


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

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HEALTH EDUCATORS' INSTITUTE CONFERENCE 2017



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**Disclosures**

- ❖ Ms. Baker has no conflicts of interest to disclose

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**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

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### 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

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### 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

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### 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

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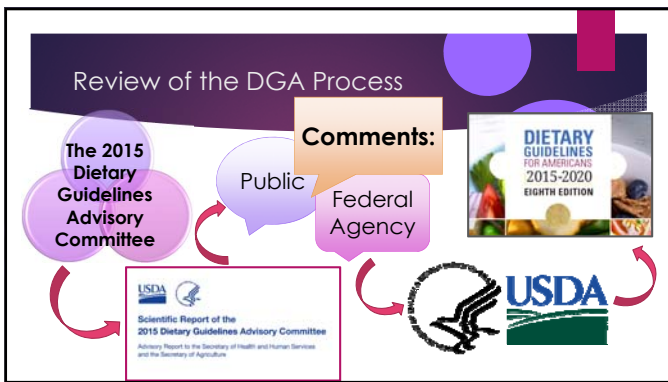
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America's Health Report Card

- ❖ ~50% of individuals in the U.S. have  $\geq 1$  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

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### 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

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### 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

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### 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. xiii

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**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*

**Food for Thought:**  
 For a 2,000 calorie diet, 200 calories of added sugar is ≈50 g. – or just one, 16-oz. soda

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

*DGA 2015, pg. 20*

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**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

DGA 2015, pg. 20; Dollar E. et al., Prev Chronic Dis 2017;14:170006.

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Introduction

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**Key Terms**

- Eating Pattern
- Nutrient Dense
- Variety
- Shift*

DGA 2015, pg. xiv

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### 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

DGA 2015, pg. 17

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### 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

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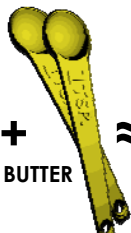
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### Nutrient Density Example: 8 oz. of Skim vs. Whole Milk

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

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**BUTTER**

≈

**WHOLE MILK:**  
149 calories,  
including 8 g.  
fat, (4.5 SFA)

*Teaching Tip*

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Chapter 1: Key Elements of Healthy Eating Patterns

**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.

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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

<https://health.gov/dietaryguidelines/2015-scientific-report/15-appendix-E3/e3-7.asp>

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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

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### Healthy Mediterranean-Style

- ❖ ↑ 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

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### 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

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

\* 1 1/2 c. eq./wk. incl. in vegetables

DGA 2015, pgs. 79-88

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### 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

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### 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](http://www.nhlbi.nih.gov/health/health-topics/topics/dash)

DGA 2015, pg. 33

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### 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"

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**"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
  - ❖ >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*

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### 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 18<sup>th</sup>, 2018

*DGA 2015, pg. 32*

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### 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*

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### 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.

Teaching Tips

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**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*

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**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




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**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?

*DGA 2015, pg. 33*

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Chapter 2:  
Shifts needed to align with healthy eating patterns

**GUIDELINE 4:**  
*SHIFT TO HEALTHIER FOOD AND BEVERAGE CHOICES*

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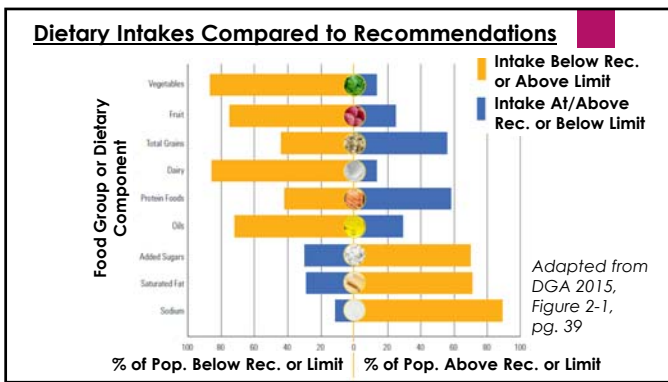
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**Protein Foods Intake**

- ❖ 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

DGA 2015, pg. 50, 52

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## 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

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## 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

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## Be Sweet Smart

Teaching Tips

- ❖ **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

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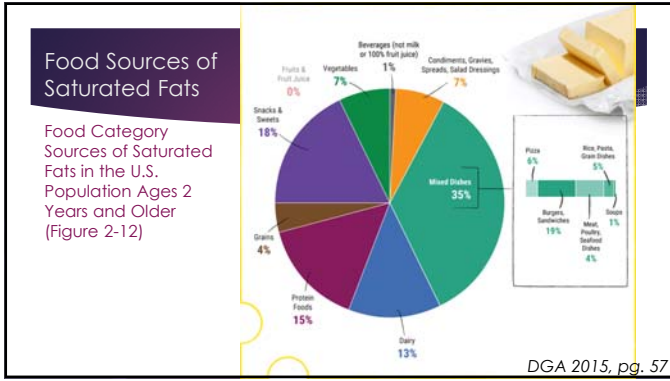
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### Trim Back on Saturated Fats, Focus on Heart-Healthy Oils

- ❖ 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

Teaching Tips

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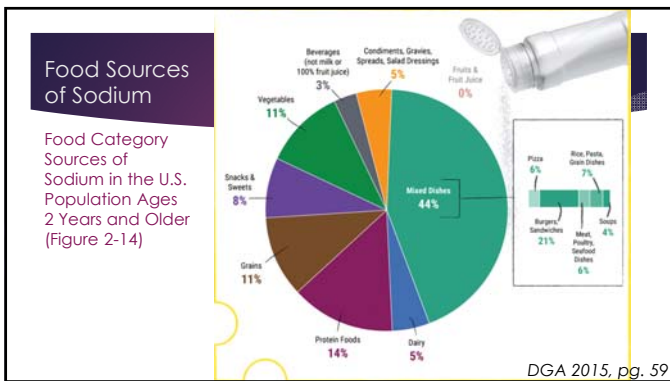
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### Be Sodium Savvy

- ❖ 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

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### 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

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### 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

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Chapter 3:  
Everyone has a  
role in supporting  
healthy eating  
patterns

**GUIDELINE 5:**  
*SUPPORT HEALTHY  
EATING PATTERNS  
FOR ALL.*

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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

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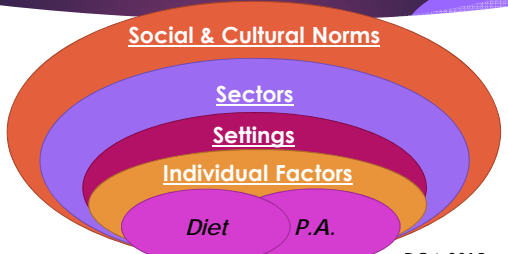
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S.E.M. and Health Outcomes



Social & Cultural Norms

Sectors

Settings

Individual Factors

*Diet*   *P.A.*

DGA 2015, pg. 64 & 65

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### 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](http://www.choosemyplate.gov)

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### DGA 2015 Tools & Resources

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



High Calorie Snacks → Nutrient-Dense Snacks

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### Looking Ahead

- ❖ The DGA 2020 – 2025 should address:
  - ❖ Guidance for infants & toddlers, birth – 24 mos.
  - ❖ Guidance for pregnant women
  - ❖ More information at: <https://www.cnpp.usda.gov/birthto24months>



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## 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.

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## References

- 1) U.S. Department of Health and Human Services and U.S. Department of Agriculture. *2015 – 2020 Dietary Guidelines for Americans*. 8<sup>th</sup> Edition. December 2015. Available at: <http://health.gov/dietaryguidelines/2015/guidelines/>.
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**Thank you for attending!**  
Questions?

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