

Process to Develop the 2020-2025 Dietary Guidelines for Americans

Topics and Scientific Questions to be Examined by the 2020 Dietary Guidelines Advisory Committee List B: Organized by Topic

Note: For full transparency, USDA and HHS are providing the refined topics and scientific questions to the public in two formats:

- [List A](#), is organized by life stage, which follows the format of the [topics and questions posted for public comment](#). This format makes it as easy as possible for the public to see what has changed.
- This list, List B, provides the identical topics and questions, reorganized to reduce redundancy and better reflect how the Departments will ask the Committee to proceed with its scientific review. The Committee will be asked to maintain the life stages approach in its scientific report for USDA and HHS.

The 2020 Dietary Guidelines Advisory Committee will be established to review the current totality of evidence on the following topics and supporting scientific questions and, based on its review, provide independent, science-based advice in these areas related to nutrition and health from birth into older adulthood. These topics and questions were identified by USDA and HHS with consideration of public and agency comments, and were prioritized based on relevance, importance, potential Federal impact, and avoiding duplication. The Committee will limit its review and advice to dietary guidance for human nutrition on the topics and scientific questions specified by the Departments. Throughout the Committee's review, evidence will be stratified and reviewed by age, sex, race, ethnicity, culture, location, and/or socioeconomic status, when possible, to identify and describe similarities and differences that may exist among individuals.

Current dietary intake and nutrients of public health concern

- For each stage of life, the following will be described/evaluated:
 - Current dietary patterns and beverage consumption
 - Current intakes of food groups and nutrients
 - Nutrients of public health concern
 - Prevalence of nutrition-related chronic health conditions
- How does dietary intake, particularly dietary patterns, track across life stages from the introduction of foods, into childhood, and through older adulthood?

Dietary patterns

What is the relationship between dietary patterns¹ (such as Dietary Guidelines-related, Mediterranean-style, Dietary Approaches to Stop Hypertension (DASH), vegetarian/vegan, low-carbohydrate diets, and high-fat diets) consumed at each stage of life and:

- 1) growth, size, body composition, and risk of overweight and obesity;
- 2) risk of cardiovascular disease;
- 3) risk of type 2 diabetes;
- 4) risk of certain types of cancer;
- 5) bone health;
- 6) neurocognitive health;
- 7) sarcopenia (in older adults); and
- 8) all-cause mortality?

¹The dietary patterns questions will consider the quantities, proportions, variety, or combination of different foods, drinks, and nutrients when examining relationships. Studies that examine a specific food group, but control for the other aspects of the dietary pattern, will also be considered.

Dietary patterns – continued

What is the relationship between dietary patterns consumed *during pregnancy* and 1) risk of gestational diabetes; 2) risk of hypertensive disorders during pregnancy; 3) gestational age at birth; 4) birth weight standardized for gestational age and sex; 5) gestational weight gain; and 6) micronutrient status?

What is the relationship between dietary patterns consumed *during lactation* and 1) human milk composition and quantity; 2) infant developmental milestones, including neurocognitive development; and 3) post-partum weight loss?

Are changes to the USDA Food Patterns needed based on the relationships identified? If so, how well do USDA Food Pattern variations meet nutrient recommendations *for each stage of life*? If nutrient needs are not met, is there evidence to support supplementation and/or consumption of fortified foods to meet nutrient adequacy?

Beverages

What is the relationship between beverage consumption (such as cow's milk, milk alternatives, water, 100% fruit juice, sugar-sweetened beverages, beverages with high-intensity sweeteners (known as artificial sweeteners), caffeinated beverages, and alcohol) *during relevant stages of life* and:

- 1) achieving nutrient and food group recommendations;
- 2) growth, size, body composition, and risk of overweight and obesity; and
- 3) for alcohol only, risk of certain types of cancer, risk of cardiovascular disease, neurocognitive health, and all-cause mortality?

What is the relationship between beverage consumption *during pregnancy* and 1) achieving nutrient and food group recommendations; 2) gestational weight gain; and 3) birth weight standardized for gestational age and sex?

What is the relationship between beverage consumption *during lactation* and 1) achieving nutrient and food group recommendations; 2) human milk composition and quantity; 3) post-partum weight loss; and 4) for alcohol only, infant developmental milestones, including neurocognitive development?

Added sugars

What is the relationship between added sugars consumption *at each stage of life* and:

- 1) achieving nutrient and food group recommendations;
- 2) growth, size, body composition, and risk of overweight and obesity;
- 3) risk of cardiovascular disease; and
- 4) risk of type 2 diabetes?

How much added sugars can be accommodated in a healthy diet *at each stage of life* while still meeting food group and nutrient needs?

Types of dietary fats

What is the relationship between types of dietary fat (such as saturated, omega-3 and omega-6 polyunsaturated, and monounsaturated) consumed (source, amount, and replacement) *at each stage of life* and:

- 1) neurocognitive development (birth to 18 years) or neurocognitive health (for those 18 years and older);
- 2) risk of cardiovascular disease;
- 3) risk of certain types of cancer; and
- 4) all-cause mortality?

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List B: Organized by Topics - continued

Seafood

- 1) What is the relationship between seafood consumption *during pregnancy and lactation* and neurocognitive development of the infant?
- 2) What is the relationship between seafood consumption *during childhood and adolescence* (up to 18 years of age) and 1) neurocognitive development; and 2) risk of cardiovascular disease?

Frequency of eating

What is the relationship between the frequency of eating (such as meals per day, snacking, and fasting) *at each stage of life* and:

- 1) achieving nutrient and food group recommendations;
- 2) growth, size, body composition, and risk of overweight and obesity;
- 3) risk of cardiovascular disease;
- 4) risk of type 2 diabetes; and
- 5) all-cause mortality?

The Agricultural Act of 2014 mandates that the *Dietary Guidelines* expand to include dietary guidance for infants, toddlers and women who are pregnant starting with the 2020-2025 edition. In addition to the questions above, focused questions on these life stages are provided below.

Infants and toddlers from birth to 24 months (healthy, full-term infants)

Topic	Question(s)
Recommended duration of exclusive human milk and/or infant formula feeding	What is the relationship between the duration of exclusive human milk and/or infant formula consumption and 1) growth, size, and body composition; 2) food allergies and atopic allergic diseases; 3) long-term health outcomes; 4) micronutrient status; and 5) developmental milestones, including neurocognitive development?
Frequency and volume of human milk and/or infant formula feeding	What is the relationship between the frequency and volume of human milk and/or infant formula consumption and 1) micronutrient status; and 2) growth, size, and body composition?
Dietary supplements (iron, vitamin D, vitamin B ₁₂ , omega-3 fatty acids)	What is the relationship between specific nutrients from supplements and/or fortified foods consumed during infancy and toddlerhood and 1) nutrient status; 2) growth, size, and body composition; and 3) bone health?
Complementary foods and beverages ²	What is the relationship between complementary feeding (timing of introduction, types, and amounts) and 1) micronutrient status; 2) growth, size, and body composition; 3) developmental milestones, including neurocognitive development; 4) food allergies and atopic allergic diseases; and 5) bone health?
Dietary patterns to help promote health and normal growth, decrease chronic disease risk, and meet nutrient needs	Can USDA Food Patterns be established based on the relationships identified? If so, how well do USDA Food Pattern variations meet nutrient recommendations for infants and toddlers? If nutrient needs are not met, is there evidence to support supplementation and/or consumption of fortified foods to meet nutrient adequacy?

² *Complementary feeding* is defined as the process that starts when human milk or infant formula is complemented by other foods and beverages. The complementary feeding period typically continues to 24 months as the young child transitions fully to family foods. *Complementary foods and beverages* are food and beverages (liquids, semisolids, and solids) other than human milk or infant formula provided to an infant or young child to provide nutrients and energy. Evidence related to dietary patterns consumed during the complementary feeding period will be considered as part of these questions.

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Topics and Scientific Questions to be Examined by the 2020 Dietary Guidelines Advisory Committee

List B: Organized by Topics - continued

Pregnancy and lactation

Topic	Question(s)
Dietary supplements (iron, folate, vitamin D, omega-3 fatty acids, vitamin B ₁₂ , iodine, and nutrients of public health concern)	What is the relationship between specific nutrients from supplements and/or fortified foods consumed before and during pregnancy and lactation and 1) micronutrient status; 2) risk of gestational diabetes; 3) risk of hypertensive disorders during pregnancy; 4) human milk composition and quantity; and 5) developmental milestones, including neurocognitive development?
Diet during pregnancy and lactation and risk of food allergy in the infant	What is the relationship between maternal diet during pregnancy and lactation and risk of infant and child food allergies and atopic allergic diseases?

Note: Some topics are not included above because they are addressed in existing evidence-based Federal guidance. In an effort to avoid duplication with other Federal efforts, it is expected that these topics will be reflected in the 2020-2025 *Dietary Guidelines* by referencing the existing guidance. Thus, these topics do not require a review of the evidence by the 2020 Dietary Guidelines Advisory Committee. Examples of existing guidance include:

- Food safety guidance
- Guidance on the health risks of excessive alcohol use, including information on binge drinking, and the recommendation that women who are pregnant or might be pregnant not drink at all
- Gestational weight gain guidance
- Physical activity guidance
- Dietary Reference Intakes, including the ongoing review of sodium and potassium