Choose MyPlate.gov to Improve Diabetes MNT

6th Annual Collaborative Diabetes Education Conference for Healthcare Professionals
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Outline

• Discuss the history and rationale for the shift from the MyPyramid to the MyPlate

• Present a Pediatric Type 1 DM and Adult Type 2 DM case study and provide tools to facilitate utilization of the MyPlate guide.

• Demonstrate how to incorporate the MyPlate Tool Kit/Resources into your DM practice.
History of Healthy People

- **1979**—ASH/SG Julius Richmond establishes first national prevention agenda: *Healthy People: Surgeon General’s Report on Health Promotion and Disease Prevention*

- **HP 1990**—Promoting Health/Preventing Disease: *Objectives for the Nation*

- **HP 2000**—Healthy People 2000: *National Health Promotion and Disease Prevention Objectives*

- **HP 2010**—Healthy People 2010: *Objectives for Improving Health*

- **Healthy People 2020** – *Launched December 2010*
Healthy People 2020

A society in which all people live long, healthy lives

Determinants
- Physical Environment
- Social Environment
- Individual Behavior
- Biology & Genetics

Overarching Goals:
- Attain high quality, longer lives free of preventable disease, disability, injury, and premature death.
- Achieve health equity, eliminate disparities, and improve the health of all groups.
- Create social and physical environments that promote good health for all.
- Promote quality of life, healthy development and healthy behaviors across all life stages.
Dietary Guidelines for Americans
History 1980 – 2010
Focus of the Dietary Guidelines

Purpose
- Provide science-based advice for ages 2 years and older
- Including those at increased risk of chronic disease

Target audience
- Policymakers, nutrition educators, and health professionals

Produced by
- USDA and HHS

How often
- Updated every 5 years
Participant Activity

• Step 1: Take your paper plate and crayons.
• Step 2: Draw the different foods (e.g. protein, vegetable, starch, etc.) on the plate that you ate for dinner last night.
• Step 3: Draw a line between the different food groups you consumed.
• Step 4: Share and pare with your neighbor to identify the strengths and weaknesses of the nutrient content of the meal you consumed.
Top Sources of Calories
Among Americans 2 Years and Older

1. **Grain-based desserts**
   - Cake, cookies, pie, cobbler, sweet rolls, pastries, and donuts

2. **Yeast breads**
   - White bread and rolls, mixed-grain bread, flavored bread, whole-wheat bread, and bagels

3. **Chicken and chicken mixed dishes**
   - Fried and baked chicken parts, chicken strips/patties, stir-fries, casseroles, sandwiches, salads, and other chicken mixed dishes

4. **Soda/energy/sports drinks**
   - Sodas, energy drinks, sports drinks, and sweetened bottled water including vitamin water

5. **Pizza**

Promoting Energy Balance

- **Top Sources of Calories by Age Group**
  - Alcoholic beverages are a major calorie source for adults
  - Sodas and pizza contribute more calories among adolescents than younger children
  - Fluid milk is a top calorie source for younger children

- **Principles for Promoting Calorie Balance**
  - Monitor food and beverage intake, physical activity, and body weight
  - Reduce portion sizes
  - When eating out, make better choices
  - Limit screen time
Foods & Food Components to Reduce

Topics covered

- Sodium
- Fats
  - Saturated fatty acids
  - *Trans* fatty acids
  - Cholesterol
- Calories from solid fats and added sugars
- Refined grains
- Alcohol
Foods & Food Components to Reduce Sodium

- Reduce intake to less than 2300 mg per day
- Further reduce intake to 1500 mg per day for:
  - Adults ages 51+
  - African Americans ages 2+
  - People ages 2+ with high blood pressure, diabetes, or chronic kidney disease
- The 1500 mg recommendation applies to half the total population (ages 2+) and to the majority of adults
- Immediate, deliberate reduction in sodium content of foods is needed.
Food Sources of Sodium

FIGURE 3-2. Sources of Sodium in the Diets of the U.S. Population Ages 2 Years and Older, NHANES 2005–2006

- Yeast breads: 7.3%
- Chicken and chicken mixed dishes: 6.8%
- Pizza: 6.3%
- Pasta and pasta dishes: 5.1%
- Cold cuts: 4.5%
- Condiments: 4.4%
- Tortillas, burritos, tacos: 4.1%
- Sausage, franks, bacon, ribs: 4.1%
- Regular cheese: 3.5%
- Grain-based desserts: 3.4%
- Beef and beef mixed dishes: 3.3%
- Rice and rice mixed dishes: 2.6%
- Eggs and egg mixed dishes: 2.6%
- Burgers: 2.4%
- Salad dressing: 2.4%
- Ready-to-eat cereals: 2.0%
- All other food categories: 31.9%
Foods & Food Components to Reduce Fats

- Saturated fatty acids—less than 10% of calories
  - Less than 7% reduces risk of CVD further
  - Replace with poly- and monounsaturated fatty acids (not with sugar or refined grain)
- *Trans* fats—as low as possible
- Cholesterol—less than 300 mg per day
  - Effect small compared to saturated and *trans* fats
  - Egg yolks—up to 1 per day
Food Sources of Saturated Fats

**FIGURE 3-4. Sources of Saturated Fat in the Diets of the U.S. Population Ages 2 Years and Older, NHANES 2005-2006**
Foods & Food Components to Reduce Calories from solid fats and added sugars

- Reduce intake of calories from solid fats and added sugars (SoFAS)
- SoFAS provide 35% of calories
  - Do not contribute nutrients
- Only 5 to 15% of calories from SoFAS can be accommodated in healthy diets
Foods & Food Components to Reduce Alcohol

- If alcohol is consumed, consume in moderation
  - For men, up to 2 drinks per day
  - For women, up to 1 drink per day
- Specific guidance for breast-feeding women
- Circumstances in which people should not drink alcohol listed
Foods and Nutrients to Increase

- While staying within calorie needs, increase intake of
  - Vegetables
  - Fruits
  - Whole grains
  - Milk
  - Seafood, in place of some meat/poultry new
  - Oils

- Nutrients of public health concern
  - Potassium
  - Fiber
  - Calcium
  - Vitamin D
Whole Grain Guidance

FIGURE 4-1. Three Ways to Make at Least Half of Total Grains Whole Grains

1. 3 ounces of 100% whole grains and 3 ounces of refined-grain products
   - 100% 100% 100% 0% 0% 0%

2. 2 ounces of 100% whole grains, 2 ounces of partly whole-grain products, and 2 ounces of refined-grain products
   - 100% 100% ≥51% ≥51% 0% 0%

3. 6 ounces of partly whole-grain products
   - ≥51% ≥51% ≥51% ≥51% ≥51% ≥51%
Building Healthy Eating Patterns

- Research on overall eating patterns
  - Considerable evidence for health outcomes from DASH and traditional Mediterranean eating patterns
  - Some evidence for vegetarian
- Common elements of healthy eating patterns identified
- To promote health, follow USDA Food Patterns or DASH Eating Plan
  - Similar to each other and to the healthful eating patterns identified in the research
- Follow food safety recommendations
Comparison of Consumption to Recommendations

**FIGURE 5-1. How Do Typical American Diets Compare to Recommended Intake Levels or Limits?**

**Usual intake as a percent of goal or limit**

**Eat more of these:**
- Whole grains: 15%
- Vegetables: 42%
- Fruits: 52%
- Dairy: 61%
- Seafood: 44%
- Oils: 61%
- Fiber: 40%
- Potassium: 56%
- Vitamin D: 28%
- Calcium: 75%

**GOAL**

**Eat less of these:**
- Calories from SoFAS*: 280%
- Refined grains: 200%
- Sodium: 149%
- Saturated fat: 110%
Summary

Dietary Guidelines for Americans, 2010

- Evidence-based nutritional guidance
  - Promote health
  - Reduce the risk of chronic diseases
  - Reduce the prevalence of overweight and obesity

- Integrated set of advice for overall eating pattern
- Consumer-friendly advice and tools coming

Resources

www.DietaryGuidelines.gov
Policy Document
Advisory Committee Report
Public Comments Database

History of USDA Food Guides

1940’s Guide to Good Eating (Basic 7)

1956 to 1970s Food for Fitness, Daily Food Guide (Basic Four)

1979 Hassle-Free Daily Food Guide

1984: Food Wheel: A Pattern for Daily Food Choices

1992: Food Guide Pyramid

2005 MyPyramid Food Guidance System
... MyPlate

Introduced along with updating of USDA food patterns for the *2010 Dietary Guidelines for Americans*

- MyPlate is designed to *remind* Americans to eat healthfully; it is not intended to change consumer behavior alone.

- MyPlate illustrates the five food groups using a familiar mealtime visual, a place setting.

- Different shape to help grab consumers’ attention with a new visual cue

- “My” continues the personalization approach from MyPyramid
The NEW MyPlate Replaces the MyPyramid
MyPlate update

MyPlate calls the former MyPyramid “Meat & Beans Group” the “Protein Group”
MyPlate update

MyPlate calls the former MyPyramid “Milk Group” the “Dairy Group”
Choose MyPlate “Menu” of Selected Consumer Messages

1. Balancing calories
2. Foods to increase
3. Foods to reduce
Choose MyPlate “Menu”

Balancing calories

- Enjoy your food, but eat less
- Avoid oversized portions
Food is to be enjoyed!

“Food is not nutritious until its eaten.”

~ Smarter Lunchrooms 2011
Enjoy — but eat less!

100 extra calories per day

10 extra pounds per year!
Enjoy — but eat less!

100 extra calories per day

10 extra pounds per year!
Eat until “satisfied,” not “full”

“Your stomach shouldn’t be a waist (waste) basket.”

~ Author Unknown
It takes about 20 minutes for the stomach to tell your brain you’re full.
Downsize portion size

The bigger the portion, the more people tend to eat.
“You better cut the pizza in four pieces, because I’m not hungry enough to eat six.”

~Yogi Berra
Limit foods high in sodium, added sugars, and refined grains.
Eat more nutrient-dense foods
Another name for “nutrient-dense” foods is “nutrient-rich” foods.
Nutrient-dense vs. not nutrient-dense

Breaded fried chicken strips, 3 oz. (246 calories)

- 108 calories: Baked chicken breast
- 138 calories: Breading and frying
Nutrient-dense foods and beverages include ALL:

- Vegetables/fruits
- Whole grains
- Seafood
- Eggs
- Dry beans/peas
- Unsalted nuts/seeds
- Fat-free/low-fat milk/milk products
- Lean meats/poultry

*When prepared WITHOUT adding solid fats, sugars, or salt*
Nutrition Facts Label doesn’t separate “added” & “naturally occurring” sugars

“Added” sugars are sugars and syrups added to foods or beverages during preparation or processing.

1 teaspoon sugar = about 4g of added and/or naturally occurring sugar
Other sugars occur “naturally” in foods like milk, fruit, and some vegetables – they aren’t the “added sugars” that are the concern.
Physical activity and diet important regardless of weight!
“My idea of exercise is a good brisk sit.”

~ Phyllis Diller
Can you guess: How much WEEKLY physical activity should adults (age 18 and over) do for substantial health benefits?

A. 2 hours and 30 minutes of moderate-intensive activity (i.e. 30 minutes, 5 times/week)

B. 1 hour and 15 minutes of vigorous-intensity activity (i.e. 15 minutes, 5 times/week)

C. Either A or B
Can you guess: How much WEEKLY physical activity should adults (age 18 and over) do for substantial health benefits?

A. 2 hours and 30 minutes of moderate-intensive activity (i.e. 30 minutes, 5 times/week)

B. 1 hour and 15 minutes of vigorous-intensity activity (i.e. 15 minutes, 5 times/week)

C. Either A or B
Moderate aerobic activity increases breathing and heart rate somewhat.
Vigorous aerobic activity greatly increases heart rate and breathing.
Limit screen time or watch and workout.
Short on time?

Get active 10 minutes 3 times a day
You can live as if there’s no tomorrow ...

... but, tomorrow will probably come ...
“If I’d known I was going to live so long, I’d have taken better care of myself.”

~Leon Eldred
Choose MyPlate “Menu”

Foods to increase

- Make half your plate fruits and vegetables
- Make at least half your grains whole grains
- Switch to fat-free or low-fat (1%) milk
Fill half your plate with fruits & veggies
Pick a variety of vegetables from each vegetable subgroup

- Red & orange
- Dark-green
- Beans & peas (legumes)
- Starchy
- Other
Diabetes MyPlate Guide

My Plate Planner

Methods of Use

- Fill 1/2 of your plate with vegetables such as carrots, broccoli and salad
- Fill 1/4 of your plate with lean meat, chicken, or fish; this is about 3 ounces
- Fill 1/4 of your plate with a starchy choice such as 1/3 cup rice
- Add 1 serving of fruit
- Choose 1 serving of milk
- Add margarine or oil for preparation or addition at the table
- Add other portions as needed to round out your meal plan
- For breakfast, use the two quarters of the plate and not the other half
- For lunch and dinner, use the whole plate
Did you know: The vegetable subgroup of “beans and peas (legumes)” includes ...

... all cooked beans and peas, for example:
  • Kidney beans
  • Lentils
  • Chickpeas
  • Pinto beans
The “beans and peas (legumes)” subgroup does NOT include ...
Can you guess: What type of food are “beans and peas (legumes)” considered?

A. Vegetable
B. Protein
C. Both A and B
D. Neither A or B
Can you guess: What type of food are “beans and peas (legumes)” considered?

A. Vegetable
B. Protein
C. Both A and B
D. Neither A or B
At least half your grains should be whole grains
Whole grains contain the entire grain seed or "kernel"
Partially whole grain products providing half or more whole grains per ounce-equivalent serving have at least either:

– 51% of total weight as whole grains OR
– 8g of whole grains
### Calories in Different Types of Milk

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<thead>
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<th>Calories</th>
<th>Calories saved</th>
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<tbody>
<tr>
<td>Whole</td>
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<tr>
<td>2%</td>
<td>125</td>
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<tr>
<td>1%</td>
<td>100</td>
<td>65</td>
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<tr>
<td>Fat-free</td>
<td>85</td>
<td>80</td>
</tr>
</tbody>
</table>

Switching to fat-free or low-fat (1%) milk makes a difference!
Can you guess: Which is more nutrient-dense?

A. Fat-free and low fat (1%) milk
B. Whole milk
C. They are equally nutrient-dense
Can you guess: Which is more nutrient-dense?

A. Fat-free and low fat (1%) milk

B. Whole milk

C. They are equally nutrient-dense
How Nutrients Affect Blood Sugar
Choose MyPlate “Menu”

Foods to reduce

- Compare sodium in foods like soup, bread, and frozen meals — and choose the foods with lower numbers
- Drink water instead of sugary drinks
Can you guess: People ages 2 and older should reduce daily sodium intake to less than …

A. 2,300 mg or 1,500 mg, depending on age/other individual characteristics

B. 2,300 mg or 3,000 mg, depending on age/other individual characteristics
Can you guess: People ages 2 and older should reduce daily sodium intake to less than …

A. 2,300 mg or 1,500 mg, depending on age/other individual characteristics

B. 2,300 mg or 3,000 mg, depending on age/other individual characteristics
Groups reduced to 1,500 mg

- African Americans ages 2+
- Adults ages 51+
- People ages 2+ with high blood pressure, diabetes, or chronic kidney disease
Can you guess: How much sodium is in a teaspoon of salt?

A. 1,300 mg
B. 2,300 mg
C. 3,300 mg
Can you guess: How much sodium is in a teaspoon of salt?

A. 1,300 mg
B. 2,300 mg
C. 3,300 mg
Easy ways to reduce sodium

- Check labels
- Avoid adding salt (an exception may be when baking yeast breads)
- Eat fresh foods, frozen veggies
- Request salt be left off when eating out
- Use other seasonings
Reduce sugar-sweetened beverage intake:

- Drink fewer sugar-sweetened beverages
- Consume smaller portions
- Substitute water, unsweetened coffee and tea, and other beverages with few or no calories
MyPlate Resources

United States Department of Agriculture

Subjects
- The Basics
  - Food Groups
  - Tips & Resources
  - Print Materials
  - Interactive Tools
- Specific Audiences
  - General Population
  - Pregnant & Breastfeeding
  - Preschoolers
  - Kids
  - Weight Loss
  - Multimedia
  - For Professionals
  - Partnering Program
  - Related Links
  - Questions?

Balancing Calories
- Enjoy your food, but eat less.
- Avoid oversized portions.

Foods to Increase
- Make half your plate fruits and vegetables.
- Make at least half your grains whole grains.
- Switch to fat-free or low-fat (1%) milk.

Tip of the Day
Cook together. Eat together. Talk together. Make mealtime a family time!

Click here for more tips
MyPlate Tool Kit/Resources

• “Let’s Eat for the health of it” consumer brochure
• ADA My Food Advisor “What can I eat?”
• 10 Tip Sheets –English and Spanish
• Sample Menus for 2000 Calorie Food Pattern
• Physical Activity & Diet Food Tracker
Summary

• Individualize MyPlate to patient needs, age and lifestyle.
• Identify patients’ readiness to change level and adjust goals to result in success.
• Be creative and positive.
• Use the resources available and encourage patients to utilize www.choosemyplate.gov and www.diabetes.org websites.