What Can Industry Do to Promote and Ensure Healthy Aging?

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NUTRITION ACROSS THE LIFESPAN FOR HEALTHY AGING
FOOD FORUM WORKSHOP
Agenda

- Nutrient Gaps Across the Lifespan
- Role of Supplementation in a Healthy Diet
- Industry Efforts to Promote Healthy Aging
- Managing Consumer Expectations
- Summary
Nutrient Gaps Across the Lifespan
2015 DGAC Report

11 Shortfall Nutrients

Consumed in amounts below the Estimated Average Requirement (EAR) or Adequate Intake (AI) levels

- Vitamin A
- Vitamin D
- Vitamin E
- Vitamin C
- Folate
- Choline
- Calcium
- Magnesium
- Fiber
- Potassium
- Iron (premenopausal females)
2015 DGAC Report
Nutrients of Public Health Concern

- Calcium
- Vitamin D
- Fiber
- Potassium
- Iron*

Among the 11 shortfall nutrients, underconsumption of five has been linked to adverse health outcomes.

*young children, adolescent females and premenopausal adult females (2015 DGAC Report)
2015 DGAC Report
Shortfall Nutrients in Older Adults (>71 y/o)

- **Calcium**
  - 71% of men and 81% of women below the EAR

- **Vitamin D**
  - 93% of men and 97% of women below the EAR

- **Fiber**
  - 96% of men and 87% of women below the AI

- **Potassium**
  - 97% percent of both groups below the AI

- 2015 DGAC Scientific Report
- Intake from food alone
Prevalence of Deficiency by Biomarkers
NHANES 2003-2006

Prevalence of nutrient deficiencies hasn’t changed between 1999-2006

Source: CDC Second Nutrition Report
Global EPA + DHA Status
(% EPA + DHA of total fatty acids)

Stark et al. Prog Lipid Res 2016
Role of Supplemental Nutrients in a Healthy Diet
Why use Dietary Supplements?
NHANES 2007-2010

- To improve overall health
- To maintain health (stay healthy)
- To supplement the diet
- To prevent health problems
- To boost immunity, prevent colds
- For bone health

**Adult Source:** Bailey et al. 2013 JAMA 173:355
**Child Source:** Bailey et al. 2013 Ped Res 74: 737

Adult, n = 11,956
≤ 19 y, n=2,044
Supplementation & Nutrient Adequacy
NHANES 2003-2006

Percent of Population with Intake Below EAR
(Men and Women, age ≥2y)

- Vitamin D
- Vitamin E
- Folate
- Vitamin A
- Calcium
- Thiamin
- Vitamin C
- Iron
- Vitamin B6

Naturally Occurring
With Fortification
With Supplements

Fulgoni et al. 2011 J Nutr 141:1847
Supplementation & Adult Nutrient Intakes

NHANES 2003-2006 (n = 8,860)

Source: Bailey et al. 2012 JADA 112:657
Prenatal Multivitamins

- **Iron**
  - Nutrients of Public Health Concern for women capable of becoming pregnant

- **Folic Acid**
  - Women capable of becoming pregnant should consume 400 mcg of synthetic folic acid daily from fortified foods and/or supplements

- **Iodine**
  - American Thyroid Association, Endocrine Society, Teratology Society, American Association of Clinical Endocrinologists, and the International Council for the Control of Iodine Deficiency Disorders Global Network
  - Recommend that all pregnant US women take a prenatal vitamin that contains 150 mcg iodine daily in the form of potassium iodide

*2015 DGAC Report*
Other Nutrients to Consider Older Adults

Protein
- Not a shortfall nutrient for older adults
  - 6% of men older than 80 years and 11% of women protein intakes below the EAR
- Potential metabolic and health benefits of consuming protein > current recommendations
  - RDA: 64 g/day
  - Suggested Optimal Intake: 80 – 120 g/day

Vitamin B12
- Older adults consume adequate vitamin B12
  - A substantial proportion of these individuals have reduced ability to absorb dietary vitamin B12
- Crystalline form of the vitamin is well absorbed
  - ages > 50 years are encouraged to include foods fortified with B12 or take dietary supplements (2010 DGAC)
Supplements Support Nutrient Adequacy Older Adults (≥ 71 y/o)

- Calcium intake from food alone did not meet the EAR
  - 71% of men and 81% of females below the EAR

- Intakes improved with dietary supplements
  - 55% for men and 49% for women

*Scientific Report of the 2015 DGAC*
Supplements Support Nutrient Adequacy Older Adults (≥ 71 y/o)

- Vitamin D intake from food alone did not meet the EAR
  - 93% of males and 97% of females below the EAR
- Intakes improved with dietary supplements
  - The proportions below the EAR dropped to 52% for both males and females

*Scientific Report of the 2015 DGA
Promoting Healthy Aging
Role of Dietary Supplement Industry

- Significant proportions of population have inadequate nutrient intakes

- Nutrient supplementation is a safe, practical means to improve nutrient intake

- The role of industry in supporting healthy aging is to promote responsible use of dietary supplements, in combination with, a healthy diet as a way to ensure nutrient adequacy
  - Population
  - Individual
Industry Efforts to Promote Healthy Aging
Filling Nutrient Gaps
Population Approach

- Health Care Cost Savings Analysis
- SNAP: Supplemental Nutrition Assistance Program
- WIC: Special Supplemental Nutrition Program for Women, Infants, and Children
- Iodine in Prenatal MVM’s - CRN Guidelines
- Health Claims/QHC
  - Magnesium; Omega-3 fatty acids
- Global Humanitarian Nutrition
  - Vitamin Angels
  - Sight and Life
Filling Nutrient Gaps
Meeting Individual Recommendations

Dietary Supplements Formulated for Specific Populations

- Life Stage/Gender
  - prenatal, children, male/female – adult, senior
- Complementing diets
  - vegan, vegetarian, lactose-free, etc.
- Alternate delivery forms
  - powder, liquid, tablet, capsule, gel-cap, gummy
- Nutrition as prevention for at risk individuals
  - AREDS, bone health, fiber, etc.
Managing Consumer Expectations
Managing Consumers' Expectations

**Physical Health**
- Pain Relief
- Metabolic Health
  - Diabetes, CVD, etc.
- Skin/Beauty

**Mental Health**
- Attention/Focus
- Memory
- Cognitive Decline
- Dementia

**Consumer Education/Responsible Messaging:**
“No miracle pill” & “Talk to Your Doctor”
Supplement Advertising Review Program

- Support to efforts of federal regulators
- Protects consumer confidence
- Prioritize egregious ads that target vulnerable populations, including aging adults
Summary

- Evidence demonstrates inadequate nutrient intakes in the general population and in sensitive sub-populations.

- Dietary supplements, in combination with a healthy diet, are a safe and prudent way to fill nutrient gaps.
  - A lifetime of nutrient adequacy supports healthy aging.

- Industry Supports Healthy Aging
  - Advocate for supplemental nutrients to be included in Federal nutrition programs and policies.
  - Set science-based industry guidelines.
  - Make products to help individuals achieve nutrient adequacy.
Thank You

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