

Draft Outline

DGAC Conceptual Model

Diet, Health Promotion, and
Disease Prevention at
Individual and Population
Levels

Barbara Millen
DGAC Chair

Purpose of Conceptual Model

- Characterize the multiple interrelated determinants of
 - Wide-ranging nutrition and lifestyle behaviors
 - Health outcomes
 - Individual and population levels
- *Highlight* areas within this large system addressed by the 2015 DGAC review of the evidence

Purpose of Conceptual Model

- Provide organizing framework in DGAC report
 - Interrelationships of the science base chapters
 - Larger environments and systems in US: food and agriculture, nutrition, physical activity, and health
 - Encompass most life stages (ages 2 years and older)
 - Considers population groups at particular risk

Purpose of Conceptual Model

- Show a large number of factors, *highlighting* those addressed by DGAC evidence reviews
 - Some components outside DGAC scope but acknowledged as related to/influencing determinants and outcomes of interest
 - Other components within DGAC scope but not specifically addressed in DGAC evidence review

Diet, Health Promotion, and Disease Prevention at Individual and Population Levels: a Conceptual Model (*draft*)

Outline of Draft Model Content

Determinants of
Diet, Physical Activity,
and Health

Nutrition,
Physical Activity, and
Related Health ***Outcomes***

Determinants of Diet, Physical Activity, and Health

- 1) **Intrapersonal Factors** (Individual)
- 2) **Interpersonal Factors** (Individual and Community)
- 3) **Environments** (Individual and Population)
- 4) **Public and Private Sectors and Systems**
(Local to National)

Nutrition, Physical Activity, and Related Health *Outcomes*

- 1) Diet
- 2) Physical Activity
- 3) Other Health-related Lifestyle Factors
- 4) Nutrition-related Health Outcomes through the Lifespan

Determinants of Diet, Physical Activity, and Health

Intrapersonal Factors (Individual)

- *Demographics*
- Psychological factors
- *Nutrition, physical activity, and health-related factors*
- *Biological*

*Italicized components addressed
by DGAC evidence reviews*

Determinants of Diet, Physical Activity, and Health

Interpersonal Factors (Individual and Community)

- Family/household
- Social/cultural/religious
- Peer and Social Networks

*Italicized components addressed
by DGAC evidence reviews*

Determinants of Diet, Physical Activity, and Health

Environments (Individual and Population)

- *Natural*
- Physical/built
- *Society and culture*
- *Food and physical activity*
- *Home*
- *Community*
- *Business/workplace*
- *Education and social services across the lifespan*
- *Healthcare and public health*

*Italicized components addressed
by DGAC evidence reviews*

Determinants of Diet, Physical Activity, and Health

Public and Private Sectors and Systems

(Local to National)

- Food, Beverage and Agriculture
- *Consumer*
- Producer/provider
- *Retail and Service*
- *Economy*
- *Government*
- Ecosystems
- Other

*Italicized components addressed
by DGAC evidence reviews*

Nutrition, Physical Activity, and Related Health *Outcomes*

- 1) Diet
- 2) Physical Activity
- 3) Other Health-related Lifestyle Factors
- 4) Nutrition-related Health Outcomes through the Lifespan

Nutrition, Physical Activity, and Related Health *Outcomes*

Diet

- *Dietary patterns*
- *Food, beverage and nutrient intake*
- Dietary product and nutrient supplements
- *Food/nutrition knowledge, attitudes and skills*
- *Food security*
- *Food safety*

Italicized components addressed by DGAC evidence reviews

Nutrition, Physical Activity, and Related Health *Outcomes*

Physical Activity

- *Physical activity patterns*
- *Sedentary behaviors*
- *Sleep patterns*
- *Physical activity knowledge, awareness and skills*

Italicized components addressed by DGAC evidence reviews

Nutrition, Physical Activity, and Related Health *Outcomes*

Other Health-related Lifestyle Factors

- Tobacco status and use
- Stress
- Medical management and adherence
- Others

*Italicized components addressed
by DGAC evidence reviews*

Nutrition, Physical Activity, and Related Health *Outcomes*

Nutrition-related Health Outcomes through the Lifespan

- *Weight and body composition*
- *Risk factors and clinical indicators*
 - *Blood lipids and glucose, blood pressure, urinary sodium*
 - *Bone density, protein/calorie malnutrition, micronutrient status*
- *Health outcomes*
 - *Fertility-, peri- and post-menopause-, pregnancy-related outcomes*
 - *Cardiovascular diseases (coronary heart disease, heart attack, hypertension and stroke)*
 - *Overweight and obesity, type 2 diabetes, etc.*
 - *Diet-related cancers (breast, colorectal, prostate, lung)*
 - *Neurological and psychological conditions (depression, cognitive function, dementia, Alzheimer's Disease)*

*Italicized components addressed
by DGAC evidence reviews*

Diet, Health Promotion, and Disease Prevention at Individual and Population Levels: a Conceptual Model (*draft*)

Outline of Draft Model Content

Determinants of
Diet, Physical Activity,
and Health

Nutrition,
Physical Activity, and
Related Health ***Outcomes***

Diet, Health Promotion, and Disease Prevention at Individual and Population Levels: a Conceptual Model (*draft*)

Goals for Visual of Conceptual Model

- Capturing bi-directionality
- Keeping the complex framework as simple and direct as possible

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DGAC Chair**

DGAC Next Steps

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DGAC Chair

DGAC and DGA Timeline

2013

- DGAC Meeting 1: June 13–14, 2013

2014

- DGAC Meeting 2: January 13-14, 2014 (included public oral testimony)
- DGAC Meeting 3: March 14, 2014
- DGAC Meeting 4: July 17-18, 2014
- DGAC Meeting 5: September 16-17, 2014 (*tentative date*)
- DGAC Meeting 6: TBD
- End of CY2014: DGAC issues report to Secretaries (HHS and USDA)

2015

- DGAC report posted on www.DietaryGuidelines.gov for public comment
- HHS and USDA hold public comment meeting on the DGAC report
- Departments prepare the *Dietary Guidelines for Americans* policy document
- End of CY2015: HHS and USDA jointly publish and release the 8th edition of the *Dietary Guidelines for Americans*

DGAC Next Steps

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DGAC Chair