The DGA 2015-2020: What’s new, why, and how can we put them into practice?

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Disclosures

◊ Ms. Baker has no conflicts of interest to disclose

Outline

◊ Explore the 2015-2020 Dietary Guidelines for Americans (DGA), highlighting updates and key messages
◊ Compare the DGA to the 2013 AHA/ACC Guideline on Lifestyle Management
◊ Discuss teaching tips & tools throughout
Learning Objectives

1) Participants will be able to synthesize important differences between the 2010 and 2015 editions of the DGA and the evidence-based research driving these updates

2) Participants will be able to apply at least one teaching tool addressing a key DGA 2015 recommendation within their population

Keep in Mind:

- The DGA focus on disease prevention, not treatment
- AHA/ACC Guideline focuses on reducing risk factors (BP, lipids)
- Select appropriate guidance & strategies, then use clinical judgement to modify as needed to best serve clients/patients

Layout of the Guidelines

- Executive Summary
- Introduction
- Chapter 1: Key Elements of Healthy Eating Patterns
- Chapter 2: Shifts Needed to Align With Healthy Eating Patterns
- Chapter 3: Everyone Has a Role in Supporting Healthy Eating Patterns
- Appendixes
Executive Summary

Review of the DGA Process

The 2015 Dietary Guidelines Advisory Committee

Public

Federal Agency

Comments:

America’s Health Report Card

- ~50% of individuals in the U.S. have ≥1 preventable, diet-related diseases
  - CVD, type 2 DM, overweight or obesity
- Small improvements, but still falling short in:
  - Healthy Eating Index scores
  - Physical activity scores

DGA 2015, pg. xi
How do the DGA Address Current Health Challenges?

- Strong focus on disease prevention
- Less emphasis on individual foods & nutrients, more focus on eating patterns
- Encourage regular physical activity

The Guidelines

1) “Follow a healthy eating pattern across the lifespan…”
2) “Focus on variety, nutrient density, and amount…”
3) “Limit calories from added sugars and saturated fats and reduce sodium intake…”
4) “Shift to healthier food and beverage choices…”
5) “Support healthy eating patterns for all…”

DGA 2015, pg. xii

Key Recommendations

- Consume a healthy eating pattern that accounts for all foods and beverages within an appropriate calorie level.
- A healthy eating pattern includes:
  - A variety of vegetables, fruits, especially whole fruits
  - Grains, at least half of which are whole grains
  - Fat-free or low-fat dairy and/or soy beverages
  - A variety of protein foods from lean animal & vegetable sources
  - Oils

DGA 2015, pg. xii
**Key Recommendations (cont.)**

- A healthy eating pattern limits:
  - **Added sugars**: <10% of total calories
  - **Saturated fats**: <10% of total calories
  - **Sodium**: <2,300 mg/day
  - **Alcohol**: If consumed, do so in moderation:
    - ≤ 1 drink/day for women, ≤ 2 drinks/day for men

**DGA 2015, pg. xiii**

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**Key Recommendations for Physical Activity**

- A healthy lifestyle also includes meeting the Physical Activity Guidelines for Americans

- **Adults:**
  - ≥150 min. moderate-intensity PA weekly
  - ≥ 2 days/week strengthening activities

- **Youth ages 6 – 17 years old:**
  - ≥ 60 minutes/day
  - Aerobic, muscle- & bone-strengthening

**DGA 2015, pg. 16**

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**Weight Management is Part of a Healthy Lifestyle**

- **Overweight adults:**
  - Prevent wt. gain, (encourage wt. loss if CVD risk factors present)

- **Obese adults:**
  - Prevent wt. gain or encourage wt. loss, (esp. w/ CVD risk factors)

- **Obese adults ≥65 y.o. w/CVD risk factors**
  - Encourage wt. loss

**DGA 2015, pg. 20**
Energy Intake for Weight Loss

- Wt. loss of 1 – 1 ½ lbs./wk. recommended
- Goal: 500 – 750 kcal/day deficit
- For women: ≈ 1200 – 1500 kcal/day
- For men: ≈ 1500 – 1800 kcal/day

Moving Beyond Weight Loss to Emphasize Physical Activity & Health at Every Size

- Decrease stigma
- P.A. “vital sign”
- Promote healthy behaviors
- Strengthen patient-provider trust & rapport

CDC Essay, 2017

Introduction

Key Terms

Eating Pattern
Nutrient Dense
Variety
Shift

DGA 2015, pg. xiv
Healthy Eating Patterns

Strong Association with Risk of:

- CVD

Moderate Association with Risk of:

- Type 2 DM
- Some Cancers
- Overweight
- Obesity

Emerging Association with Risk of:

- Neurocognitive Disorders
- Congenital Abnormalities

Principles of Healthy Eating Patterns

- Represents totality of all foods – the sum is greater than the parts.
- Nutrient needs should be met primarily from foods - food first!
- Healthy eating patterns are adaptable
  - Socio-cultural, personal preferences

Nutrient Density Example: 8 oz. of Skim vs. Whole Milk

**Teaching Tip**

**SKIM MILK:**
- 83 calories, nutrient-dense

**WHOLE MILK:**
- 149 calories, including 8 g. fat, (4.5 SFA)
GUIDELINES 1, 2 AND 3:
Follow a healthy eating pattern across the lifespan.
Focus on variety, nutrient density, and amount.
Limit calories from added sugars and saturated fats and reduce sodium intake.

Three Eating Patterns Offered
- DGAC goal: provide examples of a variety of science-based approaches to consuming a healthy diet
- Healthy U.S. Style, (similar to DASH); Vegetarian; and Mediterranean eating patterns were developed


Healthy U.S. Style
- Formerly “USDA Food Patterns”, similar to DASH diet
  - New name, same food group allocations
  - "Limit on Calories for Other Uses", (formerly "Maximum SoFAS Limit"), adjusted slightly
Healthy Mediterranean-Style Eating Pattern

- Fruits & seafood & dairy than Healthy U.S. Style Eating Pattern
- Developed based on eating patterns reported in studies demonstrating health benefits of a Mediterranean diet
- Nutrient content = Healthy U.S. Style; < calcium & vitamin D

DGA 2015, pg. 35-36, Appendix 4

Healthy Vegetarian-Style Eating Pattern

- Replaced DGA 2010 Lacto-Ovo Vegetarian Adaptation of the USDA Food Patterns
- Evidence-based (NHANES) vs. substitution-based
- ≥ legumes, soy products, nuts, seeds, and whole grains; no meats, poultry or seafood
- > calcium and dietary fiber; < vitamin D
- Adapt to vegan diet by substituting soy milk for dairy

DGA 2015, pg. 86, Appendix 5

Comparison of Eating Patterns at 2,000 Calorie Level

<table>
<thead>
<tr>
<th>Food Group</th>
<th>U.S.</th>
<th>Med-Style</th>
<th>Vegetarian</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vegetables (cup eq.)</td>
<td>2.5</td>
<td>2.5</td>
<td>2.5</td>
</tr>
<tr>
<td>Fruits (cup eq.)</td>
<td>2</td>
<td>2.5</td>
<td>2</td>
</tr>
<tr>
<td>Grains (oz. eq.)</td>
<td>6</td>
<td>6</td>
<td>6.5</td>
</tr>
<tr>
<td>Dairy (cup eq.)</td>
<td>3</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Protein Foods (oz. eq.)</td>
<td>5.5</td>
<td>6.5</td>
<td>3.5</td>
</tr>
<tr>
<td>Seafood</td>
<td>8/wk.</td>
<td>15/wk.</td>
<td>--</td>
</tr>
<tr>
<td>Meats, Poultry, Eggs</td>
<td>26/wk.</td>
<td>26/wk.</td>
<td>3/wk. (eggs)</td>
</tr>
<tr>
<td>Nuts &amp; Seeds; Soy</td>
<td>5/wk.</td>
<td>5/wk.</td>
<td>15 (7+8)/wk.</td>
</tr>
<tr>
<td>Legumes</td>
<td>n/a*</td>
<td>n/a*</td>
<td>6/wk.</td>
</tr>
<tr>
<td>Oils (g)</td>
<td>27</td>
<td>27</td>
<td>27</td>
</tr>
<tr>
<td>Limit on Calories for Other Uses</td>
<td>270 (14%)</td>
<td>260 (13%)</td>
<td>290 (15%)</td>
</tr>
</tbody>
</table>

* 1 ½ c. eq./wk. incl. in vegetables

DGA 2015, pgs. 79 - 88
AHA/ACC Lifestyle Guidelines for BP and Lipid-Lowering

- A dietary pattern rich in:
  - Vegetables
  - Fruits
  - Whole grains
  - Low-fat dairy
  - Poultry
  - Fish
  - Legumes
  - Non-tropical vegetable oils
  - Nuts

- And limiting:
  - Sweets
  - Sugar-sweetened beverages
  - Red meats

- Adapt for energy needs, preferences & nutr. therapy
- Examples: USDA Food Pattern (i.e. Healthy U.S.), DASH Diet, AHA Diet

JAAC. 2014;63(25), pg. 2969-72

Dietary Approaches to Stop Hypertension (DASH)

- Shown to reduce CVD risk factors:
  - BP and LDL-cholesterol
- Rich in: vegetables, fruits, low-fat dairy, whole grains, poultry, fish, beans, & nuts
  - High in: potassium, calcium, magnesium, dietary fiber, protein
- Limits: Sweets, sugar-sweetened beverages & red meats
- Low in: saturated fats, sodium
- Resources available at: www.nhlbi.nih.gov/health/health-topics/topics/dash

DGA 2015, pg. 33

What Counts as Whole Grain?

- "A food is a 100-percent whole-grain food if the only grains it contains are whole grains. One ounce-equivalent of whole grains has 16 g. of whole grains."
- Hint: look for a carb to fiber ratio of 10:1

Teaching Tip

DGA 2015, pg. 22; Harvard Health Blog, January 14, 2013, "The trick to recognizing a good whole grain"
**“Limits on Calories for Other Uses”**

- Added sugars, added refined starches
- Solid fats
- Alcohol (if consumed)
- Note: In the eating patterns, these components, combined, may account for:
  - <10% of total Calories for 1200-1800 kcal
  - >10% of total Calories for >1800 kcal

*DGA 2015, pg. 28 & 31*

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**Added Sugars & Refined Starches**

- **Goal** <10% total calories from added sugar
- Note: most healthy eating patterns of 1,200 – 1,800 calories cannot accommodate 10% Cal. total from "empty calories"
- Currently, added sugars alone contribute ~270 calories/day, or >13% of total calorie intake
- Make at least ½ of all grains whole grains

*DGA 2015, pg. 28 & 31*

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**Saturated Fats (SFA)**

- **Goal** <10% of total calories (DGA 2015)
  - Compare to goal of 5 – 6% of total calories (AHA/ACC 2013)
  - Current average intake: 11%
  - Only 29% of individuals meet the rec. of <10% SFA
- Replace w/PUFAs & MUFAs to total & LDL-C & risk of CVD
- Teaching tip: Challenge participants to think about lower SFA choices they can shift to within each food group

*DGA 2015, pgs. 31-32 & 55-56; JAAC. 2014;63(25), pg. 2966*
Trans Fats

- Limit intake to “as low as possible”
- Example sources: partially hydrogenated oils found in stick margarines, snack foods, prepared desserts, etc.
- Legislation to remove trans fats from foods:
  - No longer generally recognized as safe (GRAS);
  - Compliance required by June 18th, 2018

DGA 2015, pg. 32

Cholesterol

- DGA 2010 Key Recommendation to limit dietary cholesterol to ≤300 mg/day not included in DGA 2015
- Need more evidence of dose-response relationship b/w dietary and blood cholesterol
- Healthy U.S. Eating Pattern contains ~100-300 mg/day
  - Average U.S. intake: 270 mg/day
  - “…individuals should eat as little dietary cholesterol as possible while consuming a healthy eating pattern.”

DGA 2015, pg. 32 & 34

Cholesterol, (cont.)

- Body makes cholesterol – we don’t need to consume any from our diet
- Found only in animal foods
- Foods higher in dietary cholesterol are typically also higher in SFA
- Eggs & shellfish are high in cholesterol but relatively low in SFA – may include as part of a balanced eating pattern, within protein foods recs.
**Sodium**

- Goal <2,300 mg/day (age ≥14 yrs.), ≤2,400 per AHA/ACC
- 1,500 mg/day for those with prehypertension or HTN
- Linear dose-response relationship b/w sodium intake, BP
- Moderate evidence of association b/w sodium intake, CVD
- Average intake 3,440 mg/day
  - Adult males: 4,240 mg/day
  - Adult females: 2,980 mg/day

*DGA 2015, pg. 34, 58; JAAC. 2014;63(25), pg. 2966*

**Sodium (cont.)**

- Did you know? 2,300 mg = 1 tsp. salt
- Reducing sodium intake by ≥1,000 mg/day, even if target is not met, lowers BP
- Best option:
  - DASH diet + sodium reduction

**Caffeine**

- Recommend no more than 400 mg/day
- Example: Three to five, 8-oz. cups of coffee
- Beverages must disclose caffeine content – dietary supplements don’t have to!
- What populations might this be esp. important for?
Chapter 2: Shifts needed to align with healthy eating patterns

GUIDELINE 4: SHIFT TO HEALTHIER FOOD AND BEVERAGE CHOICES

Dietary Intakes Compared to Recommendations

- For males ages 14 – 70 protein intake from meat, poultry and eggs is too high
- Reduce intake of the above
- Shifts to replace meat/poultry, eggs with seafood and legumes for both men and women

Adapted from DGA 2015, pg. 50, 52
Beverages

- Beverages contribute to hydration, nutrients, but also ~20% of calories
- 35% are from sugar-sweetened beverages
- Think your drink!
- Water, fat free & 1% milk, 100% fruit & vegetable juices

DGA 2015, pg. 61

Food Sources of Added Sugars

Food Category

Sources of Added Sugars in the U.S. Population Ages 2 Years and Older (Figure 2-10)

DGA 2015, pg. 55

Be Sweet Smart

- Toss the table sugar
  - Cut back on the amount added to foods & drinks like cereal, pancakes, coffee or tea
- Swap out the soda
  - Buy sugar-free or low-cal drinks [<10 calories = "calorie free"]
  - Water is usually your best choice!
- Add fruit
  - Try fresh or dried fruit in your oatmeal instead of sugar
- Replace it completely
  - Enhance foods with spices like ginger, allspice, cinnamon or nutmeg

Teaching tips
Food Sources of Saturated Fats

Food Category Sources of Saturated Fats in the U.S. Population Ages 2 Years and Older (Figure 2-12)

Trim Back on Saturated Fats, Focus on Heart-Healthy Oils

- Say "yes" to:
  - Lean meats & plant proteins
  - Low fat dairy & alternatives
  - Cold water fish
  - Nuts & nut butters
  - Avocados
  - Liquid oils & spreads free of trans fat

Food Sources of Sodium

Food Category Sources of Sodium in the U.S. Population Ages 2 Years and Older (Figure 2-14)
Be Sodium Savvy

- Strategies:
  - Use the NFP to get informed & compare brands
  - Choose NSA, reduced sodium, or low-sodium foods
  - Choose fresh vs. processed meats & poultry
  - Season with herbs & spices
- Note: Only a small amount of sodium is naturally occurring or comes from the salt shaker – most is from processed & prepared foods

DGA 2015, pg. 58

Underconsumed Nutrients

- EAR or AI not met by many Americans for:
  - Potassium, dietary fiber, choline, magnesium, calcium, vitamins A, D, E & C; and iron (for females ages 19 – 50)
  - Nutrients in bold = “nutrients of public health concern”
- Recommendations: shift to eating more vegetables, fruits, whole grains and dairy products (Tip: see Appendixes 10 – 13 for food sources)

DGA 2015, pg. 60

Food Away from Home

- 67% of calories are purchased at a store & eaten at home
- 33% are eaten away from home as of 2009 – 2010 (from 18% in 1977-1978)

DGA 2015, pgs. 50, 52
Chapter 3: Everyone has a role in supporting healthy eating patterns

GUIDELINE 5: SUPPORT HEALTHY EATING PATTERNS FOR ALL.

Over-Arching Goals

- Aim to make healthy choices easy, accessible, affordable & normative at home, school, work & community
- Use multi-component and multi-level approaches to effect change

DGA 2015, pg. 64

S.E.M. and Health Outcomes

DGA 2015, pg. 64 & 65
MyPlate Teaching Tools & Tips

- MyWins
- SuperTracker
- Daily Checklist
- Don’t reinvent the wheel...
- Get creative, involve family & make it fun!

DGA 2015, pg. 69; www.choosemyplate.gov

DGA 2015 Tools & Resources

- Available at:
  - https://health.gov/dietaryguidelines/2015/resources.asp
  - Handouts, teaching ideas, graphics & PPT slides

Looking Ahead

- The DGA 2020 – 2025 should address:
  - Guidance for pregnant women
  - More information at: https://www.cnpp.usda.gov/birthto24months
Now You Know!

- Key differences between 2010 and 2015 DGA.
- Teaching tools and resources to use with your clients & patients.
- Differences between the DGA 2015 and 2013 AHA/ACC Guidelines - to individualize application for your populations.

References


Thank you for attending!

Questions?