

Dietary Guidelines for Americans Committee: Process and Updates

Jamie Stang, PhD, MPH, RDN
Member, 2020 Dietary Guidelines for Americans
Advisory Committee



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Dietary Guidelines Advisory Committee *Overview*

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About the Dietary Guidelines for Americans

- The *Dietary Guidelines for Americans* serves as the cornerstone of federal nutrition programs and policies, providing food-based recommendations to help prevent diet-related chronic diseases and promote overall health.
- According to the National Nutrition Monitoring and Related Research Act of 1990, the *Dietary Guidelines* is mandated to reflect the preponderance of scientific evidence, and is published jointly by USDA and HHS every five years.
- Historically, the *Dietary Guidelines* has focused on 2 years of age and older. The 2014 Farm Bill mandated the addition of infants and toddlers and women who are pregnant.



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About the Dietary Guidelines Advisory Committee

- The Dietary Guidelines Advisory Committee is formed and governed under the Federal Advisory Committee Act (FACA).
- The Committee is established to provide independent, science-based advice and recommendations to be considered by USDA and HHS in the development of the *Dietary Guidelines*.
- The responsibility for chartering a Dietary Guidelines Advisory Committee every five years rotates between USDA and HHS.
 - USDA served as administrative lead for the *2020-2025 Dietary Guidelines*.
- USDA and HHS work jointly in supporting the Committee and in developing the *2020-2025 Dietary Guidelines*.



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Charge to the 2020 Dietary Guidelines Advisory Committee

- Examine the evidence on specific topics and scientific questions identified by the Departments of Agriculture and Health and Human Services;
- Develop a report that outlines its science-based review and recommendations to the Departments with rationale; and
- Submit its report to the Secretaries of USDA and HHS for consideration as the Departments develop the *2020-2025 Dietary Guidelines for Americans*.



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Process to Update the Dietary Guidelines

Step 1: Review of the science by a Federal advisory committee.

- USDA/HHS convene a Dietary Guidelines Advisory Committee.
- The Committee conducts an independent review of current scientific evidence and submits a report of findings to the Secretaries.
- The scientific report is then posted for public and Federal agency review and comment.



The work of the 2020 Dietary Guidelines Advisory Committee was completed in June 2020. The report is available at [DietaryGuidelines.gov](https://www.dietaryguidelines.gov)

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Process to Update the Dietary Guidelines

Step 2: USDA and HHS write the *Dietary Guidelines for Americans*.

- Each edition of the *Dietary Guidelines* that USDA and HHS develops builds upon the previous edition, with scientific justification for changes informed by the Committee's scientific report – along with input from Federal agencies and the public.



The 2020-2025 Dietary Guidelines for Americans were released in December 2020. Available at <https://www.dietaryguidelines.gov/resources/2020-2025-dietary-guidelines-online-materials>

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2020 Dietary Guidelines Advisory Committee Overview

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Key Milestones

- 2018**
 - February: USDA & HHS posted topics and questions for public comment; 12,000+ comments received in 30 days
 - September: Issued public call for nominations for the 2020 Dietary Guidelines Advisory Committee
- 2019**
 - March: Appointed Committee held first meeting, 15-month period for public comments to the Committee opened
 - July & October: Committee met to deliberate and hear oral testimony from the public
- 2020**
 - January & March: Committee met and heard public oral testimony for a second time, held outside of Washington, DC
 - June: Committee held final meeting to discuss draft scientific report; submitted final report to USDA and HHS
 - December: 2020 Dietary Guidelines for Americans released



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Organization of the 2020 Dietary Guidelines Advisory Committee

Advisory Committee Review of Scientific Evidence

Worked in 6 topic area subcommittees and one cross-cutting working group:

1. Pregnancy and Lactation
2. Birth to 24 Months
3. Dietary Patterns
4. Beverages and Added Sugars
5. Dietary Fats and Seafood
6. Frequency of Eating



Data Analysis and Food Pattern Modeling

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Approaches to Examine the Evidence



Data Analysis

A collection of analyses that uses national data sets to help us understand the current health and dietary intakes of Americans. These data help make our advice practical, relevant, and achievable.

Food Pattern Modeling

Analysis that helps us understand how changes to the amounts or types of foods and beverages in a pattern might impact meeting nutrient needs across the U.S. population.



NESR Systematic Review

Research project that answers a question on diet and health by searching for, evaluating, and synthesizing all relevant, peer-reviewed studies.

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Scientific Review Protocols

The Committee created a protocol for each question before it examined any of the scientific evidence.

- Developed before the scientific review begins, a protocol is a plan for how one of the scientific approaches will be used to examine evidence related to one question
 - e.g., inclusion/exclusion criteria for study design and date of publication
- For the first time in the DGA process, draft protocols were posted online for public comments to the Committee before they were finalized.



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Approaches to Examine the Evidence



Data Analysis



**Food Pattern
Modeling**



**NESR
Systematic Reviews**

- The Committee made all decisions required to develop the protocols that guided how each approach would be used to examine the evidence for each question.
 - USDA and HHS staff supported implementing these approaches.
- The conclusions reached are those of the Committee.
- Draft and final protocols and draft conclusion statements were posted at DietaryGuidelines.gov during the Committee's review.

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The Committee's Scientific Review



Data Analysis

More than 150 analyses of Federal data sets

Food Pattern Modeling

Several analyses across the life span – and representing, for the first time, 6- to 24-month life stage



NESR Systematic Review

More than 270,000 citations screened and nearly 1,500 original research articles included in 33 original systematic reviews

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Public Comments to the Committee

- The Committee received more than 62,000 written public comments from March 12, 2019 to June 10, 2020.
 - Public comments available at Regulations.gov
 - A summary is included in the Committee's report

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Scientific Report of the 2020 Dietary Guidelines Advisory Committee

- Committee's work culminated in release of the *Scientific Report of the 2020 Dietary Guidelines Advisory Committee*
- Posted at DietaryGuidelines.gov on July 15, 2020
 - >10,000 downloads in first week

Professionally typeset PDF and print-version expected early 2021.



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Scientific Report of the 2020 Dietary Guidelines Advisory Committee

PART A: Executive Summary

PART B: Setting the Stage and Integrating the Evidence

PART C: Methodology

PART D: Evidence on Diet and Health

PART E: Future Directions

PART F: Appendices



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Part D: Evidence on Diet and Health

Current Dietary Intakes Through the Life Course

Chapter 1: [Current Intakes of Foods, Beverages, and Nutrients](#)

Diet and Health Relationships: Pregnancy and Lactation

Chapter 2: [Food, Beverage, and Nutrient Consumption During Pregnancy](#)

Chapter 3: [Food, Beverage, and Nutrient Consumption During Lactation](#)

Diet and Health Relationships: Birth to Age 24 Months

Chapter 4: [Duration, Frequency, and Volume of Exclusive Human Milk and/or Infant Formula Feeding](#)

Chapter 5: [Foods and Beverages Consumed During Infancy and Toddlerhood](#)

Chapter 6: [Nutrients from Dietary Supplements During Infancy and Toddlerhood](#)

Chapter 7: [USDA Food Patterns for Children Younger Than Age 24 Months](#)

Diet and Health Relationships: Individuals Ages 2 Years and Older

Chapter 8: [Dietary Patterns](#)

Chapter 9: [Dietary Fats and Seafood](#)

Chapter 10: [Beverages](#)

Chapter 11: [Alcoholic Beverages](#)

Chapter 12: [Added Sugars](#)

Chapter 13: [Frequency of Eating](#)

Chapter 14: [USDA Food Patterns for Individuals Ages 2 Years and Older](#)

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Part E: Future Directions

[Download Section](#)

Part F: Appendices

[APPENDIX F-1: Glossary of Terms](#)

[APPENDIX F-2: Public Comments](#)

[APPENDIX F-3: Biographical Sketches of the 2020 Dietary Guidelines Advisory Committee](#)

[APPENDIX F-4: Membership of Dietary Guidelines Advisory Committee Subcommittees and Working Groups](#)

[APPENDIX F-5: Dietary Guidelines Advisory Committee Report Acknowledgements](#)

Online-Only Supplementary Material

[Data Analysis](#)

[Food Pattern Modeling](#)

[Systematic Reviews](#)

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Guideline 1. Follow a healthy dietary pattern at every life stage

At every life stage—infancy, toddlerhood, childhood, adolescence, adulthood, pregnancy, lactation, and older adulthood—it is never too early or too late to eat healthfully.

- **For about the first 6 months of life**
 - exclusively feed infants human milk.
 - Continue to feed infants human milk through at least the first year of life, and longer if desired.
 - Feed infants iron-fortified infant formula during the first year of life when human milk is unavailable.
 - Provide infants with supplemental vitamin D beginning soon after birth.
- **At about 6 months**
 - introduce infants to nutrient-dense complementary foods.
 - Introduce infants to potentially allergenic foods along with other complementary foods.
 - Encourage infants and toddlers to consume a variety of foods from all food groups. Include foods rich in iron and zinc, particularly for infants fed human milk.
- **From 12 months through older adulthood**
 - follow a healthy dietary pattern across the lifespan to meet nutrient needs, help achieve a healthy body weight, and reduce the risk of chronic disease.



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Guideline 2. Customize and enjoy nutrient-dense food and beverage choices to reflect personal preferences, cultural traditions, and budgetary considerations.

- A healthy dietary pattern can benefit all individuals regardless of age, race, or ethnicity, or current health status.
- The *Dietary Guidelines* provides a framework intended to be customized to individual needs and preferences, as well as the foodways of the diverse cultures in the United States.



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Guideline 3. Focus on meeting food group needs with nutrient-dense foods and beverages, and stay within calorie limits.

The core elements that make up a healthy dietary pattern include:

- Vegetables of all types
 - dark green; red and orange; beans, peas, and lentils; starchy; and other vegetables
- Fruits
 - especially whole fruit
- Grains
 - at least half of which are whole grain
- Dairy
 - including lactose-free versions and fortified soy beverages and yogurt alternatives
- Protein foods
 - including lean meats, poultry, and eggs; seafood; beans, peas, and lentils; and nuts, seeds, and soy products
- Oils
 - vegetable oils and oils in food, such as seafood and nuts



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Guideline 4. Limit foods and beverages higher in added sugars, saturated fat, and sodium, and limit alcoholic beverages.

A small amount of added sugars, saturated fat, or sodium can be added to nutrient-dense foods and beverages to help meet food group recommendations, but foods and beverages high in these components should be limited. Limits are:

- **Added sugars**
 - Less than 10 percent of calories per day starting at age 2
 - Avoid foods and beverages with added sugars for those younger than age 2
- **Saturated fat**
 - Less than 10 percent of calories per day starting at age 2
- **Sodium**
 - Less than 2,300 milligrams per day—and even less for children younger than age 14
- **Alcoholic beverages**
 - Drink in moderation by limiting intake to 2 drinks or less in a day for men and 1 drink or less in a day for women
 - Drinking less is better for health than drinking more
 - There are some adults who should not drink alcohol
 - women who are pregnant



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DGAC Findings: Current Intakes (Chapter 1)

American dietary landscape has not changed over time

Across the lifespan:

- Americans report overconsumption of total energy, saturated fats, sodium, added sugars
 - for some consumers, alcoholic beverages also overconsumed
- Intakes of fruits, vegetables, and whole grains are lower than current recommendations
- Americans 1 years and older:
 - Underconsumption of vitamin D, calcium, dietary fiber, and potassium

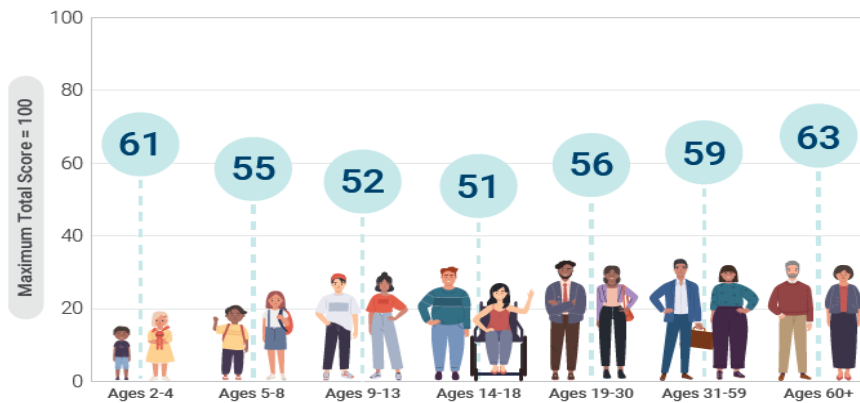


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DGAC Findings: Current Intakes

Figure 1-4

Adherence of the U.S. Population to the *Dietary Guidelines* Across Life Stages, as Measured by Average Total Healthy Eating Index-2015 Scores

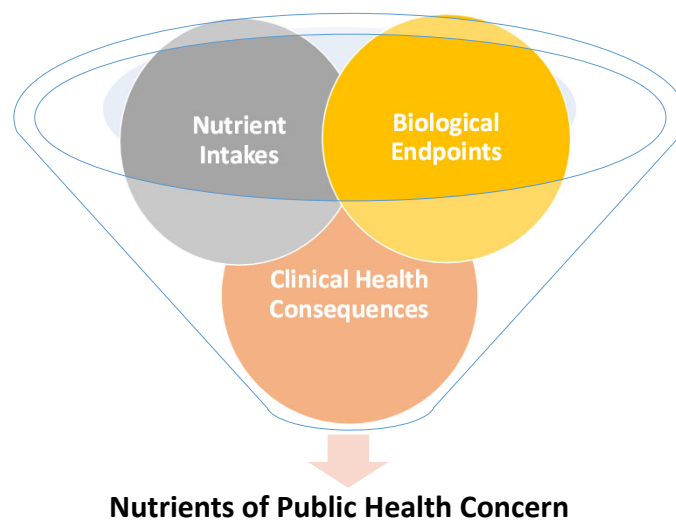


NOTE: HEI-2015 total scores are out of 100 possible points. A score of 100 indicates that recommendations on average were met or exceeded. A higher total score indicates a higher quality diet.

Data Source: Analysis of What We Eat in America, NHANES 2015-2016, ages 2 and older, day 1 dietary intake data, weighted.

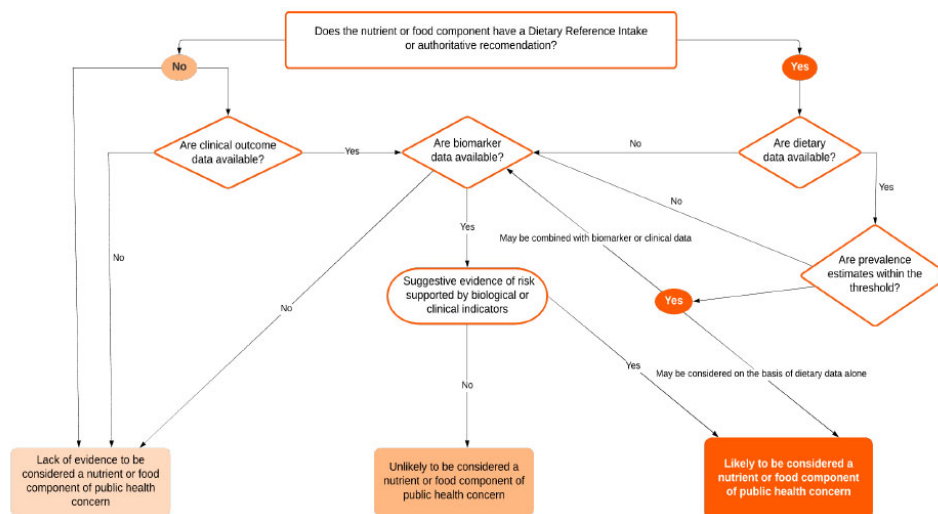
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Analytic Framework: Three Pronged Approach



2020 Dietary Guidelines Advisory Committee: Meeting 2

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Nutrients of Public Health Concern
2020 Dietary Guidelines Advisory Committee: Meeting 5

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DGAC Findings: Dietary Patterns (Chapter 8)

Table D8.1. Dietary pattern components in the Committee's Conclusion Statements that are associated with the health outcomes of interest.**

Health Outcome of Interest:	All-cause mortality	Cardiovascular disease ^a	Growth, size, body composition and risk of overweight and obesity ^a	Type 2 diabetes ^a	Bone health ^a	Colorectal Cancer ^b	Breast Cancer (Post-menopausal) ^b	Lung Cancer ^b	Neurocognitive health
Grade:	Strong (adults)	Strong (adults); Limited (children)	Moderate (adults); Limited (children)	Moderate (adults)	Moderate (adults)	Moderate (adults)	Moderate (adults)	Limited (adults)	Limited (adults)
Dietary patterns associated with lower risk of disease consistently included the following components.									
Components									
Fruits	X	X	X	X	X	X	X	X	X
Vegetables	X	X	X	X	X	X	X	X	X
Whole grains/cereal	X	X	X	X	X	X	X	X	
Legumes	X	X	X (adults)		X	X		X	X
Nuts	X	X (adults)			X				X
Low-fat dairy	X	X	X		X	X		X	
Fish and/or seafood	X	X	X (adults)		X	X		X	X
Unsaturated vegetable oils	X	X	X (adults)						X
Lean meat	X					X		X	
Poultry	X								
Dietary patterns associated with higher risk of disease consistently included the following components.									
Red meat	X	X (adults)	X (adults)	X		X			
Processed meat	X	X	X	X	X	X			
High-fat meat								X	
High-fat dairy	X			X					
Animal-source foods							X		
Saturated fats		X (adults)	X (adults)			X			

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DGAC Findings: Dietary Patterns (Chapter 8)

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Grade:	Strong (adults)	Strong (adults); Limited (children)	Moderate (adults); Limited (children)	Moderate (adults)	Moderate (adults)	Moderate (adults)	Moderate (adults)	Limited (adults)	Limited (adults)
Dietary patterns associated with higher risk of disease consistently included the following components.									
Sugar-sweetened beverages and/or foods	X	X	X	X	X	X			
Refined grains	X	X	X	X			X		
Fried potatoes/ French fries and potatoes			X (children)			X			
Added sugars			X (children)						
Sodium		X (adults)	X (adults)						

* Note: The reader is directed to the full conclusion statement above for more information on the relationship between dietary patterns and health outcomes.

* An empty box indicates the research examined in the body of evidence on dietary patterns and the health outcome of interest in that column did not consistently include that component as part of the dietary patterns. Some research efforts may have included that individual component, but that component was not consistently mentioned in the aggregate body of evidence examined. It was beyond the scope of these systematic reviews examining dietary patterns and health outcomes of interest to reclassify or standardize the component categories as originally used in the evidence reviewed.

* For both cardiovascular disease and growth, size, body composition and risk of overweight and obesity outcomes, the components listed are applicable to both adults and children. The components that are relevant only to adults or children are identified with parentheses. Evidence for the relationship between children's dietary patterns and type 2 diabetes and bone health also were examined but the evidence was insufficient to determine a relationship.

* The relationship between dietary patterns and prostate cancer was reviewed. Limited evidence suggested no relationship between dietary patterns and risk of prostate cancer.

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DGAC Findings: Dietary Patterns (Chapter 8)

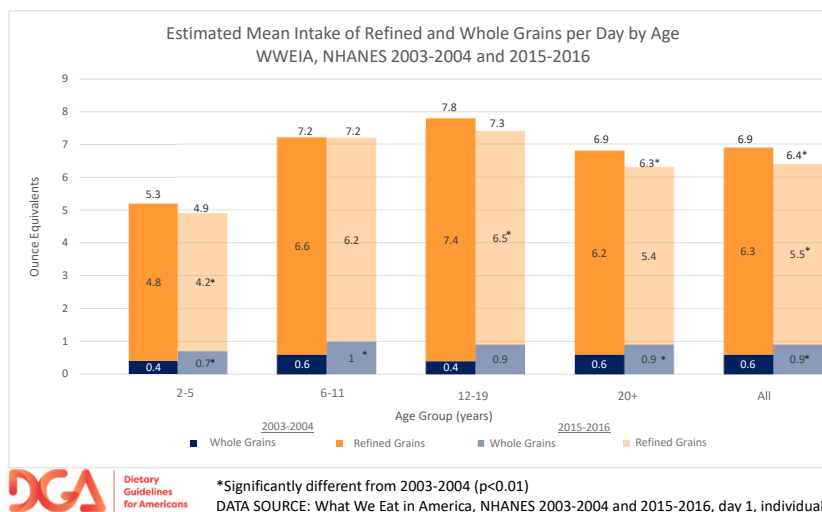
Dietary patterns associated with beneficial outcomes:

- higher intake of vegetables, fruits, legumes, whole grains, low- or non-fat dairy, lean meat and poultry, seafood, nuts and unsaturated vegetable oils
- low consumption of red and processed meats, sugar-sweetened foods and drinks, and refined grains
- Dietary patterns associated with adverse or detrimental outcomes included higher intake of red and processed meats, sugar-sweetened foods and beverages, and refined grains



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Whole Grain Intakes Increased & Refined Grain Intakes Decreased between 2003-2004 and 2015-2016



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DGAC Findings: Dietary Fats and Seafood (Chapter 9)

Fats and Dietary Cholesterol:

- Intake of saturated fats should be limited to less than 10% of energy per day by replacing them with unsaturated fats
- Dietary cholesterol intake should be as low as possible

Seafood intake for children:

- Two or more servings of cooked seafood per week recommended for ages 2+ years to ensure intake of key nutrients and overall healthy dietary pattern
 - serving sizes vary based on age, should follow FDA guidance
- For those that do not consume seafood, encourage intake of other foods high in omega-3 fatty acids
 - flaxseeds, walnuts, soy oil, algae and omega-3 source eggs



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DGAC Findings: Beverages (Chapter 10)

When nutrient-rich beverages (e.g. milk, 100% juice) are incorporated into the diet, it will be important to be mindful of their contribution to total energy intake

- Recommend only limited intake of sugar sweetened beverages
- Low and no calorie sweetened beverages may be a useful aid in weight management in adults
- The role beverages play in diet quality and energy balance varies across the life span
 - recommendations should be tailored appropriately by age and energy needs



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DGAC Findings: Alcohol (Chapter 11)

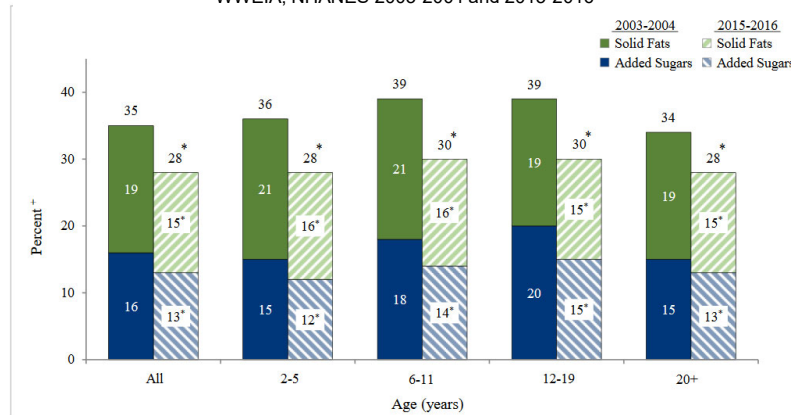
- Do not begin to drink alcohol or purposefully continue to drink because you think it will make you healthier
- If you drink alcohol, at all levels of consumption, drinking less is generally better for health than drinking more
- For those who drink alcohol, recommended limits for better health are up to 1 drink per day for both women and men



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Percent of Calories from Solid Fats and Added Sugars Decreased Between 2003-2004 and 2015-2016

Estimated mean intakes of calories from solid fats and added sugars as percent of total calories per day, by age
WWEIA, NHANES 2003-2004 and 2015-2016



*Significantly different from 2003-2004 (p < 0.01)

*Percentages rounded to integers. Total percentages of calories from solid fats and added sugars are shown above the respective bar charts.

DATA SOURCE: What We Eat in America, NHANES 2003-2004 and 2015-2016, day 1, individuals 2+ years
Bowman SA, et al. Food Surveys Research Group. Dietary Data Brief No. 20, November 2018.

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DGAC Findings: Added Sugar (Chapter 12)

Question 3. How much added sugars can be accommodated in a healthy diet while still meeting food group and nutrient needs?

Table D12.2. Essential calories and limit on solid fats and added sugars across energy levels in the Healthy U.S.-Style Food Patterns for ages 2 years and older

	Essential Calories ¹	Percent Essential Calories ¹	Energy Limit for Solid Fats and Added Sugars ²	Energy Assigned to Solid Fats ³	Energy Assigned to Added Sugars ³	Grams of Solid Fats ⁴	Grams of Added Sugars ⁴	Percent Energy Added Sugars
Level	kcal	% kcal	kcal	kcal	kcal	g	g	%
1,000	868	87	132	72	59	9	15	6
1,200	1120	93	80	44	36	5	9	3
1,400	1310	94	90	49	40	6	10	3
1,600	1496	94	104	57	47	7	12	3
1,800	1657	92	143	79	65	9	16	4
2,000	1759	88	241	133	109	16	27	5
2,200	1947	88	253	139	114	17	29	5
2,400	2079	87	321	176	144	21	36	6
2,600	2251	87	349	192	157	23	39	6
2,800	2431	87	369	203	166	24	41	6
3,000	2559	85	441	243	199	29	50	7
3,200	2620	82	580	319	261	38	65	8

¹ The energy associated with the foods and beverages ingested to meet nutritional goals through choices that align with the USDA Food Patterns in forms with the least amounts of saturated fat, added sugars and sodium.

² Calculated from pattern calorie level minus essential calories.

³ Calculated as 55 percent of energy from solid fats and 45 percent from added sugars, based on mean population intakes (NCI Usual Intakes data for NHANES 2013-2016).

⁴ Calculated using caloric values of 8.4 kcal per 1 gram of solid fats and 4 kcal per 1 gram of added sugars.

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DGAC Findings: Added Sugar (Chapter 12)

- Recommend less than 6% of energy from added sugars to achieve a dietary pattern that is nutritionally adequate while avoiding excess energy



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DGAC Findings: Food Patterns, Ages 2 and Older (Chapter 14)

Continue to recommend established USDA Food Patterns:

- Healthy U.S.-Style,
- Healthy Vegetarian, and
- Healthy Mediterranean-Style

Core components of all 3 USDA Food Patterns:

- Fruits, vegetables, legumes, whole grains, nuts and seeds
- Protein and fats from nutrient-rich food sources
- Limited amounts of added sugars, solid fats, and sodium
- Discretionary calories:
 - A small amount of energy remains for saturated fats, added sugars, alcohol or other sources of energy

Help the public continue to shift dietary intakes in healthy directions including strategies for maintaining energy balance



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Questions?



Photo Source: Ready for Brexit