Committee to review the process to update the Dietary Guidelines for Americans

Understanding the Committee’s methodology for topic formation and reviewing the evidence base

Dr. Barbara E. Millen
2015 Dietary Guidelines Advisory Committee Chairman
Speaker Disclosures

• Currently:
  • Founder and President, Millennium Prevention, Inc.
  • Chairman, Boston Nutrition Foundation, Inc.

• Formerly:
  • Professor, Boston University School of Medicine (BUSM), Dept. Family Medicine & Div. Graduate Medical Sciences
  • Founding Chairman, Multidisciplinary Graduate Programs in Medical Nutrition Sciences (Boston Medical Center)
  • Founding Director of Nutrition Research, The Framingham Study
  • Expert Panel Member: Guidelines for Prevention and Management of Overweight and Obesity
  • Expert Panel Member: Lifestyle Management of Cardiovascular Disease

• Chairman, 2015 Dietary Guidelines Advisory Committee
• Reviewer, 2015-2020 Dietary Guidelines for Americans
2015 Dietary Guidelines Advisory Committee

• Charged by the U.S. Congress

• Provide science-based recommendations to USDA and DHHS on
  – How food, nutrition, and physical activity
    • Can promote the health of the U.S. population
    • Help reduce the burden from major preventable chronic diseases and other *lifestyle-related* health problems
  – How best to accomplish these goals at individual and population levels

• 2015 DGAC Scientific report informed the 2015-2020 Dietary Guidelines for Americans, the basis of national nutrition and health policy guidelines
2015 Dietary Guidelines Advisory Committee

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Millennium Prevention

Vice Chair
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Tufts University

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Shanthy Bowman, PhD
Co-Executive Secretary
Food Surveys Research Group
Agricultural Research Service
USDA
Topic Selection Criteria

Scope of the Dietary Guidelines
Address Food and Nutrition Issues that inform public health action to:

1. Promote population health or well-being
2. Reduce the significant burden of avoidable disease in whole US population or sub-populations

Major DGAC Focus is on:

• Food groups
  – Includes foods and beverages in them
• Dietary patterns
  – Amount and combination to promote health/prevent disease
• Nutrients considered, but changes to DRIs out of scope
  – Focus on food-based recommendations
• Social, behavioral, and/or environmental factors that influence food and nutrient intake and physical activity
• Food safety
Topic Selection Criteria

Target populations

• Americans 2 years and older
• Not birth to 24 months of age
• Women who are pregnant or breastfeeding
• Large subpopulations at-risk
Topic Selection Criteria

• Potential impact on food and nutrition-related outcomes of public health concern
  – Health outcomes (e.g., body weight, CVD, cancer)
  – Diet-related behaviors and dietary composition (e.g., food/beverage intake, dietary patterns and diet quality) and their social, behavioral and environmental determinants

• Likelihood of informing recommendations
  – Suggest new guidance
  – Inform revision to current guidance
  – Addresses urgent public health concerns, important areas of uncertainty/knowledge gaps, emerging topics
Diet and Physical Activity, Health Promotion and Disease Prevention at Individual and Population Levels across the Lifespan
Areas of DGA Potential Public Policy Impact

**U.S. Department of Health and Human Services**
- Healthcare Systems
  - Affordable Care Act
  - Medicaid and Medicare
- National Prevention Strategy
- Grant Funding for public health research and infrastructure
- Food and Nutrition Labeling
  - Nutrition Facts Label
  - Restaurant and vending labeling

**U.S. Department of Agriculture**
- Food, Agriculture and Farm Policies, Resources, and Products
- Federal Food Assistance Programs:
  - National School Lunch Program
  - Child and Adult Care Food Program Nutrition
  - Supplemental Nutrition Assistance Program (SNAP)
  - Commodity Supplemental Food Program
  - Special Supplemental Nutrition Program for Women, Infants and Children (WIC)
Topic Selection and Work Group/Subcommittee Formation Framework

- Science Review Subcommittee
- Proposed process for developing relevant scientific questions and prioritizing them in advance of commencing the work
- Subcommittees formed around work load of initial Work Group’s prioritized scientific questions
Work Groups: Each with a specified scope of the Dietary Guidelines

Develop and Prioritize Topics/Questions

**Topic Areas**
(High-level categories the DGAC may want to address)

**Scientific Questions**
(Specific questions the DGAC may want to answer under various topics)

**Systematic Review Plans**
(Detailed descriptions of how the DGAC plan to answer scientific questions)

| Tier |  
|------|---
| Tier 1 |  
| Tier 2 |  
| Tier 3 |  

- Work Group
- Topic Areas
- Questions
- Tier 1
- Tier 2
- Tier 3
WG 1 Environmental Determinants of Food, Diet and Health

- **food environment**: physical settings, media/marketing environment, policy environment
- **physical activity (PA) environment**: physical settings, built environment, media/marketing environment, and policy environment (PA Guidelines and National PA Plan)
- **agriculture/aquaculture sustainability**: how, what and where foods are grown and their long-term relationship to the health of humans
- **food systems**: local/regional food and markets/systems, policy influences on what food is grown, produced, processed, distributed, marketed and their cost
- **Food safety**: toxic components of the food supply and food production/distribution and microbial hazards (2010 food safety guidelines carried forward and updated)
WG 2 Dietary Patterns and Quality and Optimization through Lifestyle Behavior Change

• What, where and how people are eating and drinking by age, gender, and race/ethnicity
• Metabolic and health outcomes of dietary patterns (‘totality’ and ‘common’ components)
• ‘What works’ for individuals to adhere to healthy dietary patterns (including m-health)
• Physical Activity (PA) (recognizing the 2008 PA Guidelines and midcourse report)
• Others: clustering of lifestyle behavioral risk factors, microbiome, alcohol, energy ‘balance’, alternative modes of intervention to change diet and PA behavior
WG3 Foods, Beverages, and Nutrients and their Impact on Health

- **2010 Topics unlikely to need reassessment:** increase fruit and vegetable intake; eat a variety of vegetables; high heme-iron foods and foods that promote iron absorption in pregnant women; limit refined grains
- **Fat quality is more important that quantity**
- **High priority topics:** sodium, omega-3 fatty acids in seafood, fortified foods/beverages and impact on total nutrient intake, trans fats and sources, processed meats, dairy products in relation to nutrients of concern, whole fruit and 100% fruit juice
- **Potential cross-cutting topic:** sodium, omega-3 fatty acids in seafood
WG3 Foods, Beverages, and Nutrients and their Impact on Health (cont.)

• **Medium priority topics**: quantity of whole grains, 10% calories from saturated fat, 300 mg cholesterol
• **Cross cutting second tier**: whole grains
• **Low priority areas**: alcohol in terms of quantity (but might be cross-cutting), glycemic index
• **Emerging topics**: foods and nutrients related to cognitive function, GMOs and clinical outcomes, nutrient over-consumption (fortified foods/beverages) and clinical outcomes, foods and supplements and athletic performance, sugar-sweetened beverages, and gene-nutrient interactions
Cross-cutting Topics of Public Health Importance

- Added Sugars work group
- Sodium work group
- Saturated Fat work group
- Physical Activity writing group
Timeline

- Public Meeting 1  June 13-14, 2013
- Public Meeting 2  January 13-14, 2014
- Public Meeting 3  March 14, 2014
- Public Meeting 4  July 17-18, 2014
- Public Meeting 5  September 16-17, 2014
- Public Meeting 6  November 7, 2014 via webinar
- Public Meeting 7  December 15, 2014
Examining the Evidence: Methods

• *De novo* data analyses (NHANES)
• Food pattern modeling analyses (NHANES)
• NEL systematic reviews
• Existing reports
  – Existing high-quality evidence-based reports
  – Existing systematic reviews
  – Existing meta-analyses
• Public comments

Go to “Resources” and select “Data Analyses”
www.dietaryguidelines.gov
The *Dietary Guidelines for Americans*: What It Is, What It Is Not

- Provide evidence-based recommendations about the components of a healthy and nutritionally adequate diet
- Focus on disease *prevention* rather than disease *treatment*
- Inform Federal food, nutrition, and health policies and programs
The Guidelines

1. **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.

2. **Focus 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.

3. **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.

4. **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.

5. **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.
A Roadmap to the 2015-2020 Edition of the Dietary Guidelines for Americans

Chapters

Executive Summary

Introduction

Chapter 1: Key Elements of Healthy Eating Patterns

Chapter 2: Shifts Needed to Align with Healthy Eating Patterns

Chapter 3: Everyone Has a Role in Supporting Healthy Eating Patterns

Appendices