

Evidence-Based Analysis and the Dietary Guidelines for Americans

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Presenter Disclosures

Eve V. Essery, PhD

- (1) The following personal financial relationships with commercial interests relevant to this presentation existed during the past 12 months:

No relationships to disclose

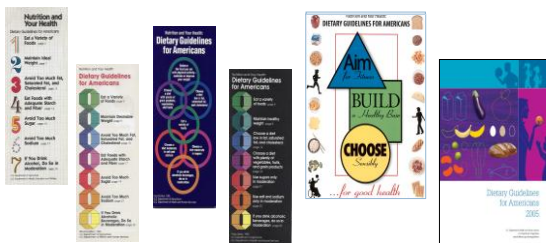
Outline

- Discuss the purpose and history of the *Dietary Guidelines for Americans*
- Outline the development process of the *Dietary Guidelines for Americans, 2010*
 - Emphasize the Dietary Guidelines Advisory Committee and the evidence-based review methodology used to support their recommendations

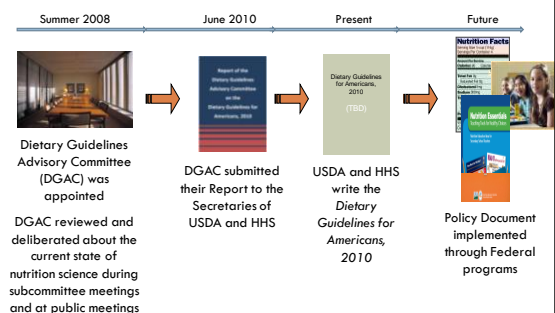
What are the Dietary Guidelines?

- Federal nutrition policy established jointly by USDA and HHS
- Provide nutrition advice for Americans ages 2 years and older to help promote health and prevent chronic disease
- Form the basis for nutrition policy in Federal food, education, and information programs
- All messages and materials produced throughout the Federal government are consistent with the Guidelines
- Used by educators and health professionals
- First published in 1980
- Updated every 5 years
- Based on the "preponderance of evidence"

Dietary Guidelines for Americans, 1980-2005



Development of Dietary Guidelines Policy



2010 Dietary Guidelines Advisory Committee

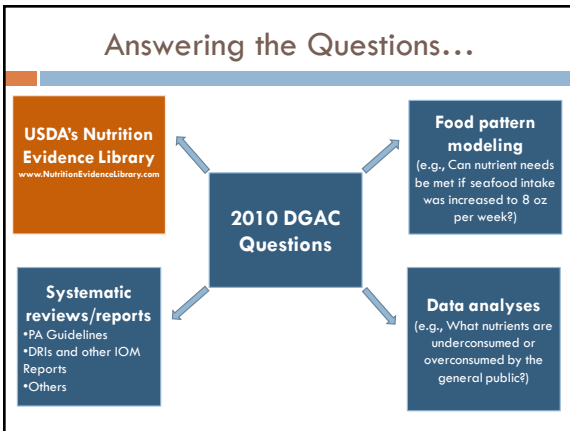
Chair	Linda Van Horn, PhD, RD
Co-chair	Naomi Fukagawa, MD, PhD
<i>Topic Subcommittee/Chapter Chairs:</i>	
Energy Balance and Weight Management	F. Xavier Pi-Sunyer, MD, MPH
Nutrient Adequacy	Sharon Nickols-Richardson, PhD, RD
Fatty Acids and Cholesterol	Thomas Pearson, MD, PhD, MPH
Food Safety and Technology	Roger Clemens, DrPH
Sodium, Potassium, and Water	Lawrence Appel, MD, MPH
Carbohydrate and Protein	Joanne Slavin, PhD, RD
Alcohol	Eric Rimm, ScD
<i>Subspecialties:</i>	
Pediatrics	Christine Williams, MD, MPH
Maternal Nutrition	Rafael Pérez-Escamilla, PhD
Behavior/Food Choices	Cheryl Achterberg, PhD
Physical Activity	Miriam Nelson, PhD

Food and Nutrition Questions

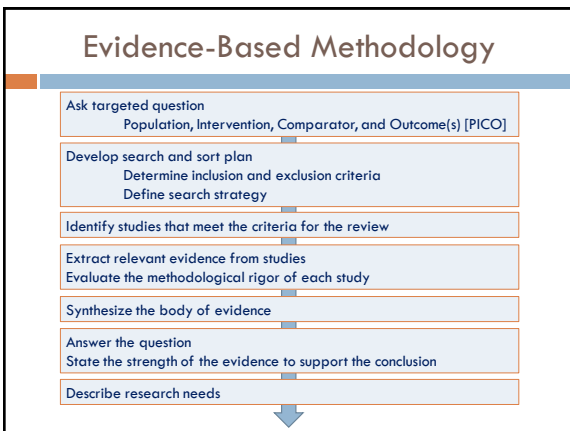
DGAC started by identifying topics that might influence the 2010 Dietary Guidelines

Developed 150 questions related to:

- **Foods and food groups**
- **Nutrients**
- **Dietary behaviors**
- **Food environment**
- **Outcomes – E.g., body weight, cardiovascular disease, type 2 diabetes, intermediate outcomes**



- ### USDA's Nutrition Evidence Library (NEL)
- Created to conduct systematic reviews to inform Federal nutrition policy and programs
 - Preferred foundation for policy and guidance
 - Meets Federal guidelines that agencies ensure the quality, objectivity, and integrity of information used to form Federal guidance
 - Leverages a systematic process that is rigorous, transparent, and minimizes bias



Evidence-Based Methodology

What is the relationship between self-diet monitoring and body weight in adults?

Searched PubMed from 2000-2009

Search terms used: ("body weight"[mh] OR adiposity[mh] OR "Body Mass Index"[mh] OR "Overweight"[mh] OR "Obesity"[mh] OR "Weight Gain"[mh] OR "Waist-Hip Ratio"[Mesh]) AND (diet[mh] OR "diet records" OR "food habits") AND (self AND monitoring)

Identified criteria:

- Inclusion criteria (e.g., English language, <20% drop out rate)
- Exclusion criteria (e.g., animal studies, medical treatment)

Evidence-Based Methodology

69 articles were identified in the search
 33 articles were selected for abstract review
 7 articles included
 26 articles excluded

Information on self-monitoring and body weight was extracted from the included articles

Methodological rigor of each study was established using predetermined criteria (e.g., validity, bias)

Evidence-Based Methodology

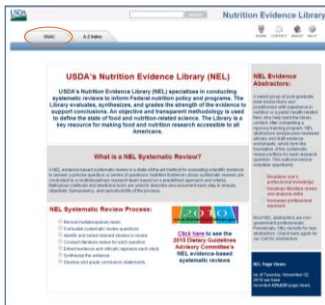
Summarized the body of evidence:
 6 randomized controlled trials (3 +, 3 0)
 1 non-randomized trial (+)
 Considered the quality, consistency, quantity, impact, and generalizability of the studies

DGAC Conclusion: *Strong evidence* shows that for adults who need or desire to lose weight, or who are maintaining body weight following weight loss, self-monitoring of food intake improves outcomes.

DGAC Recommendation: Adults are encouraged to self-monitor food intake to improve outcomes when actively losing weight or maintaining body weight following weight loss.

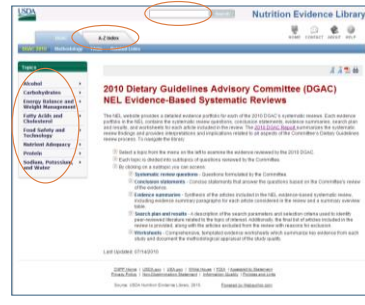
Transparency and Availability

www.NutritionEvidenceLibrary.com



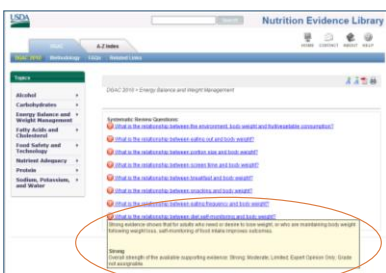
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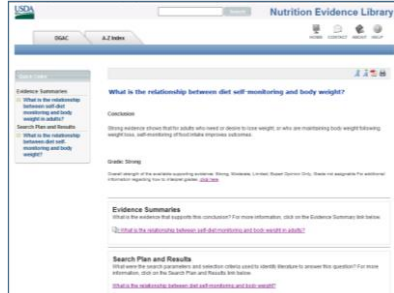
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- ✓ Question
- ✓ Conclusion
- ✓ Grade
- ✓ Summary of the evidence
- ✓ Description of the search strategy

Transparency and Availability

www.DietaryGuidelines.gov

DGAC Report

Dietary Guidelines for Americans
Report of the Dietary Guidelines Advisory Committee
December 2010
Dietary Guidelines for Americans, 2010
Dietary Guidelines for Americans, 2010
Dietary Guidelines for Americans, 2010

Related Materials

Dietary Guidelines for Americans
Dietary Guidelines for Americans, 2010
Dietary Guidelines for Americans, 2010
Dietary Guidelines for Americans, 2010