Implementing the Dietary Guidelines for Americans in Education Programs and Research

Janet M. de Jesus, MS, RD
Program Officer, Implementation Science
National Heart, Lung, and Blood Institute

Review of the Process to Update the Dietary Guidelines for Americans
National Academy of Sciences
January 10, 2017
NIH Implementation of Dietary Guidelines

- NIH implementation of the Dietary Guidelines for Americans in research

- NHLBI nutrition education materials

- NIH coordination of nutrition review
Role of NHLBI and Collaborative Partners in Guideline Development and Implementation

NHLBI Role

Knowledge Generation

Evidence Synthesis

Implementation Research

Collaborative Partners’ Role

Practice Guidelines
- Writing guidelines
- Disseminating guidelines
- Helping implement guidelines

Gaps in Evidence

Gaps in Implementation

NIH Nutrition Research

Estimated NIH Nutrition Research Funding, FY 2016

Nutrition Research
Total $: ~1.6 Billion
Total # grants: 4211

NIH Institutes and Centers

www.niddk.nih.gov/about-niddk/advisory-coordinating-committees/nih-nutrition-research-task-force/
Healthy Eating Index 2010: Nutrition Research

- Based on USDA's 2010 food patterns
- Translates recommendations in the Dietary Guidelines into specific, quantified dietary recommendations.
- All of the food groups contained in USDA's food patterns are represented in HEI–2010 components.
### HEI-2010 Total and Component Scores for the U.S. Total Population, Children and Older Adults, NHANES 2011-2012

<table>
<thead>
<tr>
<th>HEI-2010 Dietary Component (maximum score)</th>
<th>Total Population ≥ 2 years (n=7,933)</th>
<th>Children 2-17 years (n=2,857)</th>
<th>Older Adults ≥ 65 years (n=1,032)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean Score (standard error)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total fruit (5)</td>
<td>3.00 (0.11)</td>
<td>3.91 (0.18)</td>
<td>3.84 (0.22)</td>
</tr>
<tr>
<td>Whole fruit (5)</td>
<td>4.01 (0.17)</td>
<td>4.78 (0.22)</td>
<td>4.99 (0.05)</td>
</tr>
<tr>
<td>Total vegetables (5)</td>
<td>3.36 (0.08)</td>
<td>2.10 (0.09)</td>
<td>4.16 (0.19)</td>
</tr>
<tr>
<td>Greens and beans (5)</td>
<td>2.98 (0.15)</td>
<td>0.70 (0.09)</td>
<td>3.58 (0.47)</td>
</tr>
<tr>
<td>Whole grains (10)</td>
<td>2.86 (0.13)</td>
<td>2.50 (0.10)</td>
<td>4.23 (0.34)</td>
</tr>
<tr>
<td>Dairy (10)</td>
<td>6.44 (0.14)</td>
<td>9.03 (0.22)</td>
<td>5.99 (0.16)</td>
</tr>
<tr>
<td>Total protein foods (5)</td>
<td>5.00 (0.00)</td>
<td>4.44 (0.13)</td>
<td>5.00 (0.00)</td>
</tr>
<tr>
<td>Seafood and plant proteins (5)</td>
<td>3.74 (0.20)</td>
<td>3.05 (0.17)</td>
<td>4.91 (0.18)</td>
</tr>
<tr>
<td>Fatty acids (10)</td>
<td>4.66 (0.14)</td>
<td>3.29 (0.18)</td>
<td>5.60 (0.36)</td>
</tr>
<tr>
<td>Refined grains (10)</td>
<td>6.19 (0.15)</td>
<td>4.91 (0.16)</td>
<td>7.34 (0.31)</td>
</tr>
<tr>
<td>Sodium (10)</td>
<td>4.15 (0.06)</td>
<td>4.85 (0.25)</td>
<td>3.66 (0.26)</td>
</tr>
<tr>
<td>Empty calories (20)</td>
<td>12.60 (0.23)</td>
<td>11.50 (0.28)</td>
<td>14.99 (0.44)</td>
</tr>
<tr>
<td><strong>Total HEI score (100)</strong></td>
<td><strong>59.00 (0.95)</strong></td>
<td><strong>55.07 (0.72)</strong></td>
<td><strong>68.29 (1.76)</strong></td>
</tr>
</tbody>
</table>

<sup>1</sup>Calculated using the population ratio method.
Use of the HEI in research
Dietary Approaches to Stop Hypertension (DASH) and DASH-Na Trials

- Tested effects of a dietary pattern on BP
  - combined effects of nutrients that occur together in foods and based on Dietary Guidelines.

- Feeding study
  - Complete diets provided
  - Body weight kept constant
Nutrition education Subcommittee (NES)

- Reviews federal nutrition education materials that contain dietary guidance for the general population.
- 1990 Congressional mandate for reviews of materials to ensure that nutrition education materials produced by federal agencies are consistent with the DGAs.
- All agencies are consistent in regard to nutrition information and advice.
A Menu of **We Can!** Tools: Healthy Weight information for families

https://www.nhlbi.nih.gov/health/educational/wecan/
Recipe Collections from the NHLBI

http://hp2010.nhlbihin.net/healthyeating
NHLBI Multicultural Resources

Educational Resources to Address Health Disparities

Delicious Heart Healthy Latino Recipes/Platillos latinos sabrosos y saludables (bilingual English, Spanish)
Provides recipes for 26 popular, easy-to-prepare, tested Latino dishes created in a heart healthy style (lower in fat and sodium than traditional versions). Includes heart healthy food substitutions, food safety, a glossary of international terms for Latino cuisine, and nutrient analyses.

- Heart Healthy Latino Recipes
- Ordering Information

On the Move to Better Heart Health for African Americans
A culturally appropriate educational booklet for African Americans on heart healthy living. In an easy-to-read format, the booklet provides concise information on heart disease and its risk factors.

Your Choice for Change - Honoring the Gift of Heart Health for American Indians
A culturally appropriate educational booklet for American Indians on heart healthy living. In an easy-to-read format, the booklet provides concise information on heart disease and its risk factors.

Healthy Heart, Healthy Family - Keep the Beat: Aim for a Healthy Weight
This booklet is part of a series called "Healthy Heart, Healthy Family," that presents important information about a specific risk factor for heart disease in a user-friendly and clear manner for Latinos.

Healthy Hearts, Healthy Homes - Are You at Risk for Heart Disease?
This booklet is part of a series called "Healthy Hearts, Healthy Homes," that presents important information about a specific risk factor for heart disease in a user-friendly and clear manner for Latinos.

NHLBI “Your Guide” Series

www.nhlbi.nih.gov
Thank you

Janet M. de Jesus, MS, RD
National Heart, Lung, and Blood Institute
dejesusjm@mail.nih.gov