





This publication may be viewed and downloaded from the Internet at DietaryGuidelines.gov.

Suggested citation: U.S. Department of Health and Human Services and U.S. Department of Agriculture, 2015–2020 Dietary Guidelines for Americans. 8<sup>th</sup> Edition. December 2015. Available at http://health.gov/dietaryguidelines/2015/guidelines/.

The U.S. Department of Health and Human Services (HHS) prohibits discrimination on the basis of race, color, national origin, disability, age, sex and in some cases religion, in health and human service programs administered or funded by HHS. The HHS Office for Civil Rights (OCR) enforces the civil rights laws and regulations that prohibit discrimination in HHS administered and funded programs. To learn more about the civil rights obligations of recipients of federal financial assistance, visit OCR's OCR Information for Providers web page (http://www.hhs.gov/civil-rights/for-providers/index.html).

If you believe that you (or someone else) have been discriminated against in programs or activities that HHS directly operates or to which HHS provides federal financial assistance, you may file a civil rights complaint with OCR. Complaints can be filed in writing by mail, fax, e-mail using the Civil Rights Discrimination Complaint Form Package, or via the OCR Complaint Portal (https://ocrportal.hhs.gov/ocr/smartscreen/main.jsf). Additional information and assistance can be obtained by visiting the OCR website or by calling the Customer Response Center. (800) 368-1019; TDD: (800) 537-7697. Language assistance services for OCR matters are available and provided free of charge. OCR services are accessible to persons with disabilities.

Complaints not filed through the OCR Complaint Portal should be sent to: Centralized Case Management Operations, U.S. Department of Health and Human Services, 200 Independence Avenue, S.W., Room 509F HHH Bldg., Washington, D.C. 20201, Fax: (202) 619-3818, OCRComplaint@hhs.gov, http://www.hhs.gov/civil-rights/index.html.

In accordance with Federal civil rights law and U.S. Department of Agriculture (USDA) civil rights regulations and policies, the USDA, its Agencies, offices, and employees, and institutions participating in or administering USDA programs are prohibited from discriminating based on race, color, national origin, religion, sex, gender identity (including gender expression), sexual orientation, disability, age, marital status, family/parental status, income derived from a public assistance program, political beliefs, or reprisal or retaliation for prior civil rights activity, in any program or activity conducted or funded by USDA (not all bases apply to all programs). Remedies and complaint filing deadlines vary by program or incident.

Persons with disabilities who require alternative means of communication for program information (e.g., Braille, large print, audiotape, American Sign Language, etc.) should contact the responsible Agency or USDAs TARGET Center at (202) 720-2600 (voice and TTY) or contact USDA through the Federal Relay Service at (800) 877-8339. Additionally, program information may be made available in languages other than English.

To file a USDA program discrimination complaint, complete the USDA Program Discrimination Complaint Form, AD-3027, found online at How to File a Program Discrimination Complaint (https://www.ascr.usda.gov/how-file-program-discrimination-complaint) and at any USDA office or write a letter addressed to USDA and provide in the letter all of the information requested in the form. To request a copy of the complaint form, call (866) 632-9992. Submit your completed form or letter to USDA by: (1) mail: U.S. Department of Agriculture, Office of the Assistant Secretary for Civil Rights, 1400 Independence Avenue, SW. Washington, D.C. 20250-9410: (2) fax: (202) 690-7442; or (3) email: program intake@usda.gov

USDA and HHS are equal opportunity providers, employers, and lenders,

December 2015

## **Table of Contents**

Message From the Secretaries	vi
Acknowledgments	vii
Executive Summary	x
Introduction	1
Nutrition & Health Are Closely Related	2
The <i>Dietary Guidelines for Americans</i> : What It Is, What It Is Not	5
Developing the Dietary Guidelines for Americans	6
Stage 1: Review of Current Scientific Evidence	7
Stage 2: Development of the <i>Dietary Guidelines for Americans</i>	8
Stage 3: Implementing the Dietary Guidelines for Americans	10
A Roadmap to the 2015-2020 Edition of the <i>Dietary Guidelines for Americans</i>	11
Chapter 1. Key Elements of Healthy Eating Patterns	13
Introduction	
About This Chapter	14
Key Recommendations: Components of Healthy Eating Patterns	
Healthy Eating Patterns: Dietary Principles	16
The Science Behind Healthy Eating Patterns	17
Associations Between Eating Patterns & Health	17
Associations Between Dietary Components & Health	17
A Closer Look Inside Healthy Eating Patterns	18
Food Groups	21
Other Dietary Components	28
Examples of Other Healthy Eating Patterns	35
Healthy Mediterranean-Style Eating Pattern	35
Healthy Vegetarian Eating Pattern	
Summary	36

Chapter 2. Shifts Needed To Align With Healthy Eating Patterns	37
Introduction	
About This Chapter	38
Current Eating Patterns in the United States	38
A Closer Look at Current Intakes & Recommended Shifts	43
Food Groups	43
Other Dietary Components	53
Underconsumed Nutrients & Nutrients of Public Health Concern	60
Beverages	61
Opportunities for Shifts in Food Choices	61
Summary	62
Introduction	
Creating & Supporting Healthy Choices	
The Social-Ecological Model	
Sectors	
Settings	
Social & Cultural Norms & Values	66
Individual Factors	66
Meeting People Where They Are: Contextual Factors & Healthy Eating Patterns	67
Food Access	67
Household Food Insecurity	67
Acculturation	67
Strategies for Action	68
Summary	72

## Appendixes

Appendix 1. Physical Activity Guidelines for Americans	73
Appendix 2. Estimated Calorie Needs per Day, by Age, Sex, & Physical Activity Level	
Appendix 3. USDA Food Patterns: Healthy U.SStyle Eating Pattern	79
Appendix 4. USDA Food Patterns: Healthy Mediterranean-Style Eating Pattern	83
Appendix 5. USDA Food Patterns: Healthy Vegetarian Eating Pattern	86
Appendix 6. Glossary of Terms	89
Appendix 7. Nutritional Goals for Age-Sex Groups Based on Dietary Reference Intakes & Dietary Guidelines Recommendations	97
Appendix 8. Federal Resources for Information on Nutrition & Physical Activity	99
Appendix 9. Alcohol	101
Appendix 10. Food Sources of Potassium	104
Appendix 11. Food Sources of Calcium	108
Appendix 12. Food Sources of Vitamin D	111
Appendix 13. Food Sources of Dietary Fiber	114
Appendix 14. Food Safety Principles & Guidance	119
List of Tables	
Table I-1. Facts About Nutrition- & Physical Activity-Related Health Conditions in the United States	2
Table 1-1. Healthy U.SStyle Eating Pattern at the 2,000-Calorie Level, With Daily or         Weekly Amounts From Food Groups, Subgroups, & Components	18
Table 1-2. Composition of the Healthy Mediterranean-Style & Healthy Vegetarian Eating Patterns           at the 2,000-Calorie Level, With Daily or Weekly Amounts From Food Groups, Subgroups, & Components	35
Table 2-1. Examples of Vegetables in Each Vegetable Subgroup	47
Table A1-1. Physical Activity Guidelines for Americans Recommendations	73
Table A1-2. Federal Physical Activity Resources	75
Table A2-1. Estimated Calorie Needs per Day, by Age, Sex, & Physical Activity Level	77
Table A3-1. Healthy U.SStyle Eating Pattern: Recommended Amounts of Food         From Each Food Group at 12 Calorie Levels	80
Table A4-1. Healthy Mediterranean-Style Eating Pattern: Recommended Amounts of Food         From Each Food Group at 12 Calorie Levels	84
Table A5-1. Healthy Vegetarian Eating Pattern: Recommended Amounts of Food         From Each Food Group at 12 Calorie Levels	87
Table A6-1. Body Mass Index & Corresponding Body Weight Categories for Children & Adults	89
Table A7-1. Daily Nutritional Goals for Age-Sex Groups Based on Dietary Reference Intakes         & Dietary Guidelines Recommendations	

Table A8-1. Federal Nutrition & Physical Activity Resources	99
Table A9-1. Alcoholic Drink-Equivalents of Select Beverages	102
<b>Table A10-1.</b> Potassium: Food Sources Ranked by Amounts of Potassium & Energy per Standard Food Portions & per 100 Grams of Foods	104
Table A11-1. Calcium: Food Sources Ranked by Amounts of Calcium & Energy         per Standard Food Portions & per 100 Grams of Foods	108
Table A12-1. Vitamin D: Food Sources Ranked by Amounts of Vitamin D & Energy         per Standard Food Portions & per 100 Grams of Foods	111
Table A13-1. Dietary Fiber: Food Sources Ranked by Amounts of Dietary Fiber           and Energy per Standard Food Portions & per 100 Grams of Foods	114
Table A14-1. Recommended Safe Minimum Internal Temperatures	121
List of Figures	
Figure ES-1. 2015-2020 Dietary Guidelines for Americans at a Glance	XV
Figure I-1. Adherence of the U.S. Population Ages 2 Years & Older to the 2010 Dietary Guidelines, as Measured by Average Total Healthy Eating Index-2010 (HEI-2010) Scores	4
Figure I-2. Percentage of Adults Meeting the <i>Physical Activity Guidelines</i> (Aerobic & Muscle-Strengthening Recommendations)	5
Figure I-3. Science, Policy, Implementation: Developing the 2015-2020 Dietary Guidelines for Americans	6
Figure 1-1. Cup- & Ounce-Equivalents	19
Figure 1-2. Fatty Acid Profiles of Common Fats & Oils	26
Figure 1-3. Hidden Components in Eating Patterns	29
Figure 2-1. Dietary Intakes Compared to Recommendations. Percent of the U.S. Population Ages 1 Year & Older Who Are Below, At, or Above Each Dietary Goal or Limit	39
Figure 2-2. Empower People To Make Healthy Shifts	40
Figure 2-3. Average Daily Food Group Intakes by Age-Sex Groups, Compared to Ranges of Recommended Intake	41
Figure 2-4. Average Vegetable Subgroup Intakes in Cup-Equivalents per Week by Age-Sex Groups, Compared to Ranges of Recommended Intakes per Week	44
Figure 2-5. Average Whole & Refined Grain Intakes in Ounce-Equivalents per Day by Age-Sex Groups, Compared to Ranges of Recommended Daily Intake for Whole Grains & Limits for Refined Grains	48
Figure 2-6. Average Protein Foods Subgroup Intakes in Ounce-Equivalents per Week by Age-Sex Groups, Compared to Ranges of Recommended Intake	50
Figure 2-7. Average Intakes of Oils & Solid Fats in Grams per Day by Age-Sex Group, in Comparison to Ranges of Recommended Intake for Oils	52

Figure 2-8. Typical Versus Nutrient-Dense Foods & Beverages	53
<b>Figure 2-9.</b> Average Intakes of Added Sugars as a Percent of Calories per Day by Age-Sex Group, in Comparison to the <i>Dietary Guidelines</i> Maximum Limit of Less Than 10 Percent of Calories	54
Figure 2-10. Food Category Sources of Added Sugars in the U.S. Population Ages 2 Years & Older	55
Figure 2-11. Average Intakes of Saturated Fats as a Percent of Calories per Day by Age-Sex Group, in Comparison to the <i>Dietary Guidelines</i> Maximum Limit of Less Than 10 Percent of Calories	56
Figure 2-12. Food Category Sources of Saturated Fats in the U.S. Population Ages 2 Years & Older	57
Figure 2-13. Average Intakes of Sodium in Milligrams per Day by Age-Sex Groups,  Compared to Tolerable Upper Intake Levels (UL)	58
Figure 2-14. Food Category Sources of Sodium in the U.S. Population Ages 2 Years & Older	59
Figure 3-1. A Social-Ecological Model for Food & Physical Activity Decisions	65
Figure 3-2. Implementation of the <i>Dietary Guidelines</i> Through MyPlate	69
Figure 3-3. Strategies To Align Settings With the 2015-2020 Dietary Guidelines for Americans	70



Page vi — 2015-2020 Dietary Guidelines for Americans

# Message From the Secretaries

One of our Government's most important responsibilities is to protect the health of the American public. Today, about half of all American adults—117 million people—have one or more preventable, chronic diseases, many of which are related to poor quality eating patterns and physical inactivity. Rates of these chronic, diet-related diseases continue to rise, and they come not only with increased health risks, but also at high cost. In 2008, the medical costs linked to obesity were estimated to be \$147 billion. In 2012, the total estimated cost of diagnosed diabetes was \$245 billion, including \$176 billion in direct medical costs and \$69 billion in decreased productivity.

The *Dietary Guidelines for Americans* is an essential resource for health professionals and policymakers as they design and implement food and nutrition programs that feed the American people, such as USDA's National School Lunch Program and School Breakfast Program, which feed more than 30 million children each school day. The *Dietary Guidelines* also provides information that helps Americans make healthy choices for themselves and their families.

This new edition of the *Dietary Guidelines*, the *2015-2020 Dietary Guidelines for Americans*, is grounded in the most current scientific evidence and is informed by the recommendations of the 2015 Dietary Guidelines Advisory Committee. This Federal advisory committee, which was composed of prestigious researchers in the fields of nutrition, health, and medicine, conducted a multifaceted, robust process to analyze the available body of scientific evidence. Their work culminated in a scientific report which provided advice and recommendations to the Federal Government on the current state of scientific evidence on nutrition and health. Informed by this report and by consideration of public and Federal agency comments, HHS and USDA nutrition and health experts then developed the *Dietary Guidelines*.

The 2015-2020 Dietary Guidelines provides guidance for choosing a healthy diet and focuses on preventing the diet-related chronic diseases that continue to affect our population. Its recommendations are ultimately intended to help individuals improve and maintain overall health and reduce the risk of chronic disease. Its focus is disease prevention, not treatment. This edition also includes data describing the significant differences between Americans' current consumption and the Dietary Guidelines recommendations. It also recommends where shifts are encouraged to help people achieve healthy eating patterns. These analyses will assist professionals and policymakers as they use the Dietary Guidelines to help Americans adopt healthier eating patterns and make healthy choices in their daily lives, while enjoying food and celebrating cultural and personal traditions through food. Now more than ever, we recognize the importance of focusing not on individual nutrients or foods in isolation, but on everything we eat and drink—healthy eating patterns as a whole—to bring about lasting improvements in individual and population health.

The body of scientific literature looking at healthy eating patterns and their impact on disease prevention is far more robust now than ever before. Chronic diet-related diseases continue to rise and levels of physical activity remain low. Progress in reversing these trends will require comprehensive and coordinated strategies, and the *Dietary Guidelines* is an important part of a complex and multifaceted solution to promote health and help to reduce the risk of chronic disease. The *Dietary Guidelines* translates science into succinct, food-based guidance that can be relied upon to help Americans choose a healthy eating pattern and enjoyable diet. We believe that aligning with the recommendations in the *Dietary Guidelines* will help many Americans lead healthier and more active lives.

/Sylvia M. Burwell/

**Sylvia M. Burwell**Secretary, U.S. Department of Health and Human Services



/Thomas J. Vilsack/

**Thomas J. Vilsack** Secretary, U.S. Department of Agriculture



## Acknowledgments

The U.S. Department of Health and Human Services and the U.S. Department of Agriculture acknowledge the work of the 2015 Dietary Guidelines Advisory Committee whose recommendations informed revisions for this edition of the *Dietary Guidelines for Americans*.

#### Dietary Guidelines Advisory Committee Members

Barbara Millen, DrPH, RD; Alice H. Lichtenstein, DSc; Steven Abrams, MD; Lucile Adams-Campbell, PhD; Cheryl Anderson, PhD, MPH; J. Thomas Brenna, PhD; Wayne Campbell, PhD; Steven Clinton, MD, PhD; Gary Foster, PhD (May—August 2013); Frank Hu, MD, PhD, MPH; Miriam Nelson, PhD; Marian Neuhouser, PhD, RD; Rafael Pérez-Escamilla, PhD; Anna Maria Siega-Riz, PhD; Mary Story, PhD, RD. Consultants: Timothy S. Griffin, PhD; Michael W. Hamm, PhD; Michael G. Perri, PhD, ABPP.

The Departments also acknowledge the work of the departmental scientists, staff, and policy officials responsible for the production of this document.

#### Policy Officials

HHS: Karen B. DeSalvo, MD, MPH, MSc; Howard K. Koh, MD, MPH; Don Wright, MD, MPH. USDA: Kevin W. Concannon, MSW; Angela Tagtow, MS, RD, LD; Jackie Haven, MS, RD.

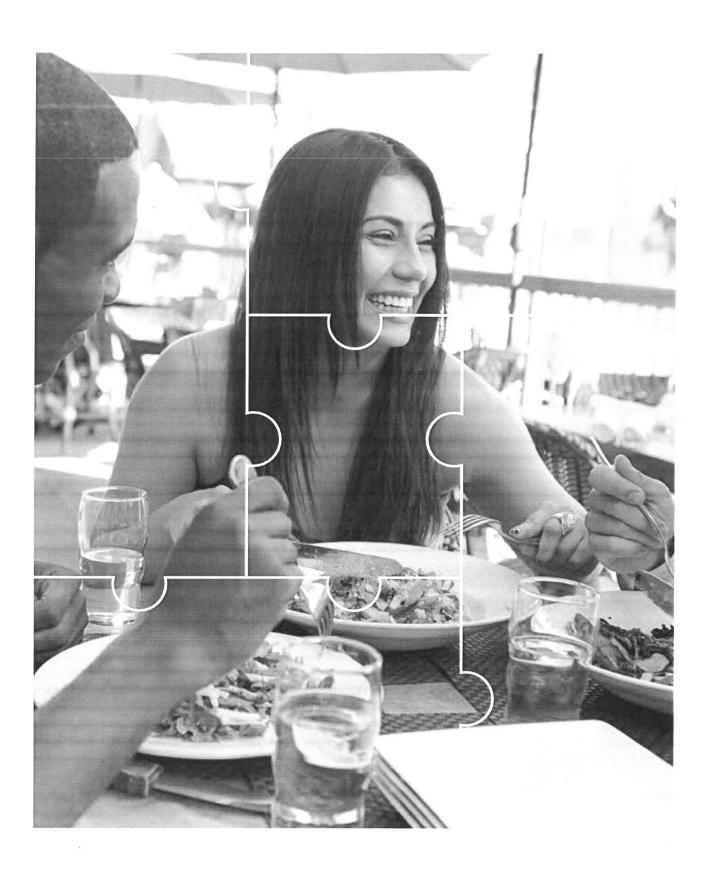
#### Policy Document Writing Staff

Richard Olson, MD, MPH; Kellie Casavale, PhD, RD; Colette Rihane, MS, RD; Eve Essery Stoody, PhD; Patricia Britten, PhD; Jill Reedy, PhD, MPH, RD; Elizabeth Rahavi, RD; Janet de Jesus, MS, RD; Katrina Piercy, PhD, RD; Amber Mosher, MPH, RD; Stephenie Fu; Jessica Larson, MS, RD; Anne Brown Rodgers (Editor).

#### Policy Document Reviewers/Technical Assistance

The Departments acknowledge the contributions of numerous other internal departmental scientists who provided consultation and extensive review throughout the production of this document. Additionally, the Departments acknowledge the external, independent peer reviewers for their work to ensure technical accuracy in the translation of the science into policy.

Finally, the Departments would like to acknowledge the important role of those who provided public comments throughout this process.



# **Executive Summary**





ver the past century, deficiencies of essential nutrients have dramatically decreased, many infectious diseases have been conquered, and the majority of the U.S. population can now anticipate a long and productive life. At the same time, rates of chronic diseases—many of which are related to poor quality diet and physical inactivity—have increased. About half of all American adults have one or more preventable, diet-related chronic diseases, including cardiovascular disease, type 2 diabetes, and overweight and obesity.

However, a large body of evidence now shows that healthy eating patterns and regular physical activity can help people achieve and maintain good health and reduce the risk of chronic disease throughout all stages of the lifespan. The 2015-2020 Dietary Guidelines for Americans reflects this evidence through its recommendations.

The *Dietary Guidelines* is required under the 1990 National Nutrition Monitoring and Related Research Act, which states that every 5 years, the U.S. Departments of Health and Human Services (HHS) and of Agriculture (USDA) must jointly publish a report containing nutritional and dietary information and guidelines for the general public. The statute (Public Law 101-445, 7 U.S.C. 5341 et seq.) requires that the *Dietary Guidelines* be

based on the preponderance of current scientific and medical knowledge. The 2015-2020 edition of the *Dietary Guidelines* builds from the 2010 edition with revisions based on the *Scientific Report of the 2015 Dietary Guidelines Advisory Committee* and consideration of Federal agency and public comments.

The *Dietary Guidelines* is designed for professionals to help all individuals ages 2 years and older and their families consume a healthy, nutritionally adequate diet. The information in the Dietary Guidelines is used in developing Federal food, nutrition, and health policies and programs. It also is the basis for Federal nutrition education materials designed for the public and for the nutrition education components of HHS and USDA food programs. It is developed for use by policymakers and nutrition and health professionals. Additional audiences who may use *Dietary Guidelines* information to develop programs, policies, and communication for the general public include businesses, schools, community groups, media, the food industry, and State and local governments.

Previous editions of the *Dietary Guidelines* focused primarily on individual dietary components such as food groups and nutrients. However, people do not eat food groups and nutrients in isolation but rather in combination, and the totality of the

diet forms an overall eating pattern. The components of the eating pattern can have interactive and potentially cumulative effects on health. These patterns can be tailored to an individual's personal preferences, enabling Americans to choose the diet that is right for them. A growing body of research has examined the relationship between overall eating patterns, health, and risk of chronic disease, and findings on these relationships are sufficiently well established to support dietary guidance. As a result, eating patterns and their food and nutrient characteristics are a focus of the recommendations in the 2015-2020 Dietary Guidelines.

The 2015-2020 Dietary Guidelines provides five overarching Guidelines that encourage healthy eating patterns, recognize that individuals will need to make shifts in their food and beverage choices to achieve a healthy pattern, and acknowledge that all segments of our society have a role to play in supporting healthy choices. These Guidelines also embody the idea that a healthy eating pattern is not a rigid prescription, but rather, an adaptable framework in which individuals can enjoy foods that meet their personal, cultural, and traditional preferences and fit within their budget. Several examples of healthy eating patterns that translate and integrate the recommendations in overall healthy ways to eat are provided.



#### The Guidelines

- Follow a healthy eating pattern across the lifespan. All food and beverage choices matter. Choose a healthy eating pattern at an appropriate calorie level to help achieve and maintain a healthy body weight, support nutrient adequacy, and reduce the risk of chronic disease.
- Pocus on variety, nutrient density, and amount. To meet nutrient needs within calorie limits, choose a variety of nutrient-dense foods across and within all food groups in recommended amounts.
- Limit calories from added sugars and saturated fats and reduce sodium intake. Consume an eating pattern low in added sugars, saturated fats, and sodium. Cut back on foods and beverages higher in these components to amounts that fit within healthy eating patterns.
- Shift to healthier food and beverage choices. Choose nutrient-dense foods and beverages across and within all food groups in place of less healthy choices. Consider cultural and personal preferences to make these shifts easier to accomplish and maintain.
- Support healthy eating patterns for all. Everyone has a role in helping to create and support healthy eating patterns in multiple settings nationwide, from home to school to work to communities.

Key Recommendations provide further guidance on how individuals can follow the five Guidelines. The *Dietary Guidelines'* Key Recommendations for healthy eating patterns should be applied in their entirety, given the interconnected relationship that each dietary component can have with others.



Consume a healthy eating pattern that accounts for all foods and beverages within an appropriate calorie level.

#### A healthy eating pattern includes:[1]

- A variety of vegetables from all of the subgroups—dark green, red and orange, legumes (beans and peas), starchy, and other
- Fruits, especially whole fruits
- · Grains, at least half of which are whole grains
- · Fat-free or low-fat dairy, including milk, yogurt, cheese, and/or fortified soy beverages
- A variety of protein foods, including seafood, lean meats and poultry, eggs, legumes (beans and peas), and nuts, seeds, and soy products
- · Oils

#### A healthy eating pattern limits:

· Saturated fats and trans fats, added sugars, and sodium

Key Recommendations that are quantitative are provided for several components of the diet that should be limited. These components are of particular public health concern in the United States, and the specified limits can help individuals achieve healthy eating patterns within calorie limits:

- Consume less than 10 percent of calories per day from added sugars<sup>[2]</sup>
- Consume less than 10 percent of calories per day from saturated fats<sup>[3]</sup>
- Consume less than 2,300 milligrams (mg) per day of sodium<sup>[4]</sup>
- If alcohol is consumed, it should be consumed in moderation—up to one drink per day for women and
  up to two drinks per day for men—and only by adults of legal drinking age.<sup>[5]</sup>

In tandem with the recommendations above, Americans of all ages—children, adolescents, adults, and older adults—should meet the *Physical Activity Guidelines for Americans* to help promote health and reduce the risk of chronic disease. Americans should aim to achieve and maintain a healthy body weight. The relationship between diet and physical activity contributes to calorie balance and managing body weight. As such, the *Dietary Guidelines* includes a Key Recommendation to:

· Meet the Physical Activity Guidelines for Americans. [6]

[1] Definitions for each food group and subgroup are provided throughout Chapter 1: Key Elements of Healthy Eating Patterns and are compiled in Appendix 3. USDA Food Patterns: Healthy U.S.-Style Eating Pattern.

[2] The recommendation to limit intake of calories from added sugars to less than 10 percent per day is a target based on food pattern modeling and national data on intakes of calories from added sugars that demonstrate the public health need to limit calories from added sugars to meet food group and nutrient needs within calorie limits. The limit on calories from added sugars is not a Tolerable Upper Intake Level (UL) set by the Institute of Medicine (IOM). For most calorie levels, there are not enough calories available after meeting food group needs to consume 10 percent of calories from added sugars and 10 percent of calories from saturated fats and still stay within calorie limits.

[3] The recommendation to limit intake of calories from saturated fats to less than 10 percent per day is a target based on evidence that replacing saturated fats with unsaturated fats is associated with reduced risk of cardiovascular disease. The limit on calories from saturated fats is not a UL set by the IOM. For most calorie levels, there are not enough calories available after meeting food group needs to consume 10 percent of calories from added sugars and 10 percent of calories from saturated fats and still stay within calorie limits.

[4] The recommendation to limit intake of sodium to less than 2,300 mg per day is the UL for individuals ages 14 years and older set by the IOM. The recommendations for children younger than 14 years of age are the IOM age- and sex-appropriate ULs (see Appendix 7. Nutritional Goals for Age-Sex Groups Based on Dietary Reference Intakes and Dietary Guidelines Recommendations).

[5] It is not recommended that individuals begin drinking or drink more for any reason. The amount of alcohol and calories in beverages varies and should be accounted for within the limits of healthy eating patterns. Alcohol should be consumed only by adults of legal drinking age. There are many circumstances in which individuals should not drink, such as during pregnancy. See Appendix 9. Alcohol for additional information.

[6] U.S. Department of Health and Human Services; 2008 Physical Activity Guidelines for Americans. Washington (DC): U.S. Department of Health and Human Services; 2008. ODPHP Publication No. U0036. Available at: http://www.health.gov/paguidelines. Accessed August 6, 2015.

#### Terms To Know

Several terms are used to operationalize the principles and recommendations of the 2015-2020 Dietary Guidelines. These terms are essential to understanding the concepts discussed herein:



**Eating Pattern**—The combination of foods and beverages that constitute an individual's complete dietary intake over time. Often referred to as a "dietary pattern," an eating pattern may describe a customary way of eating or a combination of foods recommended for consumption. Specific examples include USDA Food Patterns and the Dietary Approaches to Stop Hypertension (DASH) Eating Plan.

Nutrient Dense—A characteristic of foods and beverages that provide vitamins, minerals, and other substances that contribute to adequate nutrient intakes or may have positive health effects, with little or no solid fats and added sugars, refined starches, and sodium. Ideally, these foods and beverages also are in forms that 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 products, and lean meats and poultry—when prepared with little or no added solid fats, sugars, refined starches, and sodium—are nutrient-dense foods. These foods contribute to meeting food group recommendations within calorie and sodium limits. The term "nutrient dense" indicates the nutrients and other beneficial substances in a food have not been "diluted" by the addition of calories from added solid fats, sugars, or refined starches, or by the solid fats naturally present in the food.

Variety—A diverse assortment of foods and beverages across and within all food groups and subgroups selected to fulfill the recommended amounts without exceeding the limits for calories and other dietary components. For example, in the vegetables food group, selecting a variety of foods could be accomplished over the course of a week by choosing from all subgroups, including dark green, red and orange, legumes (beans and peas), starchy, and other vegetables.

An underlying premise of the *Dietary Guidelines* is that nutritional needs should be met primarily from foods. All forms of foods, including fresh, canned, dried, and frozen, can be included in healthy eating patterns. Foods in nutrient-dense forms contain essential vitamins and minerals and also dietary fiber and other naturally occurring substances that may have positive health effects. In some cases, fortified foods and dietary supplements may be useful in providing one or more nutrients that otherwise may be consumed in less-than-recommended amounts.

For most individuals, achieving a healthy eating pattern will require changes in

food and beverage choices. This edition of the *Dietary Guidelines* focuses on **shifts** to emphasize the need to make substitutions—that is, choosing nutrient-dense foods and beverages in place of less healthy choices—rather than increasing intake overall. Most individuals would benefit from shifting food choices both within and across food groups. Some needed shifts are minor and can be accomplished by making simple substitutions, while others will require greater effort to accomplish.

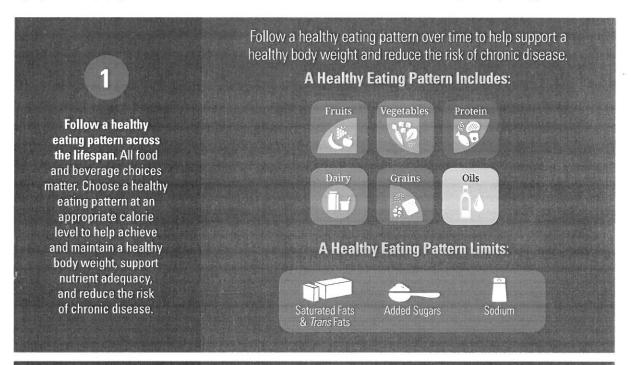
Although individuals ultimately decide what and how much to consume, their personal relationships; the settings in

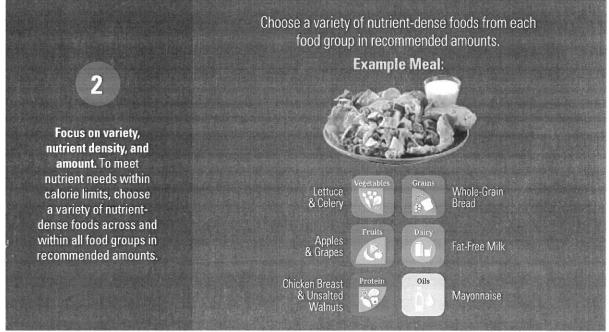
which they live, work, and shop; and other contextual factors strongly influence their choices. Concerted efforts among health professionals, communities, businesses and industries, organizations, governments, and other segments of society are needed to support individuals and families in making dietary and physical activity choices that align with the *Dietary Guidelines*. Everyone has a role, and these efforts, in combination and over time, have the potential to meaningfully improve the health of current and future generations.

#### Figure ES-1.

### 2015-2020 Dietary Guidelines for Americans at a Glance

The 2015-2020 Dietary Guidelines focuses on the big picture with recommendations to help Americans make choices that add up to an overall healthy eating pattern. To build a healthy eating pattern, combine healthy choices from across all food groups—while paying attention to calorie limits, too. Check out the 5 Guidelines that encourage healthy eating patterns:





#### Figure ES-1. (continued...)

### 2015-2020 Dietary Guidelines for Americans at a Glance

The 2015-2020 Dietary Guidelines focuses on the big picture with recommendations to help Americans make choices that add up to an overall healthy eating pattern. To build a healthy eating pattern, combine healthy choices from across all food groups—while paying attention to calorie limits, too. Check out the 5 Guidelines that encourage healthy eating patterns:

