The Dietary Guidelines for Americans 2015-2020
What Are They, How Have They Changed, and How Can You Use Them in Practice?
Welcome

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Introduction

• Managing a chronic disease like diabetes requires multiple decisions each day on a range of complex processes.
• There are no vacations, no time-outs.
• What can I eat? This is the most common question from people with diabetes.
• Nutrition plays an important role in controlling or preventing diabetes.
Learning Objectives

• Explain the purpose of the Dietary Guidelines for Americans (DGA), how they have changed, and how they should be used in diabetes education.

• Describe the impact that changes to the dietary guidelines can have on the broader public health nutrition world.

• Name the tools to apply the recommendations in public health.

• Identify aspects of culture that can facilitate the use of the dietary guidelines.
The main theme of the *Dietary Guidelines 2015–2020* is:

A. Importance of eating patterns as a whole; combination of foods and drinks that people consume over time.

B. It’s comparison of how Americans are eating now against recommendations, providing data by age groups and sex.

C. Information about shifts (healthy substitutions in food choices) for achieving healthy eating patterns.

D. All of the above
Knowledge Check

The main theme of the Dietary Guidelines 2015-2020 is:

- Eating patterns, food and drinks: 5.8%
- Compare diets to recommendations: 1.2%
- Guidance on shifts and food choices: 7.9%
- All of the above: 85.1%
History

1917

A Week's Supply of Vegetables and Fruits For an Average Family

Choose Your Food Wisely

1. Vegetables and Fruits
2. Milk, Eggs, Fish, Meat, Cheese, Beans, Peas, Peanuts
3. Cereals—Corn Meal, Oatmeal, Rice, Bread, Etc.
4. Sugar, Syrups, Jelly, Honey, Etc.
5. Fats—Butter, Margarine, Cottonseed Oil, Olive Oil, Drippings, Suet.

You need some food from each group every day—don't skip any!

1943

A Day's Pattern for Good Eating from the "Basic 7"

Eat 2 or more fruits every day.
Eat 2 or more vegetables every day.

1956

Food for Fitness

A Daily Food Guide

1979

A Guide to Good Eating

Use Daily...
Knowledge Check

• What’s changed in the Dietary Guidelines 2015–2020?
  A. No longer have a quantitative requirement for dietary cholesterol
  B. Added sugar quantitative requirement
  C. Emphasis on food pattern rather than individual nutrients and specific food
  D. All of the above
  E. Nothing has changed
Knowledge Check

What's changed in the Dietary Guidelines 2015-2020?

- No quant req. f/dietary cholesterol: 2.0%
- Added sugar quant. requirement: 11.6%
- Food pattern vs. ind nutrients/food: 14.8%
- All of the above: 68.7%
- Nothing has changed: 2.9%
Today’s Presenters

Jennifer Seymour, PhD
Senior Policy Advisor
Division of Nutrition, Physical Activity, and Obesity
Centers for Disease Control and Prevention

Lorena Drago, MS, RD, CDN, CDE
Founder
Hispanic Foodways
Jennifer Seymour, PhD

DIETARY GUIDELINES FOR AMERICANS 2015-2020
Dietary Guidelines for Americans 2015-2020
What It Is, What It Is Not

• Provide evidence-based recommendations about the components of a healthy and nutritionally adequate diet
• Focus on disease prevention rather than disease treatment
• Inform Federal food, nutrition, and health policies and programs
Dietary Guidelines for Americans 2015-2020

Figure 1-3

1. Review the Science

First, an external Advisory Committee creates the Advisory Report and submits it to the Secretaries of HHS and USDA.

This report is informed by:

- Original systematic reviews
- Review of existing systematic reviews, meta-analyses, and reports by Federal agencies or leading scientific organizations
- Data analyses
- Food pattern modeling analyses

2. Develop the Dietary Guidelines

Using the previous edition of the Dietary Guidelines, the Advisory Report, and consideration of public and Federal agency comments, HHS and USDA develop a new edition of the Dietary Guidelines. The 2015-2020 Dietary Guidelines for Americans includes:

- 5 Guidelines
- Key Recommendations that support the Guidelines

Science-based nutrition guidance for both professionals and organizations working to improve our nation’s health.

3. Implement the Dietary Guidelines

Federal programs apply the Dietary Guidelines to meet the needs of Americans through food, nutrition, and health policies and programs—and in nutrition education materials for the public.
Dietary Guidelines for Americans 2015-2020

Contents

• 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
The Guidelines

1. **Follow a healthy eating pattern across the lifespan.** All food and beverage choices matter. Choose a healthy eating pattern at an appropriate calorie level to help achieve and maintain a healthy body weight, support nutrient adequacy, and reduce the risk of chronic disease.

2. **Focus on variety, nutrient density, and amount.** To meet nutrient needs within calorie limits, choose a variety of nutrient-dense foods across and within all food groups in recommended amounts.

3. **Limit calories from added sugars and saturated fats and reduce sodium intake.** Consume an eating pattern low in added sugars, saturated fats, and sodium. Cut back on foods and beverages higher in these components to amounts that fit within healthy eating patterns.
4. **Shift to healthier food and beverage choices.** Choose nutrient-dense foods and beverages across and within all food groups in place of less healthy choices. Consider cultural and personal preferences to make these shifts easier to accomplish and maintain.

5. **Support healthy eating patterns for all.** Everyone has a role in helping to create and support healthy eating patterns in multiple settings nationwide, from home to school to work to communities.
CHAPTER 1

Key Elements of Healthy Eating Patterns
Key Elements of Healthy Eating Patterns: 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 from all of the subgroups—dark green, red and orange, legumes (beans and peas), starchy, and other
  − Fruits, especially whole fruits
  − Grains, at least half of which are whole grains
  − Fat-free or low-fat dairy, including milk, yogurt, cheese, and/or fortified soy beverages
  − A variety of protein foods, including seafood, lean meats and poultry, eggs, legumes (beans and peas), and nuts, seeds, and soy products
  − Oils

• A healthy eating pattern limits:
  − Saturated fats and trans fats, added sugars, and sodium
Key recommendations that are quantitative are provided for several components of the diet that should be limited. These components are of particular public health concern in the United States, and the specified limits can help individuals achieve healthy eating patterns within calorie limits:

- Consume less than 10 percent of calories per day from added sugars
- Consume less than 10 percent of calories per day from saturated fats
- Consume less than 2,300 milligrams (mg) per day of sodium
- If alcohol is consumed, it should be consumed in moderation—up to one drink per day for women and up to two drinks per day for men—and only by adults of legal drinking age
- Meet the *Physical Activity Guidelines for Americans*
Principles of Healthy Eating Patterns

• An eating pattern represents the totality of all foods and beverages consumed
  – It is more than the sum of its parts; the totality of what individuals habitually eat and drink act synergistically in relation to health.

• Nutritional needs should be met primarily from foods rather than with supplements
  – Individuals should aim to meet their nutrient needs through healthy eating patterns that include foods in nutrient-dense forms.

• Healthy eating patterns are adaptable
  – Any eating pattern can be tailored to the individual’s socio-cultural and personal preferences.
The Science Behind Healthy Eating Patterns

- **Systematic reviews of scientific research**
  - To examine relationships between the overall eating pattern, including its constituent foods, beverages, and nutrients, and health outcomes.

- **Food pattern modeling**
  - To assess how well various combinations and amounts of foods from all food groups would result in healthy eating patterns that meet nutrient needs and accommodate limits, such as those for saturated fats, added sugars, and sodium.

- **Analyses of current intakes**
  - To identify areas of potential public health concern.
Inside Healthy Eating Patterns: Food Groups — Examples of Content

Vegetables

• Include a variety of vegetables from all five subgroups—dark green, red and orange, legumes (beans and peas), starchy, and other.
• Include all fresh, frozen, canned, and dried options in cooked or raw forms, including vegetable juices.
• Vegetables should be consumed in a nutrient-dense form, with limited additions such as salt, butter, or creamy sauces.

Dairy

• Include fat-free and low-fat (1%) dairy, including milk, yogurt, cheese, or fortified soy beverages (soymilk).
• Fat-free or low-fat milk and yogurt, in comparison to cheese, contain less saturated fats and sodium and more potassium, vitamin A, and vitamin D.
Inside Healthy Eating Patterns:
Other Components

“In addition to the food groups, it is important to consider other food components when making food and beverage choices.”

• Added sugars
• Saturated fats
• Trans fats
• Cholesterol
• Sodium
• Alcohol
• Caffeine
Inside Healthy Eating Patterns: Other Components — Examples of Content

**Cholesterol**
- Individuals should eat as little dietary cholesterol as possible while consuming a healthy eating pattern.
- The Healthy U.S.-Style Eating Pattern contains approximately 100 to 300 mg of cholesterol across the 12 calorie levels.

**Caffeine**
- Most caffeine evidence focuses on coffee.
- Three to five 8-oz cups/day can be included in healthy eating patterns.
- Individuals who do not consume caffeinated beverages are not encouraged to add them.
- In addition, caffeinated beverages may contain added calories from cream, whole or 2% milk, creamer, and added sugars, which should be limited.
Healthy Eating Patterns: Detailed Information

Call-out boxes provide details on many topics:

- Healthy physical activity patterns
- Importance of calorie balance
- About legumes (beans and peas)
- How to make half of grains whole grains
- About seafood
- About meats and poultry
- Dietary fats—the basics
- Dietary Approaches to Stop Hypertension (DASH)
- Caffeine
Healthy Eating Patterns: Multiple Approaches

“There are many ways to consume a healthy eating pattern, and the evidence to support multiple approaches has expanded over time.”

• Examples of healthy eating patterns in the *Dietary Guidelines* include:
  – Healthy U.S.-Style Eating Pattern
  – Healthy Mediterranean-Style Eating Pattern
  – Healthy Vegetarian Eating Pattern
CHAPTER 2
Shifts Needed To Align With Healthy Eating Patterns
Current Eating Patterns in the United States
% U.S. Population ≥1 yr Below, At, or Above Each Dietary Goal or Limit
(Fig 2-1)

Note: The center (0) line is the goal or limit. For most, those represented by the orange sections of the bars, shifting toward the center line will improve their eating pattern.

Data Source: What We Eat in America, NHANES 2007-2010 for average intakes by age-sex group. Healthy U.S.-Style Food Patterns, which vary based on age, sex, and activity level, for recommended intakes and limits.
Whole and Refined Grains: Intakes and Recommendations
Average Intakes Compared to Ranges of Recommendations and Limits (Figure 2-5)

Note: Recommended daily intake of whole grains is to be at least half of total grain consumption, and the limit for refined grains is to be no more than half of total grain consumption. The blue vertical bars on this graph represent one half of the total grain recommendations for each age-sex group, and therefore indicate recommendations for the minimum amounts to consume of whole grains or maximum amounts of refined grains. To meet recommendations, whole grain intake should be within or above the blue bars and refined grain intake within or below the bars.

Data Sources: What We Eat in America, NHANES 2007-2010 for average intakes by age-sex group. Healthy U.S.-Style Food Patterns, which vary based on age, sex, and activity level, for recommended intake ranges.
Seafood: Intakes and Recommendations

Average Weekly Intakes Compared to Ranges of Recommendations (Fig 2-6)

Data Sources:
What We Eat in America, NHANES 2007-2010 for average intakes by age-sex group. Healthy U.S.-Style Food Patterns, which vary based on age, sex, and activity level, for recommended intake ranges.
Shifts to Align with Healthy Eating Patterns: Examples

• Increasing **vegetables** in mixed dishes while decreasing the amounts of refined grains or meats high in saturated fat and/or sodium.

• Incorporating **seafood** in meals twice per week in place of meat, poultry, or eggs.

• Using vegetable **oil** in place of solid fats when cooking, and using oil-based dressings and spreads on foods instead of those made from solid fats.

• Choosing beverages with no **added sugars**, such as water.

• Using the Nutrition Facts label to compare **sodium** content of foods and choosing the product with less sodium.
Major Messages from Chapter 2

• The U.S. population, across almost every age and sex group, consumes eating patterns that are:
  – low in vegetables, fruits, whole grains, dairy, seafood, and oil
  – high in refined grains, added sugars, saturated fats, sodium, and
  – for some age-sex groups, high in the meats, poultry, and eggs subgroup.
• Young children and older Americans generally are closer to the recommendations than are adolescents and young adults.
Food Sources of Added Sugars
U.S. Population Ages 2 Years and Older (Figure 2-10)

Data Source: What We Eat in America (WWEIA) Food Category analyses for the 2015 Dietary Guidelines Advisory Committee. Estimates based on day 1 dietary recalls from WWEIA, NHANES 2009-2010.
Food Sources of Saturated Fats
U.S. Population Ages 2 Years and Older (Figure 2-12)

Data Source: What We Eat in America (WWEIA) Food Category analyses for the 2015 Dietary Guidelines Advisory Committee. Estimates based on day 1 dietary recalls from WWEIA, NHANES 2009-2010.
Food Sources of Sodium

Food Category Sources of Sodium in U.S. Population ≥2 Years (Figure 2-14)

- Mixed Dishes: 44%
- Beverages (not milk or 100% fruit juice): 3%
- Condiments, Gravies, Spreads, Salad Dressings: 5%
- Fruits & Fruit Juice: 0%
- Vegetables: 11%
- Snacks & Sweets: 8%
- Grains: 11%
- Protein Foods: 14%
- Dairy: 5%

Data Source: What We Eat in America (WWEIA) Food Category analyses for the 2015 Dietary Guidelines Advisory Committee. Estimates based on day 1 dietary recalls from WWEIA, NHANES 2009-2010.
CHAPTER 3
Everyone Has a Role in Supporting Healthy Eating Patterns
Creating and Supporting Healthy Choices (Figure 3-1)

**SOCIAL & CULTURAL NORMS & VALUES**
- Belief Systems
- Traditions
- Heritage
- Religion
- Priorities
- Lifestyle
- Body Image

**SECTORS**
- Government
- Education
- Health Care
- Transportation

**Organizations**
- Public Health
- Community
- Advocacy

**Businesses & Industries**
- Planning & Development
- Agriculture
- Food & Beverage
- Manufacturing
- Retail
- Entertainment
- Marketing
- Media

**SETTINGS**
- Homes
- Early Care & Education
- Schools
- Work sites
- Recreational Facilities
- Food Service & Retail Establishments
- Other Community Settings

**INDIVIDUAL FACTORS**
- Demographics
  - Age
  - Sex
  - Socioeconomic Status
  - Race/Ethnicity
  - Disability
- Other Personal Factors
  - Psychosocial
  - Knowledge & Skills
  - Gene-Environment Interactions
  - Food Preferences

Data Source: Adapted from:
Strategies To Align Settings With the Dietary Guidelines for Americans 2015-2020 (Figure 3-3)
Implementing the Guidelines through MyPlate (Fig. 3-2)

MyPlate, MyWins.
Find your healthy eating style and maintain it for a lifetime. This means:

- Make half your plate fruits & vegetables.
- Grains
  - Focus on whole grains.
- Protein
  - Vary your protein routine.
- Dairy
  - Move to low-fat or fat-free milk or yogurt.
- Limit
  - Drink and eat less sodium, saturated fat, and added sugars.

Everything you eat and drink over time matters. The right mix can help you be healthier in the future.

Start with small changes to make healthier choices you can enjoy.

Visit ChooseMyPlate.gov for more tips, tools, and information.
Nutrition Facts Label Update

Nutrition Facts
Serving Size 2/3 cup (55g)
Servings Per Container About 8

Amount Per Serving
Calories 230  Calories from Fat 72%

% Daily Value*
Total Fat 8g  12%
  Saturated Fat 1g  5%
  Trans Fat 0g
Cholesterol 0mg  0%
Sodium 160mg  7%
Total Carbohydrate 37g  12%
  Dietary Fiber 4g  16%
  Sugars 1g
Protein 3g

* Percent Daily Values are based on a 2,000 calorie diet.
Your daily value may be higher or lower depending on your calorie needs.

Nutrition Facts
Serving size 2/3 cup (55g)

Amount per serving
Calories 230

% Daily Value*
Total Fat 8g  10%
  Saturated Fat 1g  5%
  Trans Fat 0g
Cholesterol 0mg  0%
Sodium 160mg  7%
Total Carbohydrate 37g  13%
  Dietary Fiber 4g  14%
  Total Sugars 12g
    Includes 10g Added Sugars 20%
Protein 3g

* The % Daily Value (DV) tells you how much a nutrient in a serving of food contributes to a daily diet. 2,000 calories a day is used for general nutrition advice.
Knowledge Check

Do you know how the *Dietary Guidelines for Americans* are used?

A. To learn how to control diseases like diabetes
B. To inform policy makers and health professionals, not the general public
C. To teach health providers how to educate their patients
D. All of the above
E. None
Knowledge Check

Do you know how the Dietary Guidelines for Americans are used?

- Control diseases like diabetes: 3.3%
- Inform policymakers/health prof.: 14.4%
- Teach providers to educate patients: 6.7%
- All of the above: 70.2%
- None: 5.4%
Lorena Drago, MS, RD, CDN, CDE

ADA’S NUTRITION RECOMMENDATIONS AND PRACTICAL APPLICATIONS
ADA Nutrition Guidelines - 2016

• No "one-size-fits-all" eating approach.
• Chosen eating pattern should be designed to improve glucose, blood pressure, and lipids.
• Individualized nutrition therapy should be provided as needed, ideally by a registered dietitian.

Evidence is inconclusive for an ideal amount of carbohydrate intake for people with diabetes. Develop collaborative goals with the individual with diabetes. (C)

ADA evidence-grading system for “Standards of Medical Care in Diabetes”. A: Clear evidence from well-conducted, generalizable randomized controlled trials that are adequately powered. B: Supportive evidence from well-conducted cohort studies. C: Supportive evidence from poorly controlled or uncontrolled studies.
Carbohydrates

The amount of carbohydrates and available insulin may be the most important factor influencing glycemic response after eating and should be considered when developing the eating plan. (A)

ADA evidence-grading system for “Standards of Medical Care in Diabetes”. A: Clear evidence from well-conducted, generalizable randomized controlled trials that are adequately powered. B: Supportive evidence from well-conducted cohort studies. C: Supportive evidence from poorly controlled or uncontrolled studies.
Carbohydrates

- Monitoring carbohydrate intake, whether by carbohydrate counting or experience-based estimation remains a key strategy in achieving glycemic control. (B)
Carbohydrates

• For good health, carbohydrate intake from vegetables, fruits, whole grains, legumes, and dairy products should be advised over intake from other carbohydrate sources, especially those that contain added fats, sugars, or sodium. (B)

ADA evidence-grading system for “Standards of Medical Care in Diabetes”. A: Clear evidence from well-conducted, generalizable randomized controlled trials that are adequately powered. B: Supportive evidence from well-conducted cohort studies. C: Supportive evidence from poorly controlled or uncontrolled studies
Sucrose

• While substituting sucrose-containing foods for isocaloric amounts of other carbohydrates may have similar blood glucose effects, consumption should be minimized to avoid displacing nutrient-dense food choices. (A)

ADA evidence-grading system for “Standards of Medical Care in Diabetes”. A: Clear evidence from well-conducted, generalizable randomized controlled trials that are adequately powered. B: Supportive evidence from well-conducted cohort studies. C: Supportive evidence from poorly controlled or uncontrolled studies.
Fructose consumed as “free fructose” (i.e., naturally occurring in foods such as fruit) may result in better glycemic control compared with isocaloric intake of sucrose or starch (B).

Free fructose is not likely to have detrimental effects on triglycerides as long as intake is not excessive (>12% energy). (C)
Sucrose

• People with diabetes should limit or avoid intake of sugar sweetened beverages (from any caloric sweetener including high fructose corn syrup and sucrose) to reduce risk for weight gain and worsening of cardiometabolic risk profile. (B)

ADA evidence-grading system for “Standards of Medical Care in Diabetes”. A: Clear evidence from well-conducted, generalizable randomized controlled trials that are adequately powered. B: Supportive evidence from well-conducted cohort studies. C: Supportive evidence from poorly controlled or uncontrolled studies.
Fats

- Evidence is inconclusive for an ideal amount of total fat intake for people with diabetes; therefore, goals should be individualized (C); fat quality appears to be far more important than quantity. (B)
- The amount of dietary saturated fat, cholesterol, and trans fat recommended for people with diabetes is the same as that recommended for the general population. (C)

ADA evidence-grading system for “Standards of Medical Care in Diabetes”. B: Supportive evidence from well-conducted cohort studies. C: Supportive evidence from poorly controlled or uncontrolled studies.
Sodium

• The recommendation for the general population to reduce sodium to less than 2,300 mg/day is also appropriate for people with diabetes. (B)

ADA evidence-grading system for “Standards of Medical Care in Diabetes”. B: Supportive evidence from well-conducted cohort studies.
Eating Patterns

- **Mediterranean Style**
  - Includes abundant plant food (fruits, vegetables, breads, cereals, beans, nuts and seeds); minimally processed, seasonally fresh, and locally grown foods; fresh fruits, occasional desserts, olive oil; dairy products (mainly cheese and yogurt) consumed in low to moderate amounts; fewer than 4 eggs/week; small amounts of occasional red meat; and small/moderate amount of wine generally with meals.

- **Vegetarian and Vegan**
  - Diets devoid of all flesh foods and animal-derived products and vegetarian diets (diets devoid of all flesh foods but including egg [ovo] and/or dairy [lacto] products). High intakes of fruits, vegetables, whole grains, nuts, soy products, fiber, and phytochemicals.

- **Low Fat**
  - Emphasizes vegetables, fruits, starches (e.g. pasta, whole grains, starchy vegetables), lean protein, and low-fat dairy products. Total fat intake 30 percent of total energy intake and saturated fat intake, 10 percent.
Eating Patterns (cont.)

• **Low Carbohydrate (CHO)**
  - Focuses on eating foods higher in protein (meat, poultry, fish, shellfish, eggs, cheese, nuts and seeds), fats (oils, butter, olives, avocado), and vegetables low in carbohydrate (salad greens, cucumbers, broccoli).
  - The amount of CHO allowed varies with most plans allowing fruit (e.g., berries) and higher CHO vegetables; sugar-containing foods and grain products such as pasta, rice, and bread are generally avoided.
  - No consistent definition of “low” CHO. Definitions have ranged from very low-CHO diet (21–70g/day) to moderately low-CHO diet (30 to 40% of calories from CHO).

• **Dietary Approaches to Stop Hypertension (DASH)**
  - Emphasizes fruits, vegetables, and low-fat dairy products. Includes whole grains, poultry, fish, and nuts. Reduced in saturated fat, red meat, sweets, and sugar-containing beverages. Most effective DASH reduced in sodium.
Using the Guidelines in Practice
Translating Information into Practice
Use Risk Communication

Explain what is “at risk”
How high is the risk (Compare high to normal)
Show patient his/her risk factor
Provide treatment strategies
Include testimonials (Group-specific)
Impact of Diabetes on Cardiovascular Mortality

What is at Risk? Compare average risk to high risk

* Risk factors analyzed were smoking, dyslipidemia, and hypertension

* Risk factors analyzed were smoking, dyslipidemia, and hypertension

Diabetes Care 12: 573-579, 1989
Your Numbers

- **A1c** – less than 7 (around 150 mg/dL)  
  - Yours – 9 (around 210)
- **Blood Pressure** – 130/80 mm Hg or less  
  - Yours – 140/90 mm Hg
- **Cholesterol LDL** – Less than 100 mg/dL  
  - Yours – 150 mg/dL

*Show patients their risk factors!*
The A1C is a blood test you get at the doctor’s office or health clinic. It shows:

- Your average blood sugar level for the last 3 months
- Your risk (chance) of having other health problems because of diabetes

Why do I need it?
Your A1C test results are the best way to know if your blood sugar is under good control over time.

What is a good A1C number?
7 or lower: You and your doctor are likely happy.

www.learningaboutdiabetes.org
Provide Treatment Strategies

• **Ask**, “What kind of oil do you cook with? What kind of spread do you use on your toast? What kind of dressing do you use?”

• **Patient**, “I cook with corn oil and sometimes olive oil. I use margarine or mayo. I don’t use salad dressing.”

• **Answer**, “Use small amounts (show spoon) of olive and canola oil.”
Counseling Tips

What are you going to say?

What are you going to show?

What is the patient going to do?
Key Messages

• Choose whole grains

• Reduce:
  – Saturated fats and replace with polyunsaturated fatty acid (PUFA) and monounsaturated fatty acids (MUFA) —not carbohydrates
  – Sodium
  – Added sugars
Whole Grains

• What are you going to say?
  – Use risk communication
  • Two servings of whole grains reduced type 2 diabetes
  • Three servings of whole grains, 36 percent lower risk of death from diabetes
    *British Medical Journal*. 2016 June 14;353. (Aune D et al.)
What Are You Going to Show?

The three parts are very different but they make up an egg.

An Egg

An egg has three parts

white

yolk

shell

Grain Anatomy

Endosperm

Bran

Germ
What is the patient going to do?

Patient’s foods

- Chicken
- **White Rice** Swap
- Spinach salad
- Roll
- Water

<table>
<thead>
<tr>
<th>Whole grain ingredients</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Brown rice</td>
</tr>
<tr>
<td>- Buckwheat</td>
</tr>
<tr>
<td>- Bulgur</td>
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<tr>
<td>- Millet</td>
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<td>- Whole rye</td>
</tr>
<tr>
<td>- Whole wheat</td>
</tr>
<tr>
<td>- Wild rice</td>
</tr>
</tbody>
</table>
What are you going to say?

• Saturated fats
  – Use risk communication
  – Compare goal with patient’s result

↓ Sat. Fats = May lower LDL from 150 to 135 mg/dL
What are you going to show?

- Do you have these foods at home?
  - Butter
  - Cheese
  - Whole Milk
  - Ice Cream
  - Mayonnaise
  - Fatty Meats/Chicken with skin

- ¿Cuál de estos alimentos tiene en su casa?
  - Mantequilla
  - Queso
  - Leche entera
  - Mayonesa
  - Carnes con grasa/Pollo con piel
Saturated Fat

- Saturated Fat Day’s Budget: 14
- Ranchero Cheese 1 oz: 5
- Ranchero Partskim 1 oz: 3.5
- Whole Milk 1 glass: 5
- 1% milk 1 glass: 1.5
- 3 oz sirloin fat trimmed: 2
- 3 oz beef ribs: 15
What are you going to do?

Patient’s Foods
- T-bone steak (3g SF)
- Potato with ¼ cup shredded cheddar cheese (6g SF)
- Rice
- Spinach sautéed with olive oil
- Fruit

Swap
- Chuck shoulder steak (1.9g SF)
- Potato with 1 tbsp. of sour cream (1.8g SF)
- Brown rice
- Spinach with olive oil
- Fruit
Guide to a Better Sandwich in Your Favorite Bodega (Small Grocery Store)

If you have High Blood Pressure

- Watch out for sodium or salt
- Turkey Breast Roll (cold cuts), not made fresh, Ham, Pastrami, Salami and Pepperoni are high in sodium
- Roast pork without added salt and roast beef are low in sodium

Season foods with garlic (not garlic salt), onions, oregano, lemon or lime instead of salt

- **DO YOU KNOW HOW YOU COULD LOWER YOUR BLOOD PRESSURE EVEN MORE?**
  - Follow the 4-4-3 rule. Eat 4 servings of fruit, 4 servings of vegetables and salads and 3 servings (3 glasses) of low-fat milk or yogurt every day
- **BEST CHOICE:** Lean Roast Pork or Roast Beef on Whole Wheat Bread

![Image of sodium content in cheese slices](chart)

- If you add cheese to your sandwich, select one slice of low sodium cheese
- **TIP:** If you eat a high sodium sandwich for lunch, eat low-sodium foods the rest of the day. Fruits, vegetables, rice, pasta, beans, meats, chicken and fish are naturally low in sodium.
How Do You Know Your Patients Know?

• Teach back

Methods for ensuring that patients understand what you have told them

Ask patients to explain or demonstrate
I taught my dog how to sing.

I don't hear Anything.

I said I taught him how to sing, NOT that he learned.
Teach-Back

• Using your own words, tell me….

• I want to be sure I did a good job of showing you how to use the nutrition label. Can you show me how you will use it to calculate __?

• Can you tell me in your own words how and when you need to use your glucose tablets?

• How would you describe your condition to a friend?

• Can you show me how many pills you would take each day?

• We covered a lot about carbohydrates and I want to make sure I explained things clearly. Can you review what we discussed?

• Using your own words, tell me your lunch selections using MyPlate.
Knowledge Check

• The amount of saturated fat for someone with diabetes should be:
  - Individualized
  - Less than 10% of calories
  - Less than 30% of calories
  - Depends on triglyceride levels
Knowledge Check

The amount of saturated fat for someone with diabetes should be:

- Individualized: 33.3%
- Less than 10% of calories: 55.4%
- Less than 30% of calories: 8.9%
- Depends on triglyceride levels: 2.4%
Summary and Application

Potential for the guidelines to inform policy and practice is critical.

- Less than optimal dietary patterns contributing directly to poor health and high chronic disease risk:
  - Low in vegetables, fruit, whole grains, and low-fat dairy
  - High in refined grains, saturated fat, added sugars, and sodium

- Critical health disparities

- Important role for people with diabetes: Access and education to improve control of diabetes and to contribute to the delay and prevention of type 2 diabetes
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WC2607-110316 - (Webcast) National Diabetes Education Program Webinar Series -
November 3, 2016

Course Evaluation

Continuing education for this course is only available through the CDC Training and Continuing
Education Online system (CDC TCEO). Please follow the instructions provided below. You must
complete the online evaluation by December 5, 2016 to receive your continuing education or your
certificate of completion.

To complete online evaluation:

- Go to CDC TCEO at http://www.cdc.gov/tceonline/. Select Participant Login to login. If you are new
to TCEO, select New Participant to create a user ID and password.

- Once logged on to CDC TCEO, the Participant Services page will display. Select the Search and
Register link. Select a search method to locate the course and click on View.

- Click on the course name, and the course information page will display. Scroll down to Register
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- The next page requests demographic information. New participants are required to answer the
demographic questions. Returning participants please verify this information and select Submit.

- A message will display thanking you for registering for the course. If you have already completed
the course you may select the option to take the evaluation.

- If you have not completed the course, you will be directed back to Participant Services. Under
Evaluations and Tests you may access the course detail page, the course link, or the evaluation
and/or posttest after completing the course.

- Complete the evaluation and Submit. If a posttest is required it will follow the evaluation. A record
of your course completion and your CE certificate will be posted in the Transcript and Certificate
section, located on the Participant Services page.

If you have any questions or problems contact:

CDC/ATSDR Training and Continuing Education Online
Email at ce@cdc.gov
1-800-41TRAIN
Thank you!
Betsy Rodríguez
bjr6@cdc.gov
(770) 488-5480

For more information call 1-800-CDC-INFO (800-232-4636)
TTY 1-(888) 232-6348 or visit www.cdc.gov/info.
To order resources, visit www.cdc.gov/diabetes/ndep.
Visit CDC NDEP Website
http://www.cdc.gov/diabetes/ndep

The National Diabetes Education Program (NDEP) works with partners to reduce the burden of diabetes and prediabetes by facilitating the adoption of proven approaches to prevent or delay the onset of type 2 diabetes and the complications of diabetes. NDEP is a joint program of the Centers for Disease Control and Prevention and the National Institutes of Health.

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Continuing Education

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