for
  - Adults ages 51+
  - African Americans ages 2+
  - People ages 2+ with high blood pressure, diabetes, or chronic kidney disease
- The 1500 mg recommendation applies to half the total population (ages 2+) and to the majority of adults
- Immediate, deliberate reduction in sodium content of foods is needed.

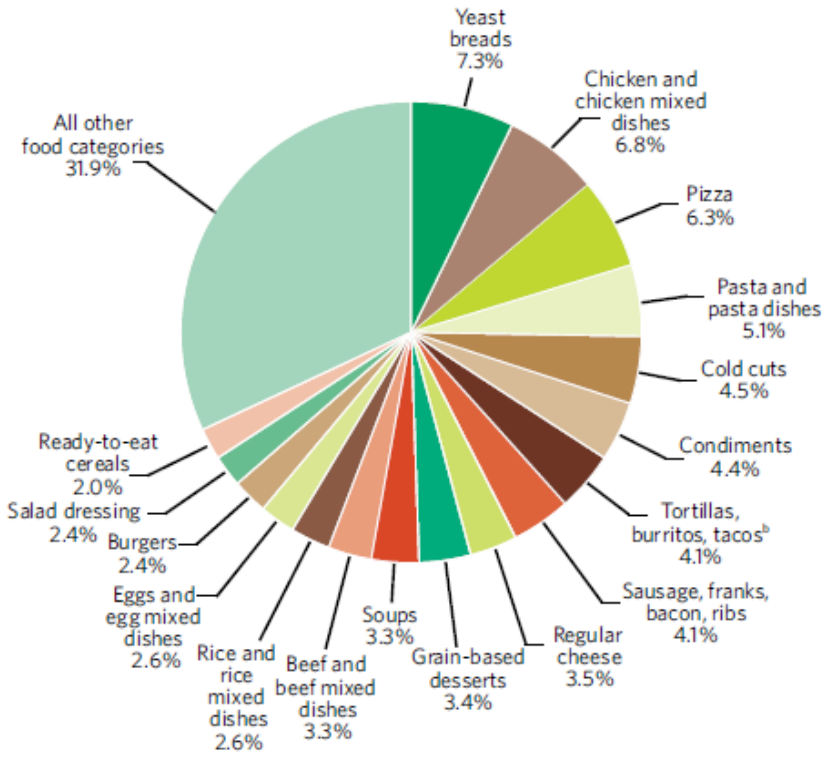
Sodium Intake

FIGURE 3-1. Estimated Mean Daily Sodium Intake, by Age–Gender Group, NHANES 2005–2006



Food Sources of Sodium

FIGURE 3-2. Sources of Sodium in the Diets of the U.S. Population Ages 2 Years and Older, NHANES 2005–2006[a]



Advice to Reduce Sodium Intake

- Read the Nutrition Facts label for information on sodium content of foods, and purchase foods low
- in sodium
- Consume more fresh foods and fewer processed foods high in sodium
- Eat more foods prepared at home, where you have more control, and use little or no salt or salty seasonings when cooking and eating foods
- When eating at restaurants, ask that salt not be added to your food, and order lower sodium options
- if available

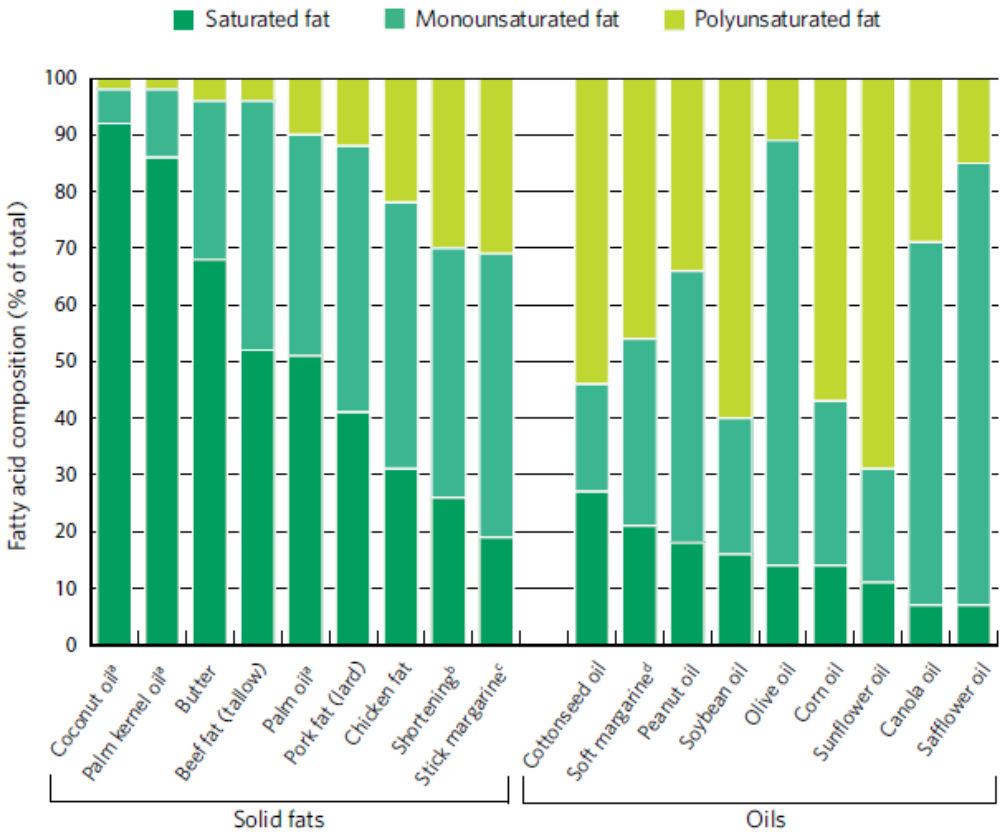
Chapter 3
Foods and Food Components to Reduce

Fats

- Saturated fatty acids—less than 10% of calories
  - Less than 7% reduces risk of CVD further
  - Replace with poly- and monounsaturated fatty acids (not with sugar or refined grain)
- *Trans* fats—as low as possible
- Cholesterol—less than 300 mg per day
  - Effect small compared to saturated and *trans* fats ***new***
  - Egg yolks—up to 1 per day ***new***

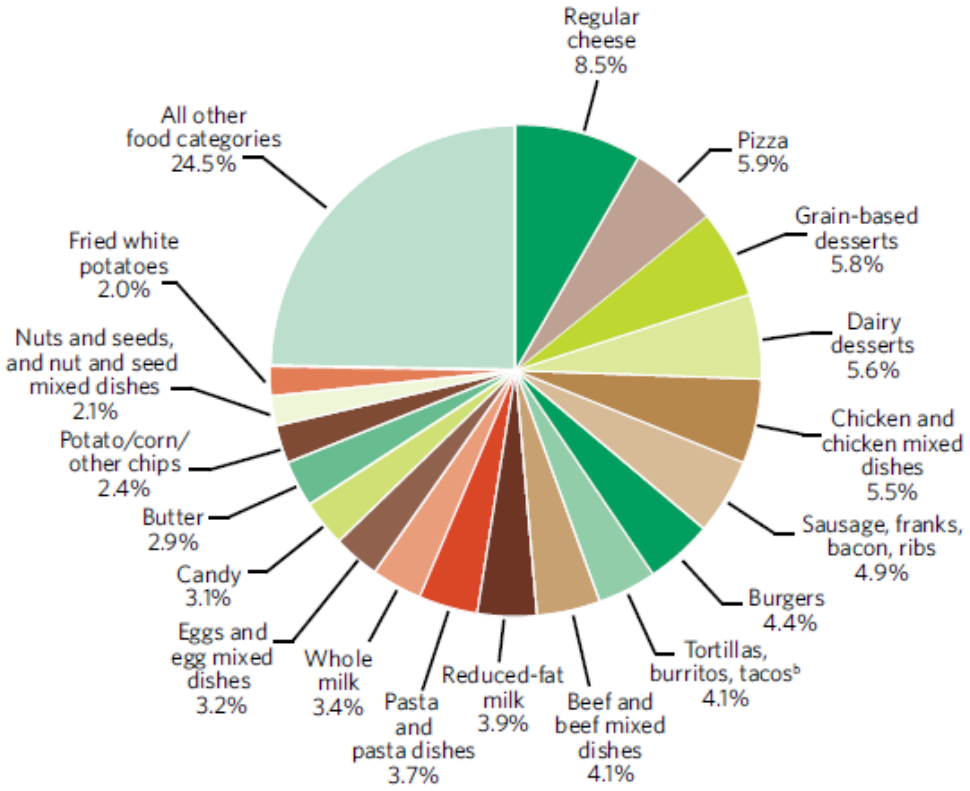
Fatty Acid Profiles of Fats and Oils

FIGURE 3-3. Fatty Acid Profiles of Common Fats and Oils



Food Sources of Saturated Fats

FIGURE 3-4. Sources of Saturated Fat in the Diets of the U.S. Population Ages 2 Years and Older, NHANES 2005–2006[a]



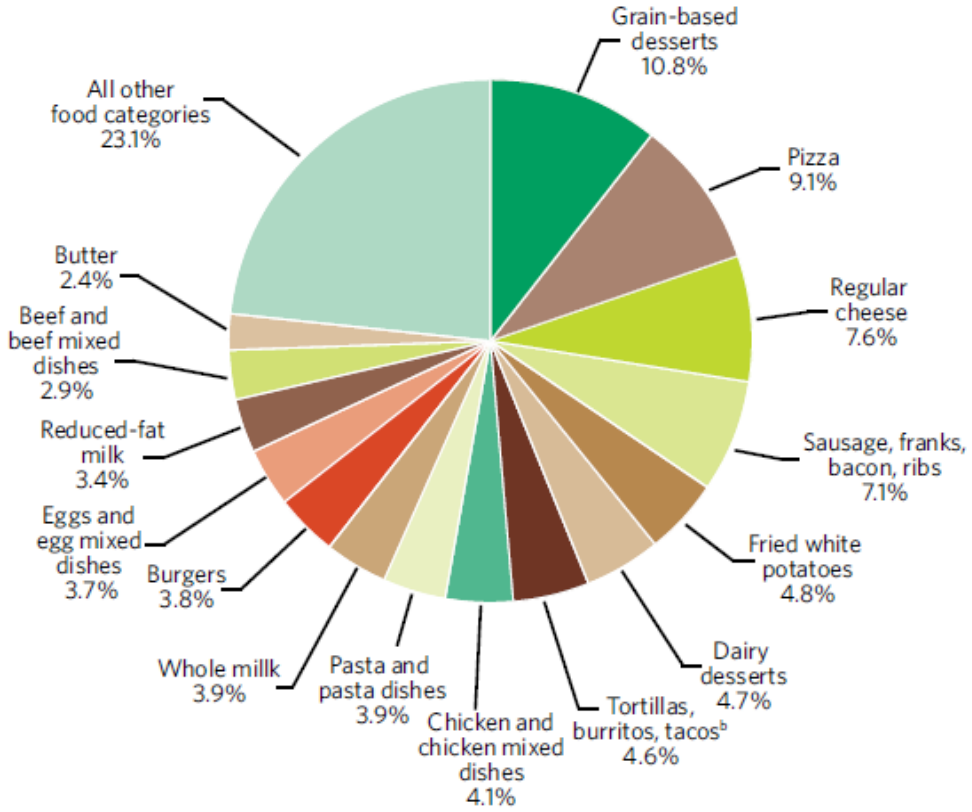
Chapter 3
Foods and Food Components to Reduce

Calories from solid fats and added sugars *new*

- Reduce intake of calories from solid fats and added sugars (SoFAS)
- SoFAS provide 35% of calories
  - Do not contribute nutrients
- Only 5 to 15% of calories from SoFAS can be accommodated in healthy diets

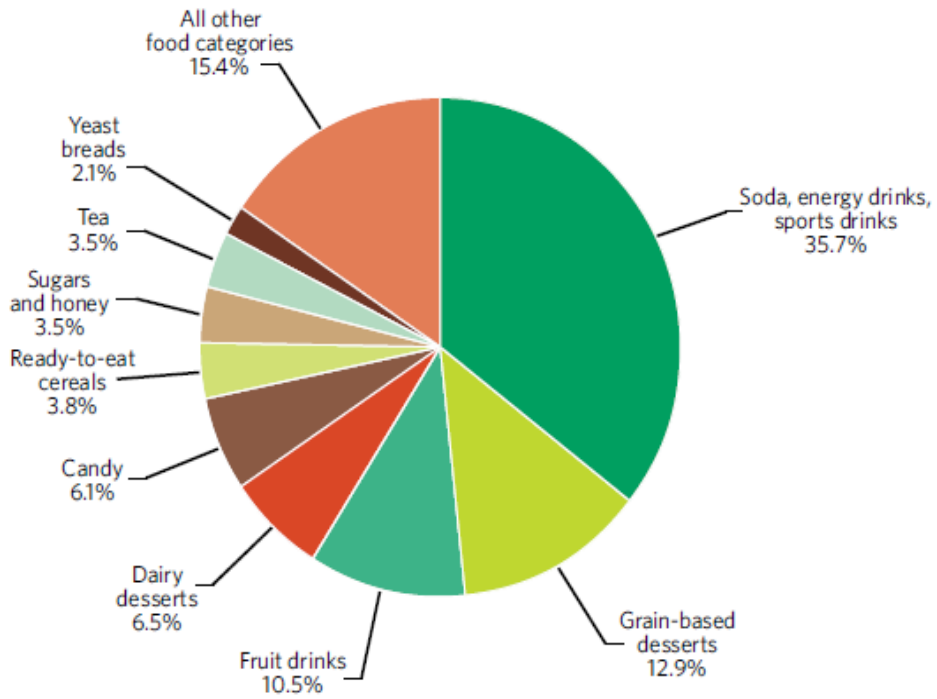
Food Sources of Solid Fats

FIGURE 3-5. Sources of Solid Fats in the Diets of the U.S. Population Ages 2 Years and Older, NHANES 2003–2004[a]



Food Sources of Added Sugars

FIGURE 3-6. Sources of Added Sugars in the Diets of the U.S. Population Ages 2 Years and Older, NHANES 2005–2006[a]



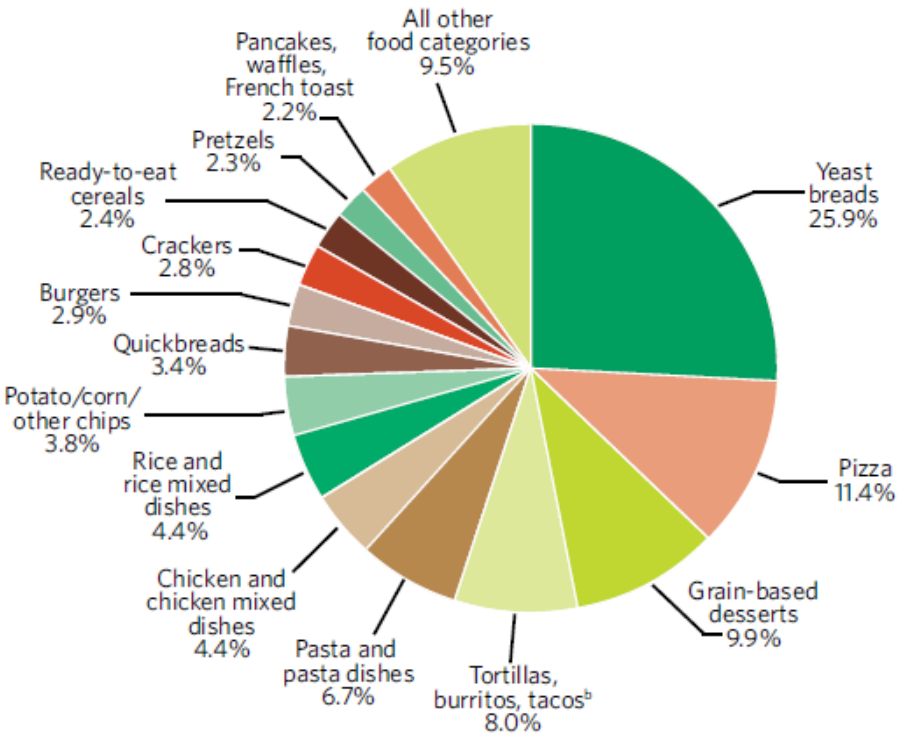
Chapter 3
Foods and Food Components to Reduce

Refined grains

- Limit consumption of refined grains, especially those that contain solid fats, added sugars, and sodium ***new***
- Enriched refined grain products provide some vitamins and minerals, but not the fiber provided by whole grains
- Replace refined grains with whole grains

Food Sources of Refined Grains

FIGURE 3-7. Sources of Refined Grains in the Diets of the U.S. Population Ages 2 Years and Older, NHANES 2003–2004[a]



Chapter 3
Foods and Food Components to Reduce

Alcohol

- If alcohol is consumed, consume in moderation
  - For men, up to 2 drinks per day
  - For women, up to 1 drink per day
- Specific guidance for breast-feeding women ***new***
- Circumstances in which people should not drink alcohol listed

Alcohol—Definitions

HOW IS AN ALCOHOLIC DRINK DEFINED?

One drink is defined as 12 fluid ounces of regular beer (5% alcohol), 5 fluid ounces of wine (12% alcohol), or 1.5 fluid ounces of 80 proof (40% alcohol) distilled spirits. One drink contains 0.6 fluid ounces of alcohol.

KEY DEFINITIONS FOR ALCOHOL

What is moderate alcohol consumption? Moderate alcohol consumption is defined as up to 1 drink per day for women and up to 2 drinks per day for men.

What is heavy or high-risk drinking? Heavy or high-risk drinking is the consumption of more than 3 drinks on any day or more than 7 per week for women and more than 4 drinks on any day or more than 14 per week for men.

What is binge drinking? Binge drinking is the consumption within 2 hours of 4 or more drinks for women and 5 or more drinks for men.

Chapter 3
Foods and Food Components to Reduce

Key Recommendations

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, especially 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.

Chapter 4

Foods and Nutrients to Increase

A wide variety of nutritious foods are available in the United States. However, many Americans do not eat the array of foods that will provide all needed nutrients while staying within calorie needs. In the United States, intakes of vegetables, fruits, whole grains, milk and milk products,[57] and oils are lower than recommended. As a result, dietary intakes of several nutrients—potassium, dietary fiber, calcium, and vitamin D—are low enough to be of public health concern for both adults and children. Several other nutrients also are of concern for specific population groups, such as folic acid for women who are capable of becoming pregnant.

This chapter describes food choices that should be emphasized to help Americans close nutrient gaps and move toward healthful eating patterns.

Recommendations are based on evidence that consuming these foods within the context of an overall healthy eating pattern is associated with a health benefit or meeting nutrient needs. Guidance on food choices for a healthy eating pattern generally groups foods based on commonalities in nutrients provided and how the foods are viewed and used by consumers. The following recommendations provide advice about making choices from all food groups while balancing calorie needs.

FOR MORE INFORMATION
See **Chapter 5** for a description of and additional information about suggested healthy eating patterns and their food group intake recommendations.

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

Chapter 4
Foods and Nutrients to Increase

- While staying within calorie needs, increase intake of
  - Vegetables
  - Fruits
  - Whole grains
  - Milk
  - Seafood, in place of some meat/poultry ***new***
  - Oils
- Nutrients of public health concern
  - Potassium
  - Fiber
  - Calcium
  - Vitamin D

Whole Grain Guidance

FIGURE 4-1. Three Ways to Make at Least Half of Total Grains Whole Grains[a]

1. 3 ounces of 100% whole grains and 3 ounces of refined-grain products

2. 2 ounces of 100% whole grains, 2 ounces of partly whole-grain products,[b] and 2 ounces of refined-grain products

3. 6 ounces of partly whole-grain products

Chapter 4
Foods and Nutrients to Increase

Key Recommendations

Individuals should meet the following recommendations as part of a healthy eating pattern and 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.[58]

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.

Chapter 4
Foods and Nutrients to Increase

Recommendations for Specific Population Groups

Women capable of becoming pregnant[59]

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.[60]

Women who are pregnant or breastfeeding[59]

Consume 8 to 12 ounces of seafood per week from a variety of seafood types.

Due to their 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_{12}, such as fortified cereals, or dietary supplements.

Chapter 5
Building Healthy Eating Patterns

Individuals and families can incorporate the recommendations presented in each of the previous chapters into an overall healthy way to eat—a healthy eating pattern.[71] A growing body of evidence from research on eating patterns supports these recommendations. A healthy eating pattern is not a rigid prescription, but rather an array of options that can accommodate cultural, ethnic, traditional, and personal preferences and food cost and availability. Americans have flexibility in making choices to create a healthy eating pattern that meets nutrient needs and stays within calorie limits. This chapter describes research findings from clinical trials of eating patterns and from observational studies of traditional eating patterns. The chapter also explains the principles for selecting a healthy eating pattern. Several templates—adaptable guides for healthy eating—have been developed that show how Americans can put these principles into action: the USDA Food Patterns, lacto-ovo vegetarian or vegan adaptations of the USDA Food Patterns, and the DASH[72] Eating Plan. These templates translate and integrate dietary recommendations into an overall healthy way to eat. They identify average daily amounts of foods, in nutrient-dense forms, to eat from all food groups and include limits for some dietary components. Consumers, professionals, and organizations can make use of these templates to plan healthy eating patterns or assess food and beverage choices.

Key Recommendations

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.

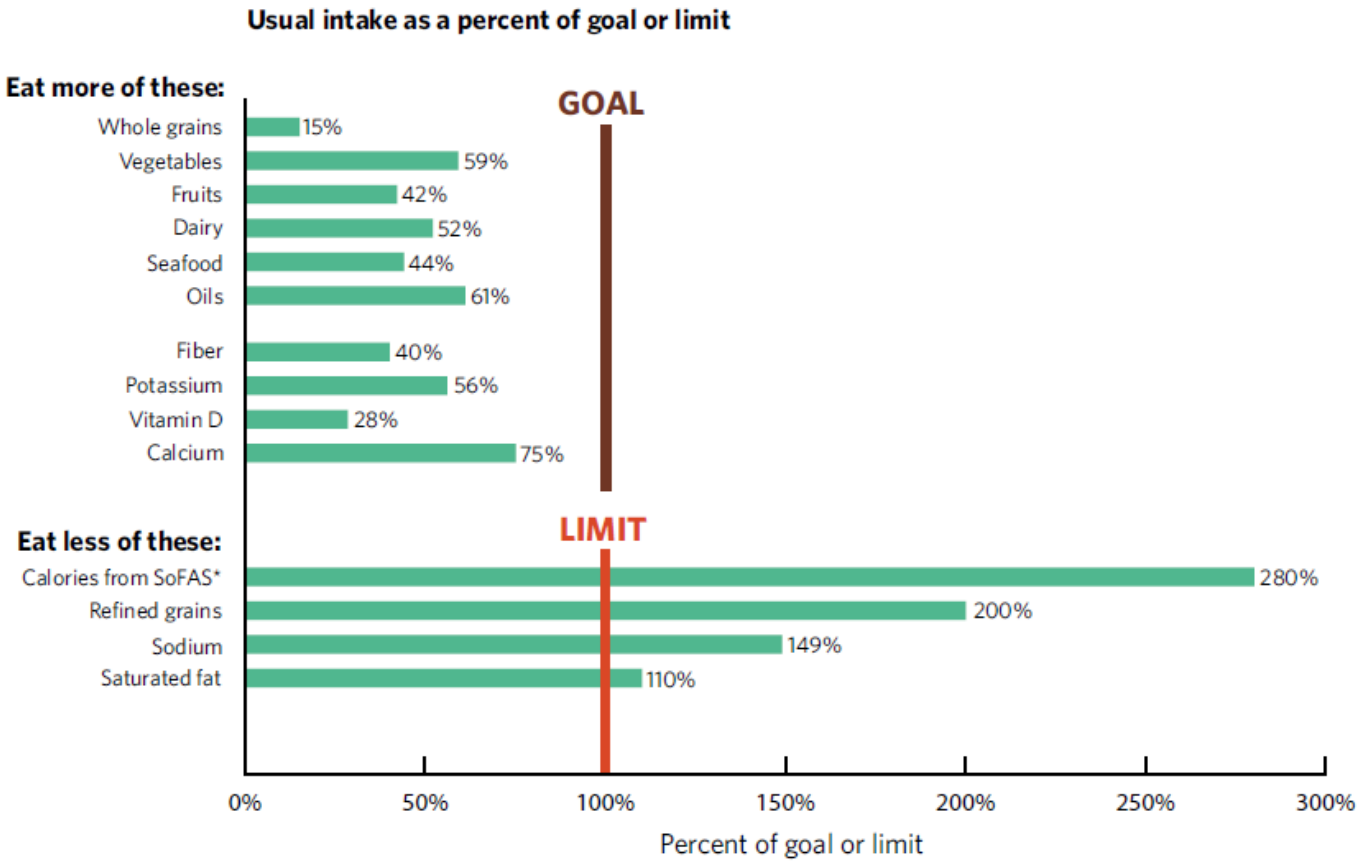
71. *Dietary Guidelines for Americans, 2010* uses the term "eating pattern," rather than the term "total diet" (the term used in the 2010 DGAC report), to refer to the combination of foods and beverages that constitute an individual's complete dietary intake over time. The term "diet" may be misconstrued as an eating pattern intended for weight loss.
72. Dietary Approaches to Stop Hypertension.

Chapter 5 *new*
Building Healthy Eating Patterns

- Research on overall eating patterns
  - Considerable evidence for health outcomes from DASH and traditional Mediterranean eating patterns
  - Some evidence for vegetarian
- Common elements of healthy eating patterns identified
- To promote health, follow USDA Food Patterns or DASH Eating Plan
  - Similar to each other and to the healthful eating patterns identified in the research
- Follow food safety recommendations

Comparison of Consumption to Recommendations

FIGURE 5-1. How Do Typical American Diets Compare to Recommended Intake Levels or Limits?



USDA Food Patterns
Changes for 2010 Dietary Guidelines

- Vegetarian adaptations
  - Lacto-ovo and vegan
- Two food groups renamed
  - “Meat & Beans” became “Protein Foods”
  - “Milk” became “Dairy Products”
    - Fortified soy milk included
- Milk for 4- to 8-year-olds increased by ½ cup per day
- At least 8 oz per week of seafood for adults
  - 3 to 6 oz for children
- Vegetable subgroups
  - Amounts revised
  - “Orange” revised to “Red and Orange”

Chapter 5
Building Healthy Eating Patterns

Key Recommendations

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.

Chapter 6
Helping Americans Make Healthy Choices

Individuals and families make choices every day about what they will eat and drink and how physically active they will be. Today, Americans must make these choices within the context of an environment that promotes overconsumption of calories and discourages physical activity. This environment and the individual choices made within it have contributed to dramatic increases in the rates of overweight and obesity. Poor health outcomes, such as cardiovascular disease, type 2 diabetes, and some types of cancer also have increased in tandem. To reverse these trends, a coordinated system-wide approach is needed—an approach that engages all sectors of society, including individuals and families, educators, communities and organizations, health professionals, small and large businesses, and policymakers. *Everyone has a role in the movement to make America healthy.* By working together through policies, programs, and partnerships, we can improve the health of the current generation and take responsibility for giving future generations a better chance to lead healthy and productive lives.

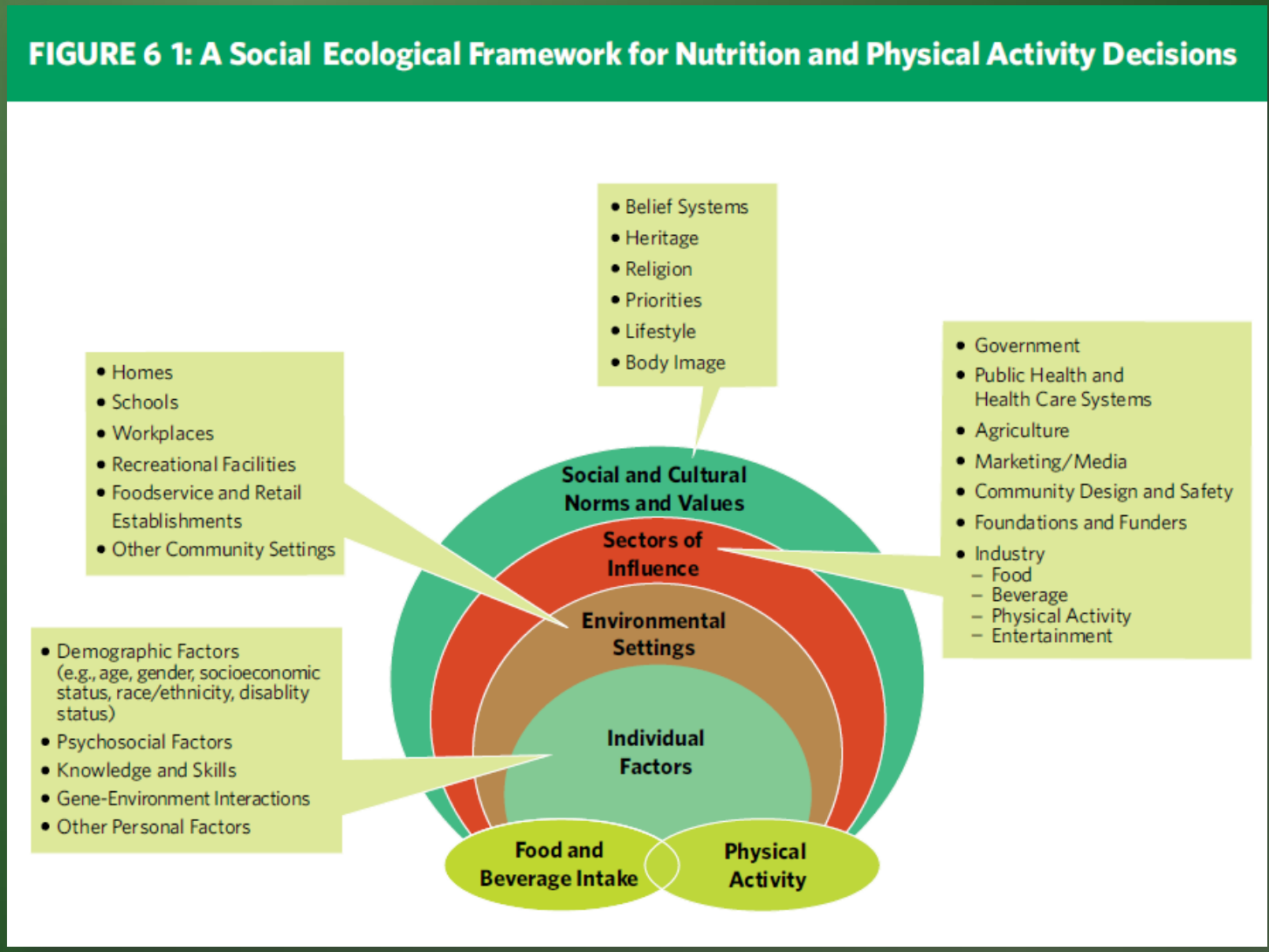
One way to think about how our current food and physical activity environment evolved, and about how it can be improved, is the Social-Ecological Model. Many public health experts agree that the Social-Ecological Model (Figure 6-1) provides a framework to illustrate how all elements of society combine to shape an individual's food and physical activity choices, and ultimately one's calorie balance and chronic disease risk. The following describes some of the factors and influencers found within each element of the model:

- **Individual factors.** Factors such as age, gender, income, race/ethnicity, genetics, and the presence of a disability can all influence an individual's and/or family's food intake and physical activity patterns. In order to change one's knowledge, attitude, beliefs, and behaviors, these individual factors should be considered and addressed (as possible).
- **Environmental settings.** People regularly make decisions about food and physical activity in a

Chapter 6 *new*
Helping Americans Make Healthy Choices

- Current food and physical activity environment is influential—for better and for worse
- All elements of society, have a role
  - Individuals and families
  - Communities
  - Business and industry
  - All levels of government
- Work together to improve the Nation's nutrition and physical activity

Socio-ecological Framework



Adapted from Story M et al., *Annu Rev Public Health* 2008;29:253-272

Appendices

- Guidance for Specific Population Groups
- Key Consumer Behaviors and Potential Strategies for Professionals to use in Implementing the 2010 Dietary Guidelines ***new***
- Food Safety Principles and Guidance for Consumers
- Using the Food Label ***new***
- Nutritional Goals for age-gender groups ***new***
- Estimated calories needs
- USDA Food Patterns, Vegetarian Adaptations ***new***, and DASH Eating Plan
- EPA, DHA, and mercury content of seafood ***new***
- Food sources of nutrients of concern
- Glossary

Additional Content

Topics covered in sidebars

- Definitions for overweight and obesity
- Water
- Fluoride
- Food allergies and intolerances
- Explanatory text
  - Beans and Peas
  - Whole and Refined Grains
  - Seafood

Summary

Dietary Guidelines for Americans, 2010

- Evidence-based nutritional guidance
  - Promote health
  - Reduce the risk of chronic diseases
  - Reduce the prevalence of overweight and obesity
- Integrated set of advice for overall eating pattern
- Consumer-friendly advice and tools coming

Resources

www.DietaryGuidelines.gov

- Policy Document
- Advisory Committee Report
- Public Comments Database

www.NutritionEvidenceLibrary.gov