

2020 Dietary Guidelines for Infants and Children- Opportunities and Challenges

Sylvia P. Poulos, PhD, RD, LD, CSSD



INFANT NUTRITION
COUNCIL OF AMERICA

The Infant Nutrition Council of America (INCA) is an association of manufacturers and marketers of formulated nutrition products for infants, young children and adults.

INCA members are:

Abbott Nutrition

Mead Johnson Nutrition

Nestle Infant Nutrition

Perrigo Nutritional



INFANT NUTRITION
COUNCIL OF AMERICA

Outline

- Overview of the Dietary Guidelines for Americans (DGA)
- Expansion of 2020 Dietary Guidelines to include infants and children
- B-24 Project Outline
- Key considerations and challenges for successful implementation

DGA- Quick Overview

- **Purpose** - Inform the development of Federal food, nutrition, and health policies and programs.
- **Primary audiences** - Policymakers and nutrition/health professionals.
- **Impact** - Serve as the foundation for federal nutrition education and US Department of Agriculture (USDA) and Department of Health and Human Services (HHS) food programs including:
 - National School Lunch Program and School Breakfast Program
 - Special Supplemental Nutrition Program for Women, Infants and Children (WIC)

How are the DGA Developed?

HHS and USDA collaborate during a 3-stage process to develop new or revise existing DGA every 5 years.

Stage 1: External Advisory Committee develops an advisory report based on:

- Original systematic reviews (conducted by USDA NEL)
- Review of existing systematic reviews, meta-analyses, and reports by Federal agencies or leading scientific organizations
- Data analyses
- Food pattern modeling analyses
- **Public comments accepted on report**

How Are the DGAs Developed?

Stage 2: Development of DGA

- **HHS and USDA consider:**
 - Public comments on Advisory Committee's Report.
 - Peer-review of draft Guidelines by non-federal experts.
 - Federal agency review to determine impact
- **USDA and HHS agency review for program-specific policy implications**

Stage 3: Federal programs apply and promote the DGA.

Expansion of the DGA to Infants and Young Children

- Existing DGA do not include infants and children from birth to 24 months (B-24).
- Beginning in 2020, DGAs will expand to include:
 - Infants and toddlers (from birth to age 2);
 - Additional guidance for pregnant women.
- Mandated by Congress in the Agricultural Act of 2014 (Farm Bill).

B-24 Dietary Guidelines

Rationale

- Child's first 1,000 days of life- prenatal through 24 months of age:
 - Critical window of time for human growth and development
 - Lays the groundwork for lifelong health
 - Nutrition may have the most profound impact during this time

B-24 Guidelines Development: Proposed Timeline

Phase I (2012-2013)



- Scientific experts and government policy and program leaders identify topics, systematic review questions, and research and data needs.

Phase II (2014-2017)



- Federal Expert Group prioritizes questions and oversees review of evidence.
- USDA's Nutrition Evidence Library (NEL) collaborates with technical experts to conduct systematic reviews.

Phase III (2017-2018)



- Federal Expert Group develops Technical Report using NEL systematic reviews, existing reports, and data analyses.
- Technical Report is provided to the 2020 Dietary Guidelines Advisory Committee for consideration.

Completed

Phase 1: Age Specific Topics Identified by Working Groups

- **WG 1 (0–6 mo):** Infant formula and infant nutrition.
 - Including bioactive components of human milk and implications for composition of infant formulas.
- **WG 2 (6–12 mo):** Nutrition, metabolism, and growth
 - Particularly protein needs and long-term health.
- **WG 3 (12–24 mo):** Developmental aspects and measurement of physical activity.
- **WG 4 (caregivers: mothers and others):** The impact of maternal diet on human milk composition and neurologic development of infants.

Phase 1: Five Critical Cross-cutting Topics

- Prevention and treatment of [food allergies](#).
- Infant feeding on the development of the human [microbiome](#) and the implications on growth and development.
- Factors influencing the [ontogeny of taste](#) preferences, both in terms of the biology and implications for health.
- Diet and [developmental origins of obesity and long-term health outcomes](#).
- Factors affecting the [development of eating behavior](#).

Key Considerations

- **Aim:** Ensure the guidelines are **evidence-based** and **reflect the balance of science**.
- **Cross-cutting Communication Is Critical**
 - Engage experts for feedback on research framework; summary literature reviews, reports and interim recommendations.
 - Providing adequate time and opportunity for public comment.
- **Consider limitations of infant nutrition research**
 - Most breastfeeding and infant nutrition research is epidemiologically based, which limits the ability to draw strong conclusions.

Previous Data Analysis

2007: U.S. Agency for Healthcare Research and Quality [meta-analysis](#) of breastfeeding research.

- Much of the research was weak, studies were often small or failed to control for confounding variables.
- Results were frequently inconclusive.

2010: *Surgeon General's Call to Action on Breastfeeding*

- Need to standardize definitions of specific terms and measures used to classify the variables in breastfeeding research.
- Need to identify ethical study designs that would expand on observational studies.

Key Considerations

The ethical limitations associated with conducting randomized controlled trials on infant feeding should be recognized.

Additionally, observational studies cannot be used to determine causality.

- **Need to more broadly define “strong evidence”**
- **Must include results from a variety of studies**

Implementation & Promotion of the Dietary Guidelines

Need to ensure the value of the DGA:

- Implementation
- Communication

Ensuring the Value of the DGA- Implementation

Special Supplemental Nutrition Program for Women, Infants and Children (WIC).

- Two major types of nutrition risk are recognized for WIC eligibility:
 1. Medically-based risks
 2. Dietary risks
 - inappropriate nutrition/feeding practices
 - failure to meet the current Dietary Guidelines for Americans.
- The WIC target population are low-income, nutritionally at risk including 53 % of all infants born in the United States.

Ensuring the Value of the DGA- Communication

- Interpretation and use
 - specific research needed on the best methods of education.
- Address full spectrum of infant feeding and reflect cultural sensitivities.
- Based on “strong evidence”.

Current Dietary Guidelines Communication Programs



Food-A-Pedia >

Look up nutrition info for over 8,000 foods and compare foods side-by-side.



Food Tracker >

Track the foods you eat and compare to your nutrition targets.



Physical Activity Tracker >

Enter your activities and track progress as you move.



My Weight Manager >

Get weight management guidance; enter your weight and track progress over time.



My Top 5 Goals >

Choose up to 5 personal goals; sign up for tips and support from your virtual coach.



Groups >

SuperTracker groups allow groups of people to use SuperTracker together.



Challenges: How Will a Review of the Process Affect Future Guidelines?



TRENDING: Donald Trump | Hillary Clinton | Paul Ryan

SPONSORED: Volume to Value

NEWS

POLICY

REGULATION

BLOGS

BUSINESS

CAMPAIGN

OPINION

CON

HOME | REGULATION | HEALTHCARE

Omnibus calls for probe of Dietary Guidelines Advisory Committee

- Members of the National Academy of Medicine will review:
 - how the advisory committee's selection process can be improved,
 - how nutritional evidence is compiled,
 - how systematic reviews of longstanding dietary recommendations are conducted.

Sylvia Poulos
spoulos@kellencompany.com
678-303-2953

advocating for infant and young child nutrition



INFANT NUTRITION
COUNCIL OF AMERICA

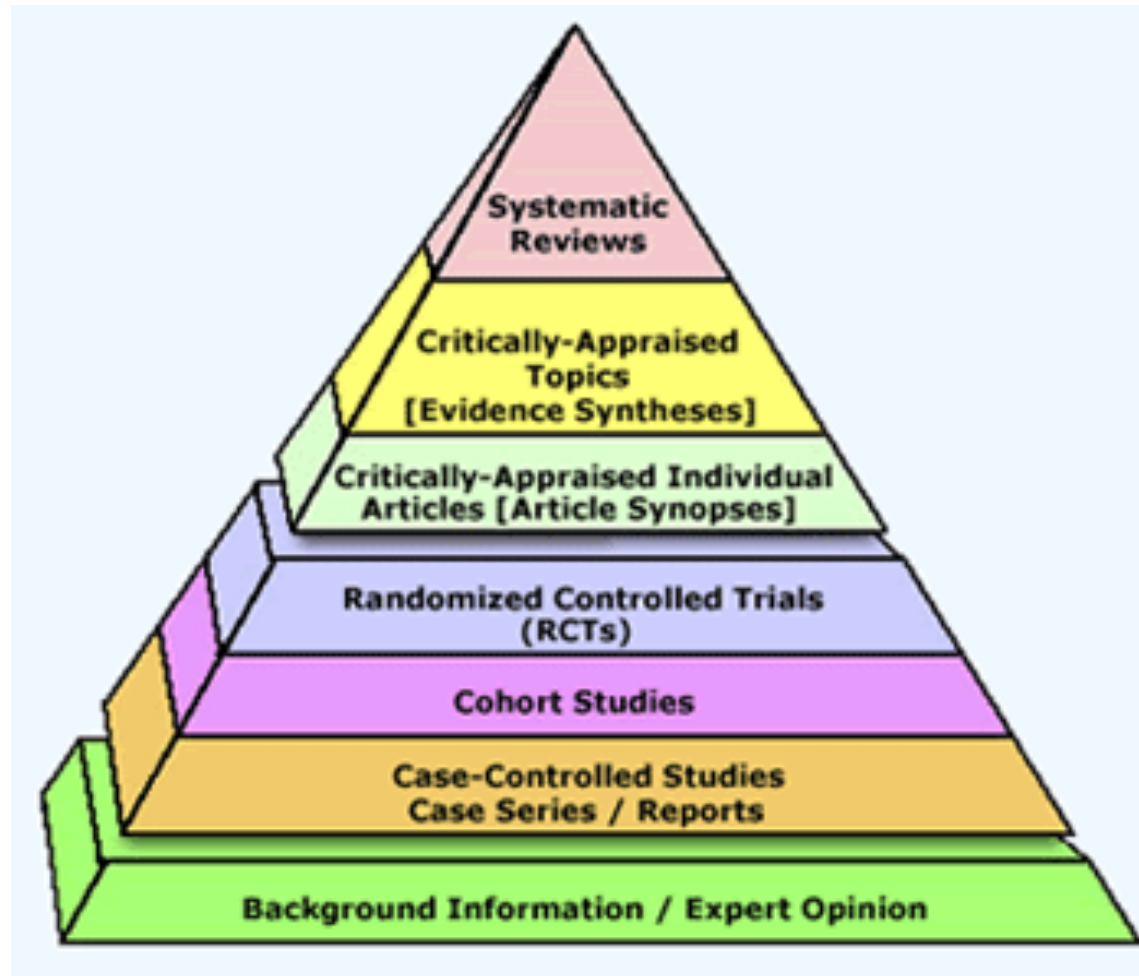
Questions



INFANT NUTRITION
COUNCIL OF AMERICA

Supporting slides

Hierarchy of Evidence Model- Critical Consideration for B-24



NEL Grading Rubric

Elements	Grade I: Strong	Grade II: Moderate	Grade III: Limited	Grade IV: Grade Not Assignable*
Risk of bias	Studies of strong design free from design flaws, bias and execution problems	Studies of strong design with minor methodological concerns OR only studies of weaker study design for question	Studies of weak design for answering the question OR inconclusive findings due to design flaws, bias or execution problems	Serious design flaws, bias, or execution problems across the body of evidence
Quantity •Number of studies •Number of subjects in studies	Several good quality studies; large number of subjects studied; studies have sufficiently large sample size for adequate statistical power	Several studies by independent investigators; doubts about adequacy of sample size to avoid Type I and Type II error	Limited number of studies; low number of subjects studied and/or inadequate sample size within studies	Available studies do not directly answer the question OR no studies available
Consistency of findings across studies	Findings generally consistent in direction and size of effect or degree of association and statistical significance with very minor exceptions	Some inconsistency in results across studies in direction and size of effect, degree of association or statistical significance	Unexplained inconsistency among results from different studies	Independent variables and/or outcomes are too disparate to synthesize OR single small study unconfirmed by other studies
Impact •Directness of studied outcomes •Magnitude of effect	Studied outcome relates directly to the question; size of effect is clinically meaningful	Some study outcomes relate to the question indirectly; some doubt about the clinical significance of the effect	Most studied outcomes relate to the question indirectly; size of effect is small or lacks clinical significance	Studied outcomes relate to the question indirectly; size of effect cannot be determined
Generalizability to the U.S. population of interest	Studied population, intervention and outcomes are free from serious doubts about generalizability	Minor doubts about generalizability	Serious doubts about generalizability due to narrow or different study population, intervention or outcomes studied	Highly unlikely that the studied population, intervention AND/OR outcomes are generalizable to the population of interest

NEL: Systematic Review

- Establish criteria based on the analytical framework
 - Evaluate study characteristics
 - Bias Assessment Tool (BAT) to assess risk of bias from selection, performance, detection, and attrition
 - Evidence Synthesis, Conclusion Statements, Grading Evidence, & Research Recommendations based on:
 - quality, quantity, consistency, impact, and generalizability.

Dietary Guidelines Implementation

- Legislative update from 2015 DGs
 - House (H.R. 3049) and Senate (S. 1800) versions of the “Farm Bill” include language related to the strength of evidence which should be required for consideration in developing the dietary guidelines.