2020 Dietary Guidelines Advisory Committee: DRAFT - Part D. Chapter 1: Current Intakes of Foods, Beverages, and Nutrients

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This chapter includes questions examined by the Data Analysis Food Pattern Modeling Working Group

DietaryGuidelines.gov

LIST OF QUESTIONS

1. What is the current prevalence of nutrition-related chronic health conditions?
2. What are the current intakes of food groups?
3. What are the current patterns of food and beverage intake?
4. Which nutrients present a substantial public health concern because of underconsumption or overconsumption?
5. How does dietary intake, particularly dietary patterns, track across life stages from the introduction of foods, into childhood, and through older adulthood?

REVIEW OF THE SCIENCE

- 6 draft conclusion statements across the 5 questions.
- Approximately 155 different analyses, were reviewed.
- Data analyses reflected the most current NHANES cycle available and combined cycles when needed for sufficient sample sizes.
- Sample sizes were small for infants and toddlers and for women who were pregnant or lactating.
- All data are cross-sectional.
- Conclusion statements were not graded but take into consideration strengths and limitations of analyses.

METHODOLOGY

All questions were answered using data analysis

Final protocols and draft conclusion statements available at DietaryGuidelines.gov

DISCUSSION

- Most Americans have one or more chronic health conditions that are related to dietary intake across the life course, including overweight and obesity, heart disease, stroke, Type 2 diabetes, hypertension, liver disease, certain types of cancer, dental caries, and metabolic syndrome.
- Racial and socioeconomic status disparities exist with regard to chronic diseases

DISCUSSION – cont.

- The American dietary landscape has not changed appreciably over the last decade
- Patterns of food group intakes across the life course contribute to higher than recommended intakes of added sugars, sodium, and saturated fats.
- Lower than recommended dietary intakes of fruits, vegetables, and whole grains were noted for almost all Americans.

DISCUSSION: Pregnancy & Lactation

- While HEI scores were higher in pregnancy and lactation than in women of similar ages, many dietary deficits were noted.
- Iron deficiency in 1 in 10 pregnant women, with estimates highest in the third trimester (~25 percent), and being more prevalent in Hispanic, Mexican, and non-Hispanic black women
- Urinary iodine concentrations suggest iodine is also of concern
- Folate/folic acid intakes in the first trimester

DISCUSSION: Older infants (6 to 12 months)

- Most U.S. infants are introduced to complementary foods before 6 months of age.
- The primary mode of feeding is associated with the timing of introduction of CFB and the types of foods and beverages that are consumed.
- Formula-fed infants are more likely to be introduced to CFB at earlier ages and tend consume different amounts and types of food

CFB= Complementary foods and beverages

Older infants (6 to 12 months)

Public Health Concern

- Based on proportion of **human milk fed infants** with intakes (human milk and CFB) below EAR
  - Iron

Pose special challenges

- Based on estimated mean nutrient intakes **for all infants** from CFB compared to the proportion of AI expected to come from CFB
  - Potassium
  - Vitamin D
  - Choline

- Based on percent of **FMF infants** with intakes above the UL
  - Zinc
  - Retinol

Toddlers (12 to 24 months)

- By 12 months most infants cease to consume human milk or infant formula.

- Patterns of food group intakes and sources of food groups and energy among toddlers are similar to those of the U.S. population ages 2 years and older.

Part D Chapter 1: Current Intakes of Foods, Beverages, and Nutrients
2020 Dietary Guidelines Advisory Committee: *Meeting 6*

Toddlers (12 to 24 months)

Proposed nutrient or food component of public health concern (from meeting 4)

- potassium
- fiber
- vitamin D
- sodium
- added sugars

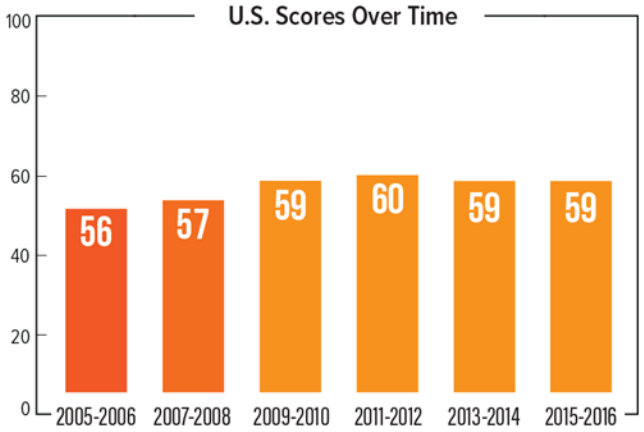
Proposed nutrient or food component that pose special challenges

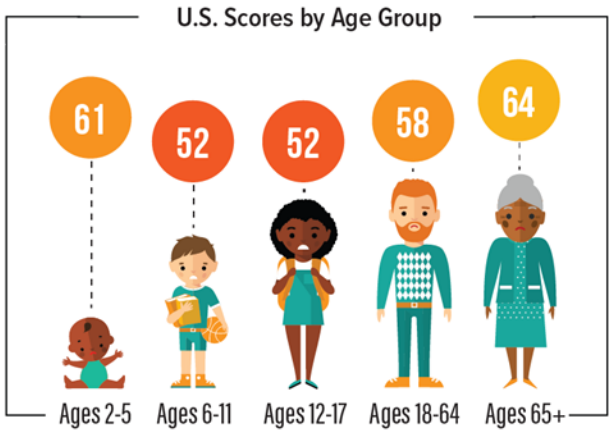
- choline
- linoleic acid

Many 1 y olds exceed recommendations for zinc and retinol from foods alone.

Dietary Quality by Life stage

How Healthy Is the American Diet?





Data source for Healthy Eating Index scores: What We Eat in American, National Health and Nutrition Examination Survey. (Undated data are from 2015-2016).

Americans, 2 years and older

Food Components of Public Health Concern

- Based on nutrient intake distributions, taken into consideration with biological endpoints and prevalence of clinical outcomes
  - vitamin D
  - calcium
  - dietary fiber
  - potassium
  - sodium
  - saturated fat
  - added sugars

DISCUSSION: Adolescents

- Using the life-course approach, the Committee recognized that pre-teens and adolescents may be at particular nutritional risk

DISCUSSION: Older Adults

- While older adults have higher relative HEI scores, additional concerns for vitamin B12 and protein are observed and warrant consideration for tailoring specific guidance.
- Protein and B6 may also be of concern among older women
- Osteoporosis and sarcopenia are chief concerns for older Americans, especially women.

Needs and Gaps

- Standardize definitions of life stages at the Federal level
- Develop HEI for those less than 2 years
- External ways to examine diet quality independent of HEI
- Identify what dietary patterns exist
- Over sampling populations at risk or where little data are available

Needs and Gaps – cont. (1)

- Biomarker data that are current and national in scope are needed to adequately describe the nutritional status of Americans, particularly those who are currently underrepresented in national data (i.e. infants and toddlers, reproductive-aged females, pregnant and lactating women, and certain race and ethnic groups).
- A process is needed to identify topics that can be carried forward into a future cycle of the DGA without additional review by the advisory committee.

Needs and Gaps – cont. (2)

- An accurate and current database of representative values for the energy and nutrient composition of human milk.

- Updated Dietary Reference Intake values from infants and young children are needed to best characterize potential dietary inadequacy and excess.

Needs and Gaps – cont. (3)

- Americans may need tools and technologies to help manage weight, analyze and plan their diets. Without such resources, it is difficult for individuals to follow the Dietary Guidelines.

SUMMARY: Draft Evidence-Based Advice to USDA and HHS

- Diet is a modifiable factor that is critically relevant to the primary and secondary prevention of most non-communicable diseases and the leading cause of disability and death affecting Americans.
- Dietary intake is also an important determinant of body weight and risk of overweight and obesity. Overweight and obesity begin early in life and remain public health problems in all age groups.

SUMMARY: Draft Evidence-Based Advice to USDA and HHS – cont. (1)

- The diet is quite complex, and the implications of dietary intake on risk of disease in the moment or later in life can be difficult to quantify.
- In order to both encourage and facilitate a healthier diet, the focus needs to be not only on what Americans choose to eat, but also on the social, economic, and environmental contexts that determine our dietary patterns. These contexts also drive dietary and health disparities that exist in the US.
- In addition to establishing optimal dietary patterns early in life, efforts should continue to ensure energy balance early in life and maintenance of energy balance over the life course.

SUMMARY: Draft Evidence-Based Advice to USDA and HHS – cont. (2)

- The 2015 Dietary Guidelines Advisory Committee described a need to understand how food security shapes dietary intakes.
- Future Committees may wish to examine optimal nutrition for prevention of cognitive decline in older adults.
- Include a review of public health-based strategies that have been successful in promoting higher quality dietary intakes, especially in key populations that are at high risk.

SUMMARY: Draft Evidence-Based Advice to USDA and HHS – cont. (3)

- Americans need to make shifts in their diets that do not add calories but make substitutions with more nutrient-dense foods or beverages.
- The Committee also recommends that the 2020-2025 Dietary Guidelines for Americans provide very specific messaging around beverage intakes, with a focus on sweetened beverages and alcohol.

DRAFT - Part D. Chapter 1: Current Intakes of Foods, Beverages, and Nutrients
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2020 Dietary Guidelines Advisory Committee:
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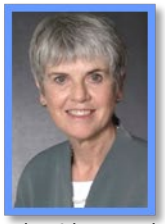

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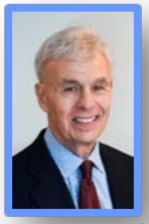

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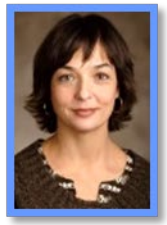

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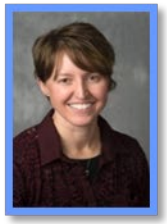

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2020 Dietary Guidelines Advisory Committee: *Meeting on Draft Report*