# Opportunities for Integrating Sustainability and Dietary Guidelines

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## Main question

• How can sustainability be integrated into the *Dietary Guidelines for Americans* (DGA)?

# Main question and Approach

- How can sustainability be integrated into the *Dietary Guidelines for Americans* (DGA)?
- Approach
  - Use of the NASEM report, Redesigning the Process for Establishing the *Dietary Guidelines for Americans*, published in 2017.
  - The recommendations in the report identified three essential functions currently conducted by the Dietary Guidelines Advisory Committee (DGAC).
  - Examination of those functions illustrates points for integration.



#### PROPOSED PROCESS

	DGA Cycle (months)				
	PROCESS REDESIGN MODEL				
	<b>Year 1</b> 0-6 6-12	Year 2 12-18 18-24	<b>Year 3</b> 24-30 30-36	<b>Year 4</b> 36-42 42-48	<b>Year 5</b> 48-54 54-60
	,	(release DGPCG rep	oort) (rele	ase DGSAC report) –	(release DGA) 🔿
Strategic planning>	DGPCG	Ongoing surveille	ance	Selection	DGPCG
	Subcommittees (as needed)			Selection	Subcommittees
Analysis>	Federal staff and to support all ty	d TEPs as needed pes of analyses			Selection
Synthesis/interpretation $\longrightarrow$		Selection	DGSAC		
Federal review/update>		_			USDA/HHS update <i>DGA</i>

# **Strategic Planning** (Dietary Guidelines Planning and Continuity Group or DGPCG)

- 1. "Provide the secretaries of USDA and HHS with planning support that assures alignment with long-term strategic objectives spanning multiple *DGA* cycles;
- 2. Identify and prioritize topics for the DGSAC to evaluate in subsequent *DGA* cycles; and
- 3. Oversee monitoring and surveillance for new evidence."



# Incorporating Sustainability into **Strategic Planning** phase

• Clearly delineate the **topics** to be addressed and how these topics relate to the **purpose** of the DGA.

PURPOSES AND AUDIENCES



- The purposes and audiences of the DGA needs to be clarified.
- Proposed purpose statement:

The purpose of the *DGA* is to provide science-based "nutritional and dietary information and guidelines for the general public" that form the basis for "any federal food, nutrition, or health program" (based on the National Nutrition Monitoring and Related Research Act)

- Proposed audience: general public
- Goals of the guidelines:
  - Promote dietary intake that helps improve health and reduce the risk of chronic disease.
  - Provide the federal government with a consistent approach for nutrition policy and messaging.

Strategic Planning (Dietary Guidelines Planning and Continuity Group or DGPCG)

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#### TOPIC IDENTIFICATION

- Preventable burden of the risk factor or disease
- o Public health (e.g., morbidity and mortality)
- o Economic burden

- Importance to
- o General population
- Subpopulations with disparate impact from disease burden
- Relevance to diet, nutrition, and health

#### TOPIC SELECTION

- Represent undesirable dietary trends or gaps in food policy that need to be addressed
- Clarity and specificity are desired or have been inadequately covered previously (e.g., subpopulations, newly identified diet-related chronic diseases)
- Addresses health inequities or reduces disparities

- Sufficient amount of new knowledge has been generated that allows for creation of evidence statements or changes prior thinking
- Could be viewed as controversial as a result of differences in valuation of health outcomes

#### TOPIC PRIORITIZATION

Criteria from topic selection column, plus:

- Public health urgency, as appropriate for the DGA
- Consideration of cost-effectiveness
   studies

# Criteria discussed in the report for topic selection



 Availability of evidence-based interventions

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- Preventable burden of the risk factor or disease
- Importance to populations/subpopulations
- Relevance to diet, nutrition, and health

- Address undesirable trends
- Need for clarity and specificity
- Address health inequities/disparities
- Sufficient new knowledge
- Controversial

#### TOPIC PRIORITIZATION

Criteria from topic selection column, plus:

- Public health urgency, as appropriate for the DGA
- Consideration of cost-effectiveness studies

 Availability of evidence-based interventions

- Public health urgency
- Evidence-based interventions available
- Cost-effectiveness studies



# Incorporating Sustainability into **Strategic Planning** phase

- Clearly delineate the **topics** to be addressed and how these topics relate to the **purpose** of the DGA.
- Challenges/Opportunities:
  - What are the objectives for including sustainability
    - Justifying the dietary recommendations?
    - Consideration of the environmental impacts due to dietary shifts?
    - Are the recommendations feasible given current economic and agricultural capacity?
  - How is sustainability related to the purpose of the DGA?
  - Incorporating relevant expertise into strategic planning process through committee membership or subcommittees.

Analysis step: Types of evidence used in the Dietary Guidelines for Americans

- Original systematic reviews with support from USDA's Nutrition Evidence Library (NEL);
- Existing systematic reviews, meta-analyses, and reports;
- Descriptive data analyses (e.g., intakes of foods and nutrients); and
- Food pattern modeling analyses.



# Analysis (Technical Expert Panels or TEPs)

- Provide content and methodological consultation (i.e. domain experts well versed in specific research method being considered)
  - Involved in conducting systematic reviews, e.g.
    - Operationalize the research questions to be addressed
    - Recommend eligibility criteria for literature review
    - Clarify systematic review questions (populations, intervention, comparison, and outcomes)
  - Assist with technical review on specialized topics
  - Supplement expertise for food pattern modeling and descriptive data analysis.



## Integrating sustainability into Analysis phase

- What are the topics and research questions on sustainability that require content and methodological consultation during evaluation of the evidence?
- Challenges/Opportunities:
  - Define the topics and research questions that can be addressed with systematic reviews.
  - Identify the descriptive data analysis that is most relevant.
  - Consider use of food pattern modeling in relation to sustainability
  - Incorporate domain experts into the Technical Expert Panels

Synthesis and Interpretation (Dietary Guidelines Scientific Advisory Committee or DGSAC)

- Synthesis, Interpretation and Integration of data and evidence
  - Synthesis: Combining data from various sources
  - Interpretation: subjective process of building on synthesis results to develop DGSAC's conclusions about a single study, multiple studies, or systematic reviews.
  - Integration: combining the results of systematic reviews, food pattern modeling, descriptive data analysis, and other types of evidence to develop conclusions on the total body of evidence.
- Identify any needs for new analysis, topics where more evidence is needed, suggest topics for future DGA cycles
- Develop research recommendations
- Deliver a DGSAC scientific report to the Secretaries of HHS and USDA as the scientific foundation for the DGA Policy report



# Integration of Sustainability into the Synthesis and Interpretation phase

- DGSAC would include experts who can provide relevant knowledge and context for reviewing the evidence on the topics identified as relevant for consideration in the DGA.
  - Note the report refers to an earlier report on the Selection Process for DGAC member for recommendations on criteria for selection).
- Challenges/Opportunities:
  - The process to nominate and select DGSAC members should specifically identify areas of expertise related to sustainability that will be considered in the specific DGA cycle.

### Integration of Sustainability into the Dietary Guidelines for Americans

Phase	Opportunities
Strategic Planning	<ul> <li>Clarify the role of sustainability in the purpose of the DGA;</li> <li>Identify the topics and objectives related to sustainability that are relevant to the DGA;</li> <li>Develop a long term plan for addressing sustainability across the DGA cycles.</li> </ul>
Analysis	<ul> <li>Involve experts in sustainability to define the research questions and parameters for systematic reviews;</li> <li>Use technical experts to identify the relevant data sources;</li> <li>Rethink approaches to dietary patterns to incorporate sustainability</li> </ul>
Synthesis and Interpretation	<ul> <li>Identify topics related to sustainability so that relevant expertise during the DGSAC nomination process can be identified</li> <li>In the report to the Secretaries, develop conclusions on the topics identified and identify research needs, evidence needs, and potential future topics related to sustainability as appropriate.</li> </ul>
Federal review and update	Incorporate conclusions into the DGA Policy Report.

## Main question-Take Home Message

- How can sustainability be integrated into the Dietary Guidelines for Americans (DGA)?
  - Clarify the relationship between sustainability and the purpose of the DGA
  - Re-examine the resources for the three functions (strategic planning, analysis, synthesis and interpretation) of the DGAC to enable sustainability to be addressed
  - Consider the emerging importance of systems approaches



- "The behavior of a system cannot be known just by knowing the elements of which the system is made." Donella H. Meadows *Thinking in Systems*
- Recommendation 7: The secretaries of USDA and HHS should commission research and evaluate strategies to develop and implement systems approaches into the *DGA*. The selected strategies should then begin to be used to integrate systems mapping and modeling into the *DGA* process.