Update on the New U.S. Dietary Standards
Wayne Campbell, PhD
Professor, Department of Nutrition Science

Dietary Guidelines for Americans

• First published by the government in 1980

• National Nutrition Monitoring and Related Research Act of 1990 (P.L. 101-445)
  – Mandates HHS and USDA jointly publish
  – At least every 5 years

HHS
Office of Disease Prevention
and Health Promotion (ODPHP)

USDA
Center for Nutrition Policy
and Promotion (CNPP)

2015 Administrative lead agency

Dietary Guidelines for Americans

Federal Policy Document
Purpose
• Provide guidance and nutrition information for ages 2 years and older
• Prevention (not treatment) of chronic disease
• Based on high quality scientific evidence
• Foundational policy for all Federal food and nutrition programs

Target audience (of policy document)
• Policymakers, nutrition educators, and health professionals

Policy Development and Implementation

Advisory Report and Policy Document are two different products.
(Advisory Report is not a draft of the policy.)
Dietary Guidelines Advisory Committee

- Federal Advisory Committee
  - Non-Federal experts
  - “Special Government Employees”
  - Served voluntarily
- Appointed by HHS and USDA Secretaries
- Governed by Federal Advisory Committee Act
  - 2-year “Charter”
  - Independent review of science
  - Advice and recommendations to Federal government
  - Do not draft policy or implement policy

2015 Dietary Guidelines Advisory Committee

Chair
Barbara Millen, DrPH, RD
Millennium Prevention

Vice Chair
Alice H. Lichtenstein, DSc
Tufts University

Members
Steven Abrams, MD
Baylor College of Medicine

Lucille Adams-Campbell, PhD
Georgetown University Medical Center

Cheryl Anderson, PhD, MPH
University of California, San Diego

J. Thomas Brenna, PhD
Cornell University

Marian Neuhouser, PhD, RD
Fred Hutchinson Cancer Research Center

Rafael Perez-Escamilla, PhD
Yale University

Anna Maria Siega-Riz, PhD, RD
University of North Carolina, Chapel Hill

Mary Story, PhD, RD
Duke University

Consultant Subcommittee Members
Timothy Griffin, PhD
Tufts University

Michael Hamm, PhD
Michigan State University

Michael Perri, PhD, ABPP
University of Florida

Evidence Review

2015 Dietary Guidelines Advisory Committee through the subcommittees

- Developed questions to answer
- Approach to answer each question
- Synthesized the evidence
- Drafted conclusion and implications statements
- Brought the findings to the full Committee to deliberate and make decisions in public meetings
Approach to Examining the Evidence

- Original Systematic Reviews
- Review of Existing Reports
- Food Pattern Modeling
- Data Analyses

2015 Advisory Report - at a glance

Part D: Science Base
- Chapter 1: Food And Nutrient Intakes, and Health: Current Status and Trends
- Chapter 2: Dietary Patterns, Foods and Nutrients, and Health Outcomes
- Chapter 3: Individual Diet and Physical Activity Behavior Change
- Chapter 4: Food Environment and Settings
- Chapter 5: Food Sustainability and Safety
- Chapter 6: Cross-Cutting Topics of Public Health Importance
  - Added Sugars, Sodium, Saturated Fat
- Chapter 7: Physical Activity

Transparent Process

www.DietaryGuidelines.gov
- Open Committee meetings, materials online
- Public comments
  - Archive of comments to the Committee
  - Advisory Report posted online for public comment to the federal government, comments in process of being posted
- Advisory Report
  - Online, searchable, printable
  - Provides detailed description of Committee process and decisions, including process document
    - Online only appendices through section E-2 and E-3

www.NEL.gov
- Nutrition Evidence Library: 2015 Committee's original systematic reviews

Part B. Chapter 2

Major Themes

- The Problem and the Gap
  - Current dietary intakes are suboptimal and have caused poor health and higher chronic disease rates.
- The Dietary Patterns
  - Focus is on a healthy overall dietary pattern, rather than individual food groups or nutrients.
  - A healthy dietary pattern can be achieved in many ways—there is not one “healthy” pattern.
- The Individual and the Population
  - Interventions to change individual lifestyles, changes in the food and physical activity environments, and changes in policies and standards.
- The Long-term View
  - Compared to the current U.S. diet, a diet higher in plant-based foods and lower in animal-based foods is more health promoting and associated with lesser environmental impact.
Key Themes

• **The problem:** Most Americans do not consume a diet consistent with DGA recommendations, which likely contributes to suboptimal dietary and nutrient intakes and reduced health and higher chronic disease rates.

Integration of Findings

• **The problem:** Many people consume diets low in vegetables, fruits, whole grains, and dairy, and high in sodium, saturated fat, refined grains, added sugars, and energy (calories).

• Mixed dishes, which include burgers and sandwiches, pizza, and various meat/rice/pasta/grain dishes, and snacks and desserts are major sources of energy and large contributors of sodium, saturated fat, and added sugars to the diet.

Integration of Findings
Conclusions Food Categories—sources of sodium, saturated fat, and added sugars

- Mixed dishes are the largest contributor to intake of sodium and saturated fat.
  - Within mixed dishes, the sub-category of burgers and sandwiches is the largest contributor for both.
- Sodium is ubiquitous in the food supply and many food categories contribute to intake.
- Snacks and sweets are a major contributor to added sugars and saturated fat intake.
- Beverages supply almost half of added sugars intake.

Key Themes

Research supports the benefits of consuming a variety of foods and beverages as part of healthy dietary patterns.

“Common characteristics of dietary patterns associated with positive health outcomes include
  - higher intake of vegetables, fruits, whole grains, low- or non-fat dairy, seafood, legumes, and nuts;
  - moderate intake of alcohol (among adults);
  - lower consumption of red and processed meat, and low intake of sugar-sweetened foods and drinks, and refined grains.”

Key Themes

While there are many ways to achieve a healthy dietary pattern, the DGAC report emphasizes three USDA food patterns:

Healthy U.S.-Style
Healthy Vegetarian
Healthy Mediterranean-style
### Composition of three USDA Healthy Food Patterns

<table>
<thead>
<tr>
<th>Food Group</th>
<th>Healthy US-Style</th>
<th>Healthy Vegetarian</th>
<th>Healthy Mediterranean</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fruit, cups/day</strong></td>
<td>2</td>
<td>2</td>
<td>2 ½</td>
</tr>
<tr>
<td><strong>Vegetables, cups/day</strong></td>
<td>2 ½</td>
<td>2 ½</td>
<td>2 ½</td>
</tr>
<tr>
<td>• <strong>Legumes, cups/week</strong></td>
<td>1 ½</td>
<td>3</td>
<td>1 ½</td>
</tr>
<tr>
<td><strong>Whole Grains, oz eq/day</strong></td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td><strong>Dairy, cups/day</strong></td>
<td>3</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td><strong>Protein Foods, oz eq/week</strong></td>
<td>5 ½</td>
<td>3 ½</td>
<td>6 ½</td>
</tr>
<tr>
<td>• <strong>Meat, oz eq/week</strong></td>
<td>12 ½</td>
<td>---</td>
<td>12 ½</td>
</tr>
<tr>
<td>• <strong>Poultry, oz eq/week</strong></td>
<td>10 ½</td>
<td>---</td>
<td>10 ½</td>
</tr>
<tr>
<td>• <strong>Seafood, oz eq/week</strong></td>
<td>8</td>
<td>---</td>
<td>15</td>
</tr>
<tr>
<td>• <strong>Eggs, oz eq/week</strong></td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>• <strong>Nuts/seeds, oz eq/week</strong></td>
<td>4</td>
<td>7</td>
<td>4</td>
</tr>
<tr>
<td>• <strong>Processed soy, oz eq/week</strong></td>
<td>½</td>
<td>8</td>
<td>½</td>
</tr>
<tr>
<td><strong>Oils, grams/day</strong></td>
<td>27</td>
<td>27</td>
<td>27</td>
</tr>
</tbody>
</table>

2015 DGAC report Table D1.32

### Key Themes – Individual Behaviors and Environments

Successful and sustained improvements in a person’s diet and health are greatly influenced by their personal, social, economic, and cultural environments.

Effective multi-component approaches and policies (more so than individual ones) may work together with a person’s own efforts to improve their diet and health.

### Contextual factors - Summary SC3

1. **Provide continuous support of Federal programs to help alleviate the consequences of household food insecurity**

2. **Food and nutrition assistance programs should take into account the risk that immigrants have of giving up their healthier dietary habits soon after arriving in the United States**

3. **Provide all individuals living in the United States with the environments, knowledge, and tools needed to implement effective individual- or family-level behavioral change strategies to improve the quality of their diets and reduce sedentary behaviors**

### Scope SC4: Population level Behavior Change

**Food Environments**

**Physical environment**

- Key settings – neighborhood and community food access, early care and education, schools, worksites
- Understand and assess the role of food environment in promoting or hindering healthy eating in various settings.
- Identify the most effective evidence-based diet-related programs, practices, environmental and policy approaches (“what works”) to improve health and reduce disparities.
Actions for Individuals and Families/Households

- Improve food and menu choices, modifying recipes (including mixed dishes and sandwiches), and watching portion sizes.
- Consume more vegetables (without added salt or fat), fruits (without added sugars), whole grains, seafood, nuts, legumes, low/non-fat dairy or dairy alternatives (without added sugars).
- Reduce consumption of red and processed meat, refined grains, added sugars, sodium, and saturated fat; substituting saturated fats with polyunsaturated alternatives; and replacing solid animal fats with non-tropical vegetable oils and nuts.

Key Themes – Food Security

Compared to the current U.S. diet, a diet with more plant-based foods and less animal-based foods and energy promotes both improved human health and food security (including food sustainability associated with reduced environmental impact).

Recommendation to reduce intakes of red and processed meats

- ‘red’ and ‘processed’ are often linked together in existing literature
- ‘reduce’ does not mean ‘eliminate’
- lean meats can be a part of a healthy dietary pattern

Recommendations on The Dairy Group

- Dairy contributes important essential macro- and micro-nutrients, but also relatively high amounts of sodium, especially from cheese
- “Increasing the proportion of fat-free milk consumed to meet Dairy Group recommendations [by proportionately reducing cheese intake] would increase levels of magnesium, potassium, vitamin A, vitamin D, and choline in the patterns, and decrease amounts of sodium, cholesterol and saturated fatty acids
- None of the alternatives to milk and milk products provide a similar enough nutrient profile in terms of these impacted nutrients to be considered for inclusion in the Dairy Group”
The DGAC report contains reliable, scientifically rigorous information and conclusions to promote healthy eating for improved health in America. The committee urges the federal government to use this information as a foundation to make population health a national priority and to emphasize the importance of healthy diets to prevent chronic disease and to promote and sustain both human and environmental vitality.