

# ChooseMyPlate.gov to Improve Diabetes MNT

6<sup>th</sup> Annual Collaborative Diabetes Education  
Conference for Healthcare Professionals

January 20, 2012

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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***



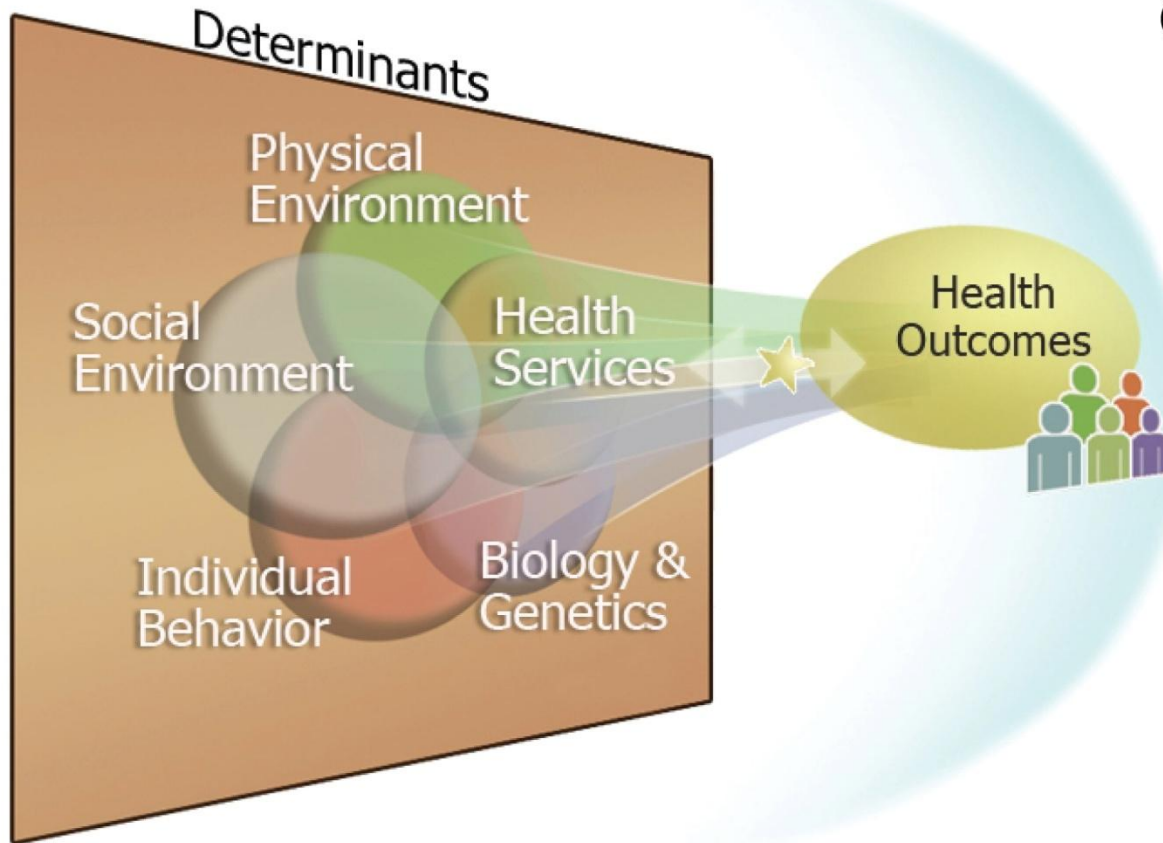
- **HP 2010—Healthy People 2010: *Objectives for Improving Health***



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

# Healthy People 2020

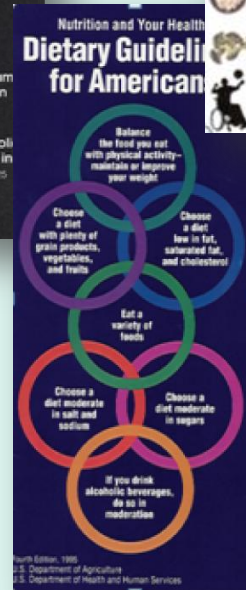
*A society in which all people live long, healthy lives*



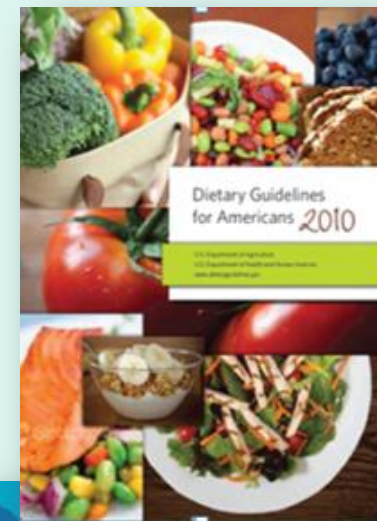
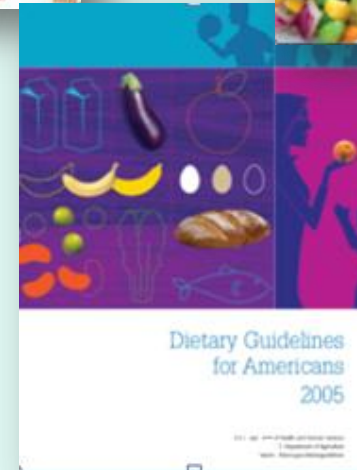
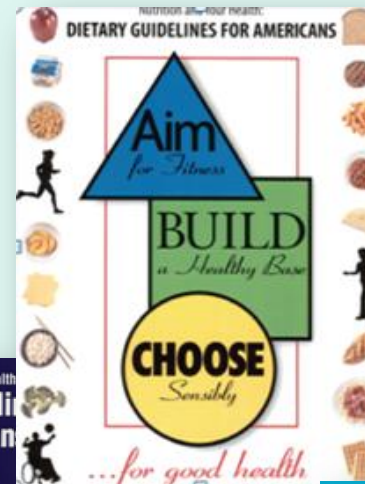
## Overarching Goals:

- 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



1995



# 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

Source: NHANES 2005-2006, Available at  
<http://riskfactor.cancer.gov/diet/foodsources>



# 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

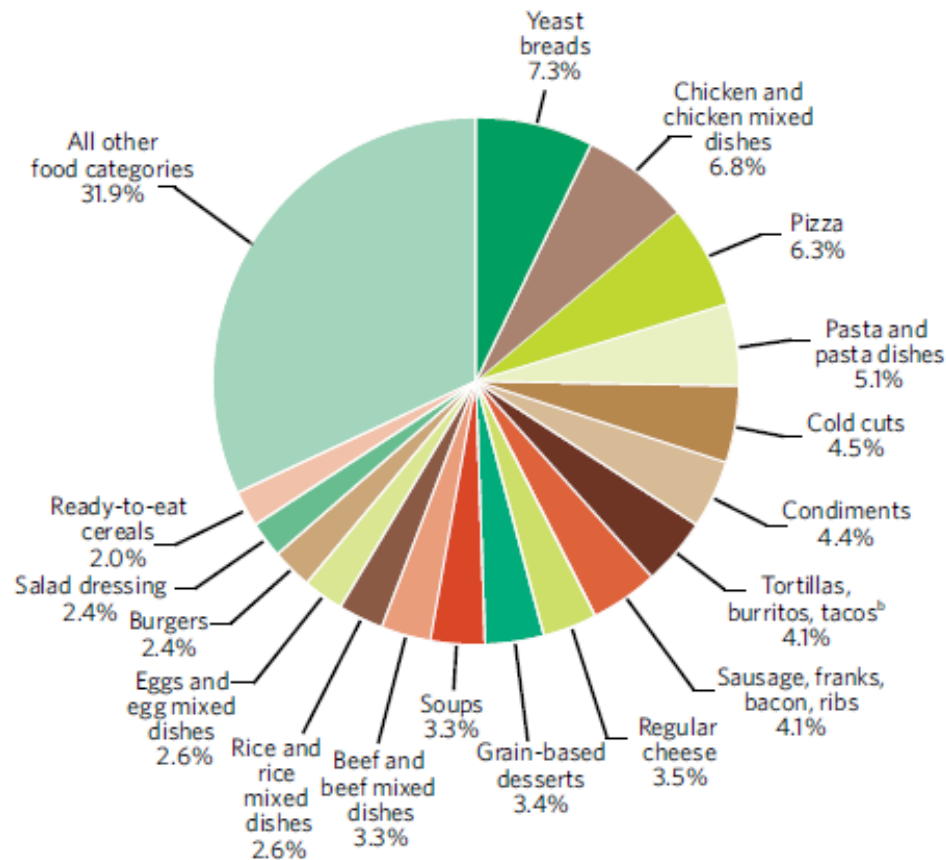
# Foods & Food Components to Reduce

## 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<sup>a</sup>**



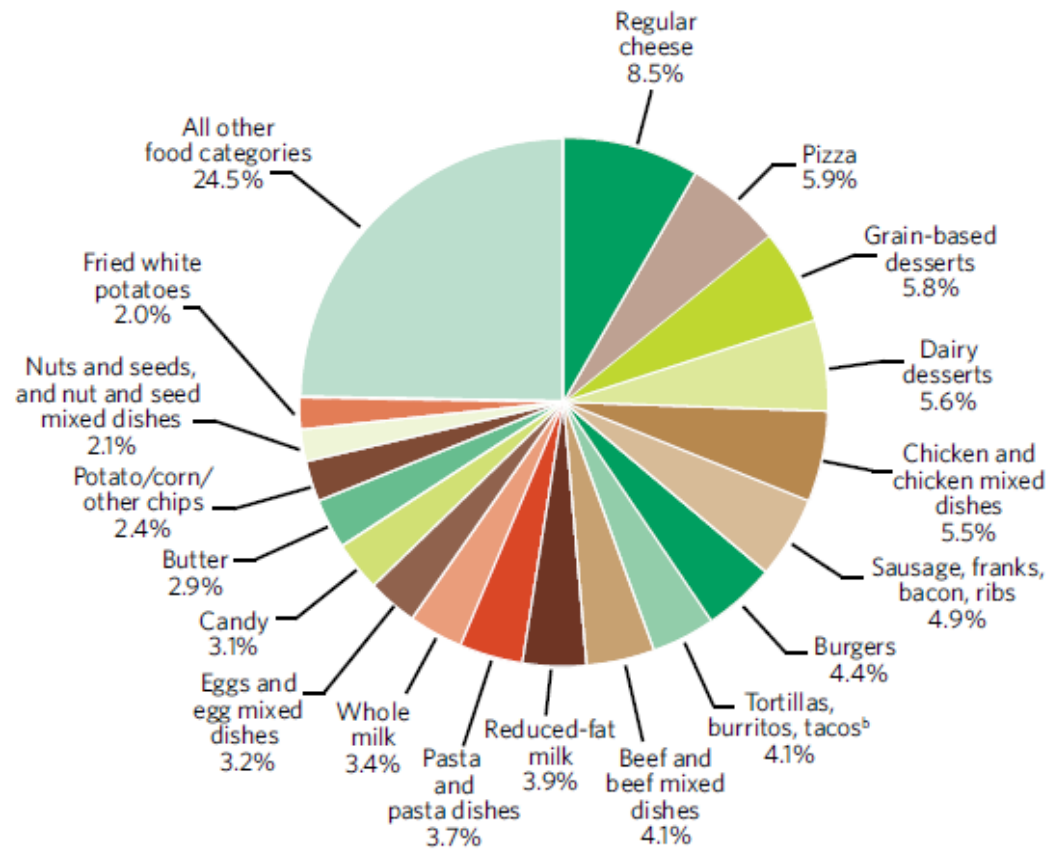
# Foods & Food Components to Reduce

## 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 **new**
  - Egg yolks—up to 1 per day **new**

# 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<sup>a</sup>**



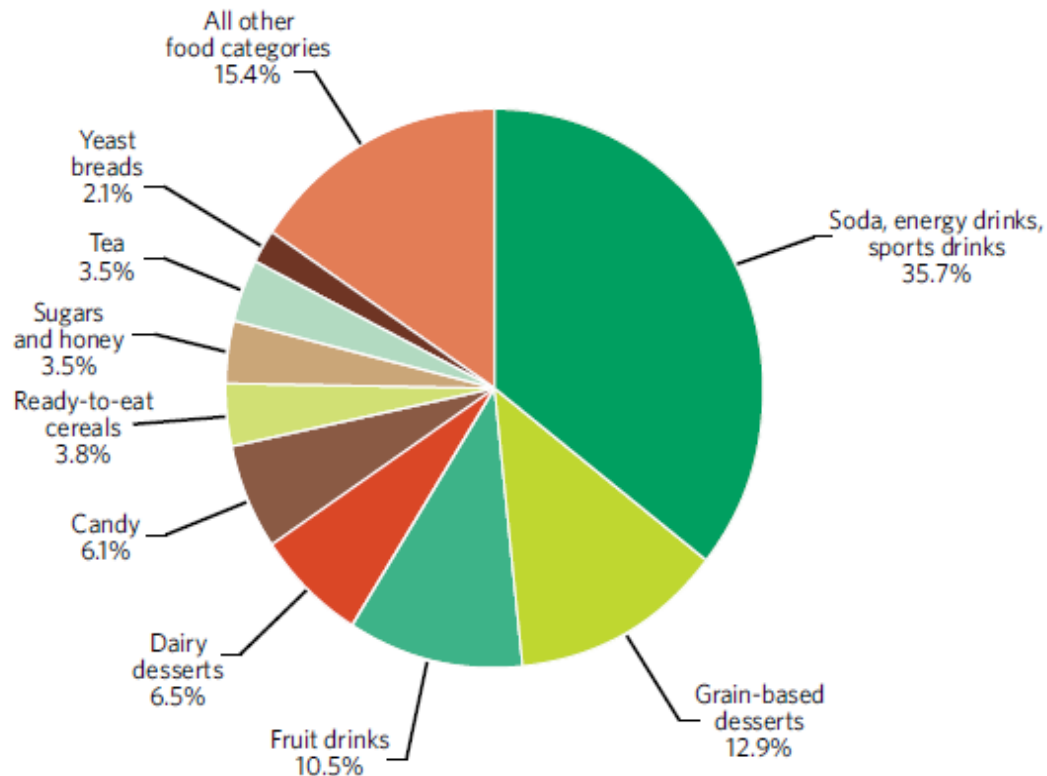
# Foods & Food Components to Reduce

## Calories from solid fats and added sugars *new*

- 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

# Food Sources of Added Sugars

**FIGURE 3-6. Sources of Added Sugars in the Diets of the U.S. Population Ages 2 Years and Older, NHANES 2005-2006<sup>a</sup>**





# 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 ***new***
- 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<sup>a</sup>**

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



2. 2 ounces of 100% whole grains, 2 ounces of partly whole-grain products,<sup>b</sup> and 2 ounces of refined-grain products



3. 6 ounces of partly whole-grain products

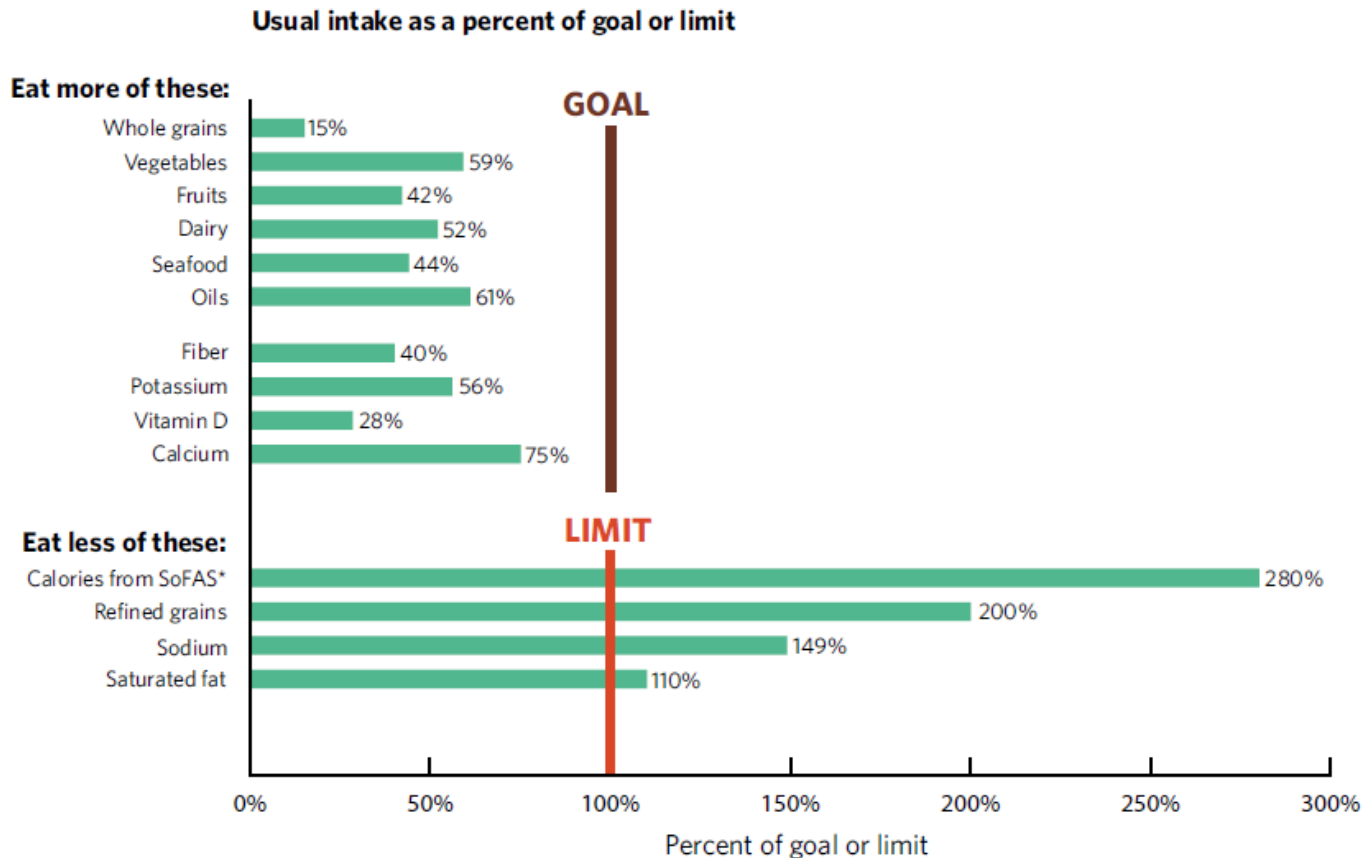


# Building Healthy Eating Patterns

- 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?**



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

Policy Document

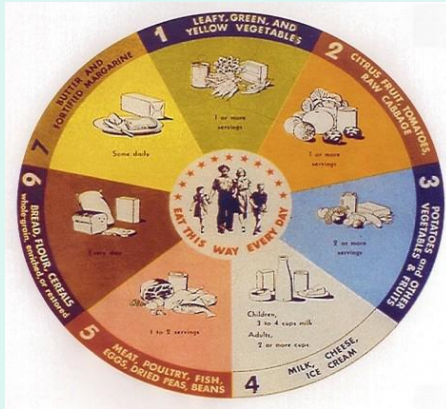
Advisory Committee Report

Public Comments Database

[www.NutritionEvidenceLibrary.gov](http://www.NutritionEvidenceLibrary.gov)

# History of USDA Food Guides

1940's Guide to Good Eating (Basic 7)



## FOOD WHEEL

A Pattern for Daily Food Choices

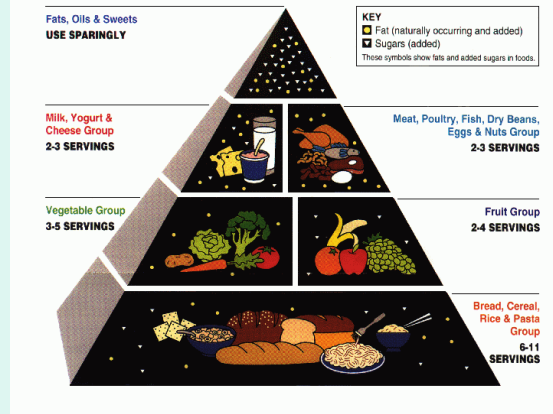


1984: Food Wheel: A Pattern for Daily Food Choices

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



1992: Food Guide Pyramid



1979 Hassle-Free Daily Food Guide



2005 MyPyramid Food Guidance System

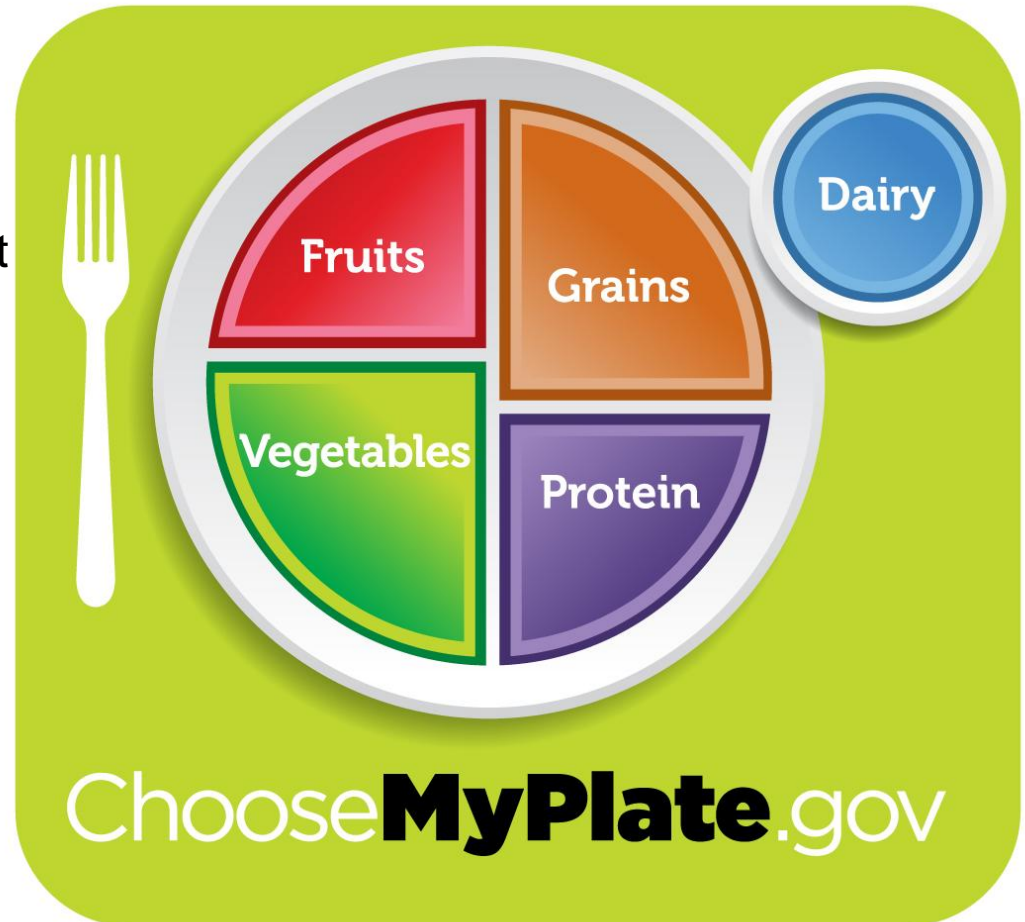


**MyPyramid.gov**  
STEPS TO A HEALTHIER YOU

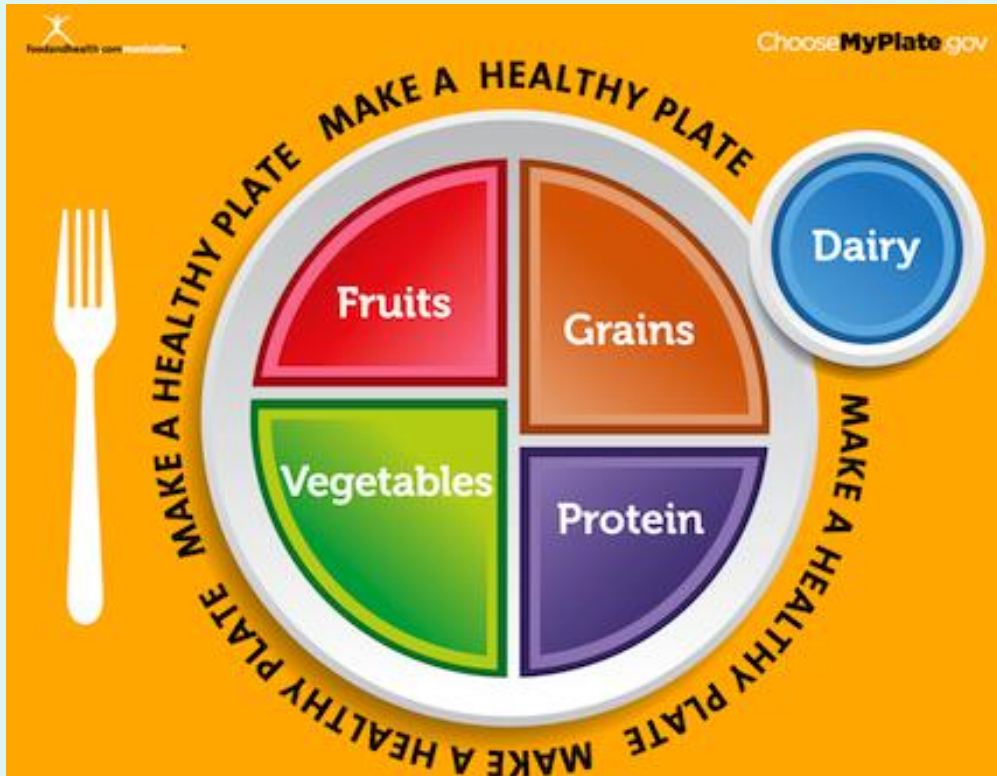
# ... MyPlate

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







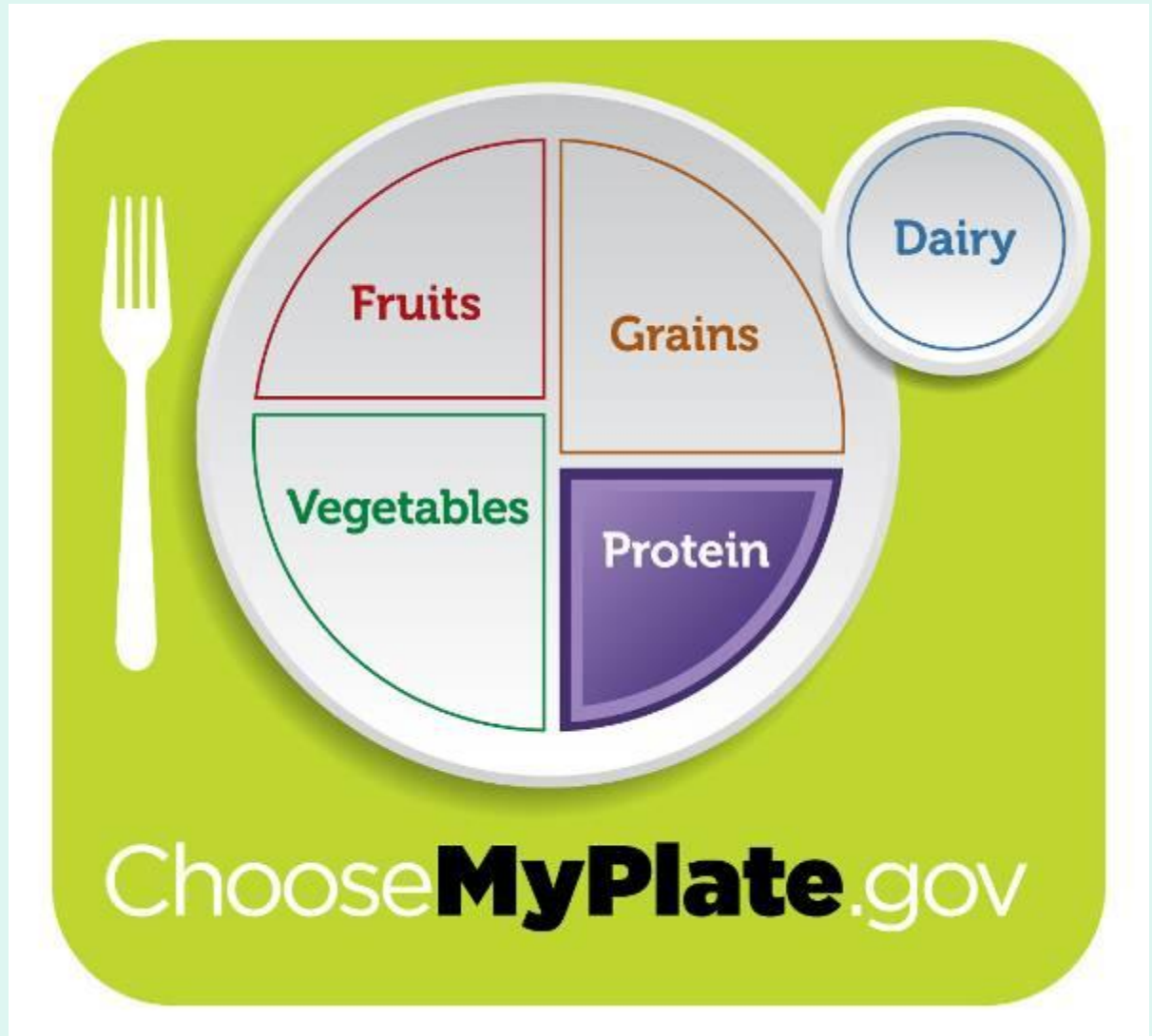
## The NEW MyPlate

Replaces the MyPyramid

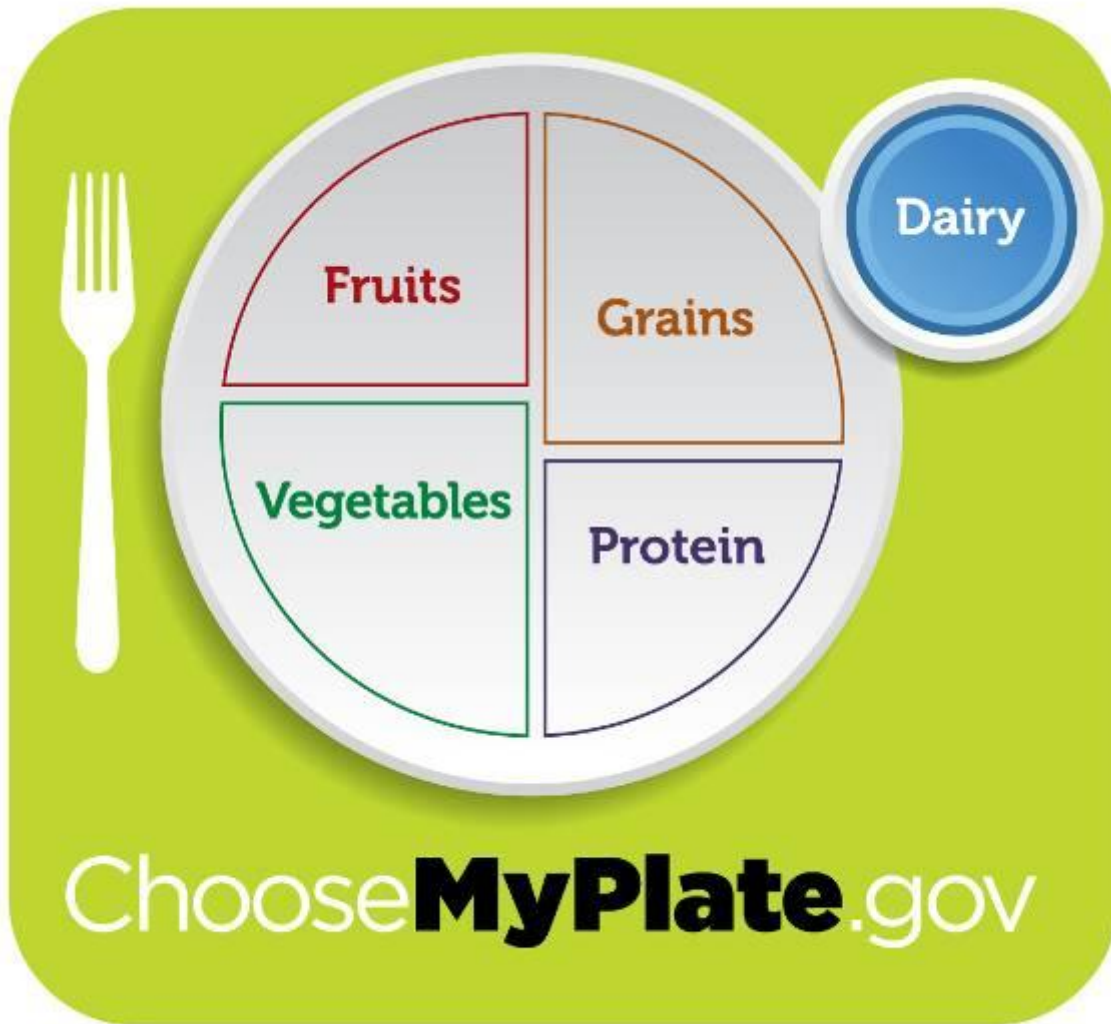
Vegetables	Fruits	Grains	Protein	Dairy
<p>Vary your veggies.</p> <p>Any vegetable or 100% vegetable juice counts as a member of the Vegetable Group.</p> <p>Fill half your plate with fruits and vegetables.</p>	<p>Focus on fruits. Whole fruit is preferable to juice but any fruit counts: fresh, frozen, canned, 100% juice or dried.</p> <p>Fill half your plate with fruits and vegetables.</p>	<p>Make at least half your grains whole.</p> <p>Read labels to find more whole grain foods.</p> <p>Whole wheat, oatmeal and brown rice are all good.</p>	<p>Go lean with protein.</p> <p>Keep portion to 1/4 of the plate.</p> <p>Nuts, beans/peas, seeds, poultry, lean meat, seafood, soy and eggs are in this group.</p>	<p>Get your calcium-rich foods.</p> <p>Remember to buy skim milk or 1% milk.</p> <p>Go easy on cheese.</p> <p>Skim yogurt is a good choice, too.</p>

# MyPlate update

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



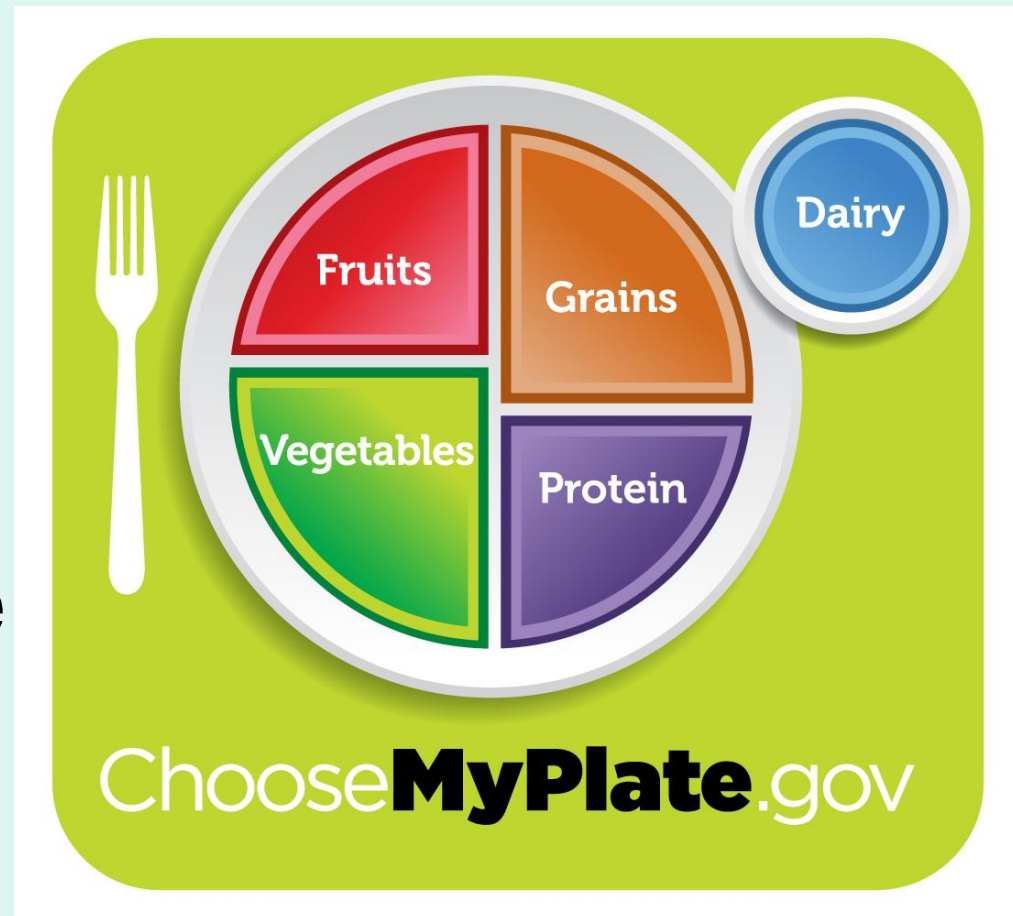
# MyPlate update



MyPlate calls the former MyPyramid “Milk Group” the “Dairy Group”

# Choose MyPlate “Menu” of Selected Consumer Messages

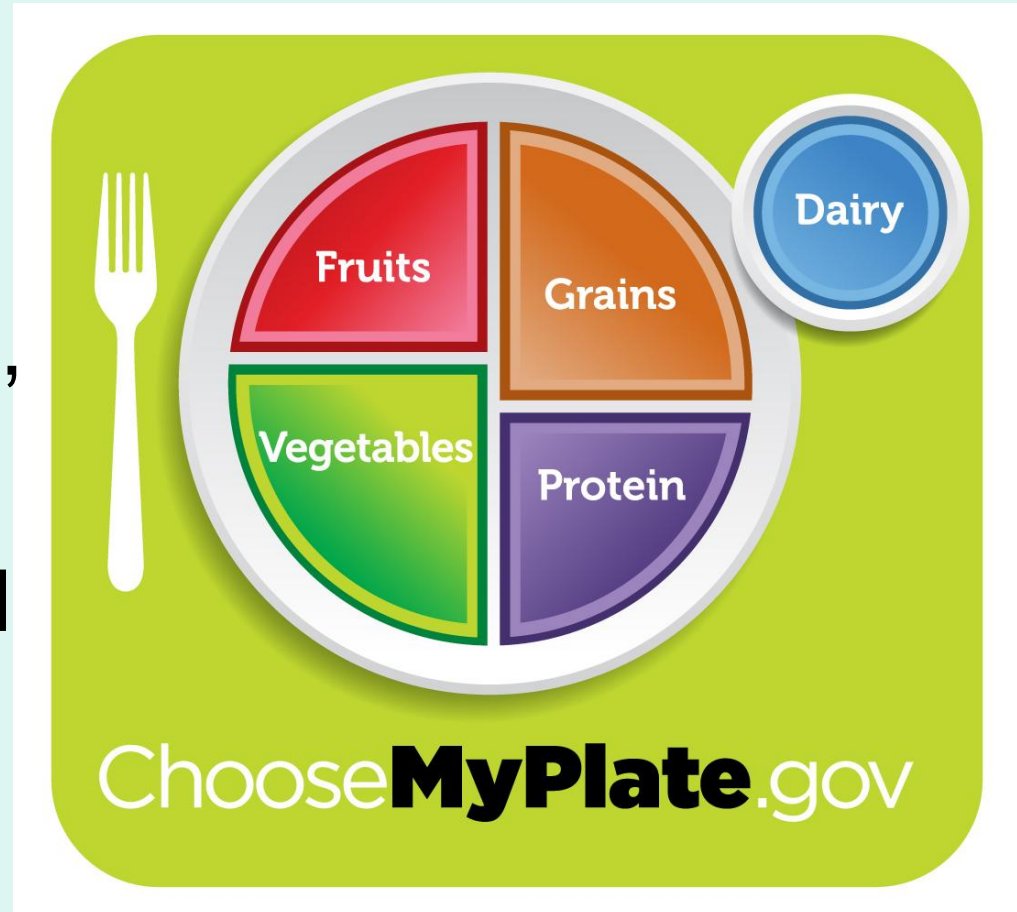
1. Balancing calories
2. Foods to increase
3. Foods to reduce



# 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!**

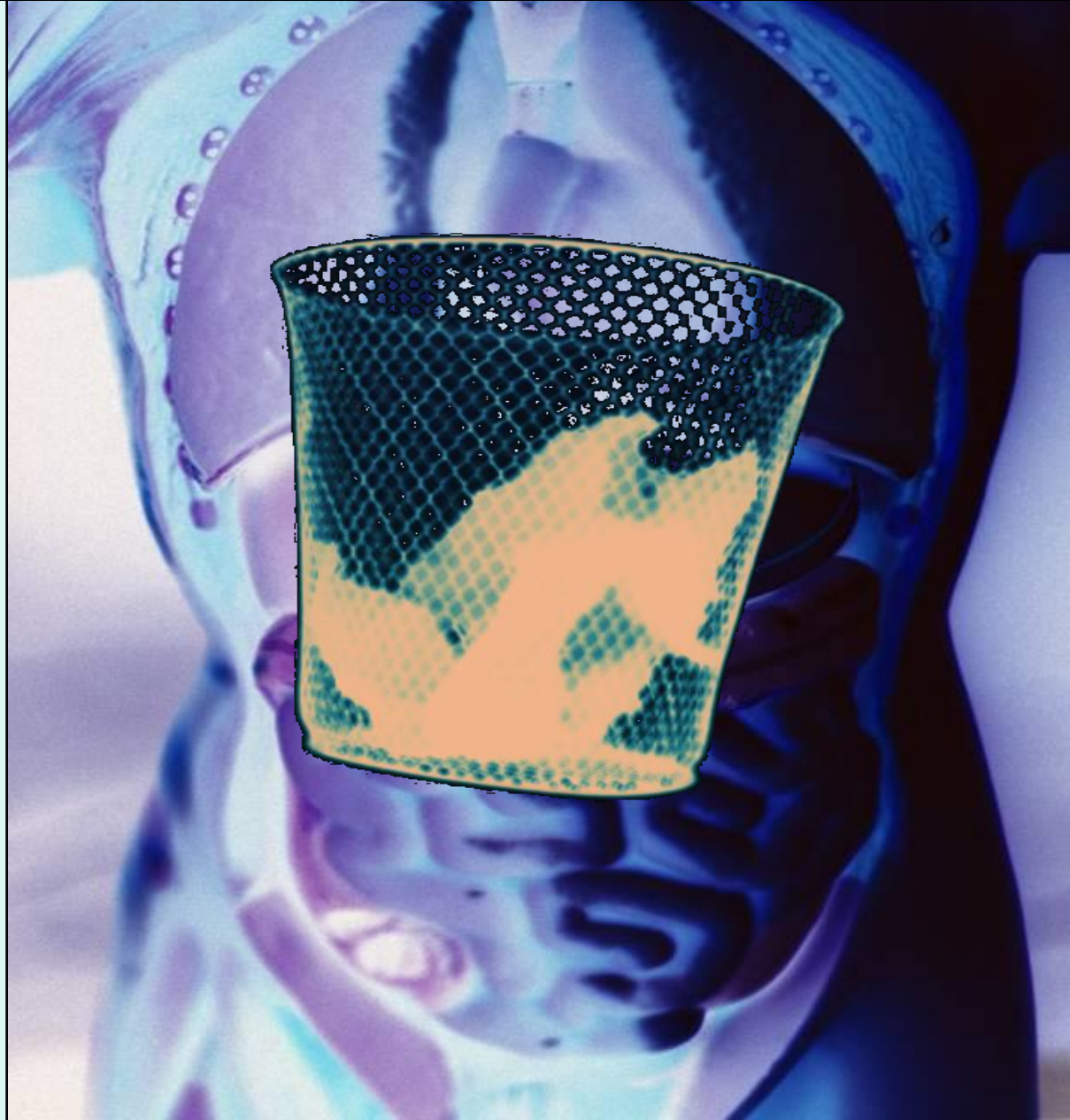


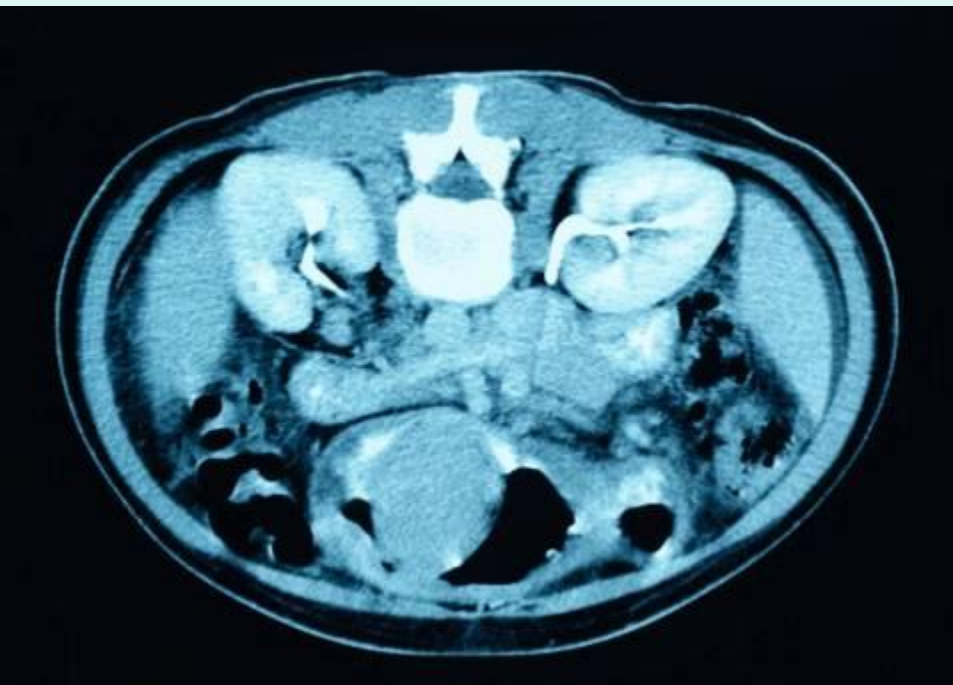
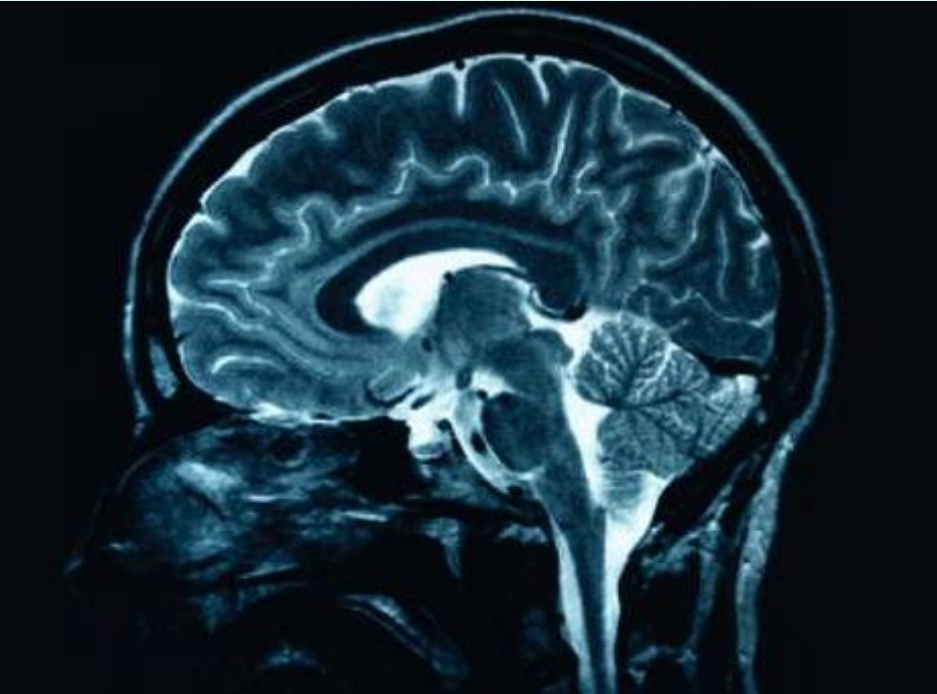


# Eat until “satisfied,” not “full”

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

*~ Author Unknown*





20 minutes

It takes  
about 20  
minutes for  
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***

Photo courtesy of National Cancer Institute



**Limit  
foods  
high in  
sodium,  
added  
sugars,  
and  
refined  
grains**

Photocourtesy of National Cancer Institute

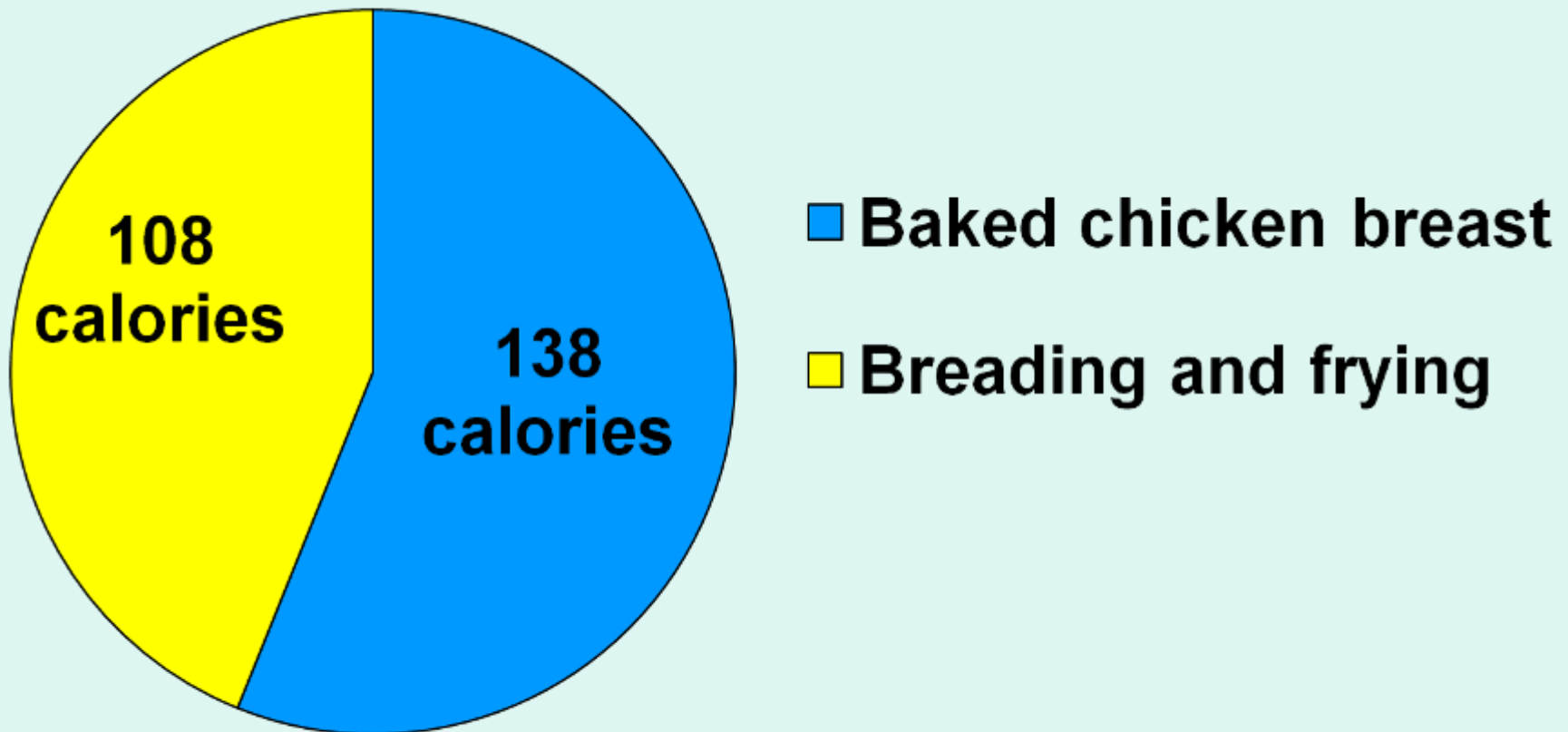
**Eat  
more  
nutrient-  
dense  
foods**



Another name for “nutrient-dense” foods is “nutrient-rich” foods



# Nutrient-dense vs. not nutrient-dense



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



# 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**

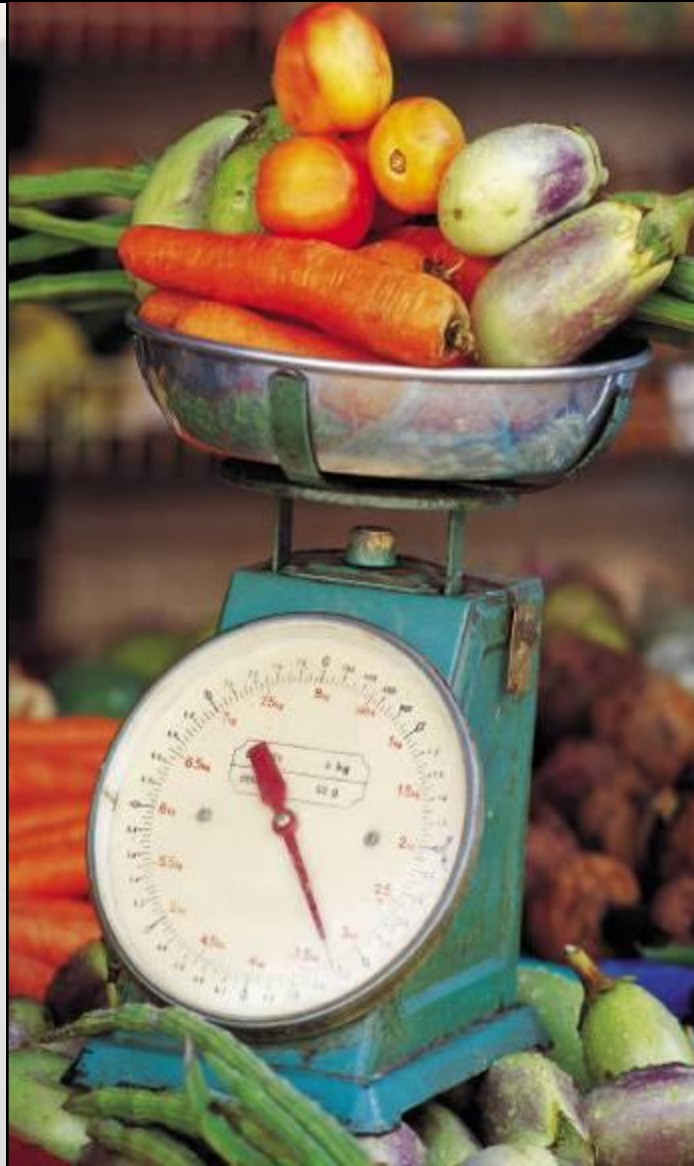
**1 teaspoon sugar = about 4g of added and/or naturally occurring sugar**

<b>Nutrition Facts</b>	
Serving Size 1 cup (228g)	
Servings Per Container 2	
<hr/>	
Amount Per Serving	
Calories 250	Calories from Fat 110
<hr/>	
	% Daily Value*
Total Fat 12g	18%
Saturated Fat 3g	15%
<i>Trans</i> Fat 1.5g	
Cholesterol 30mg	10%
Sodium 470mg	20%
Total Carbohydrate 31g	10%
Dietary Fiber 0g	0%
Sugars 5g	
Protein 5g	

**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**

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**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?

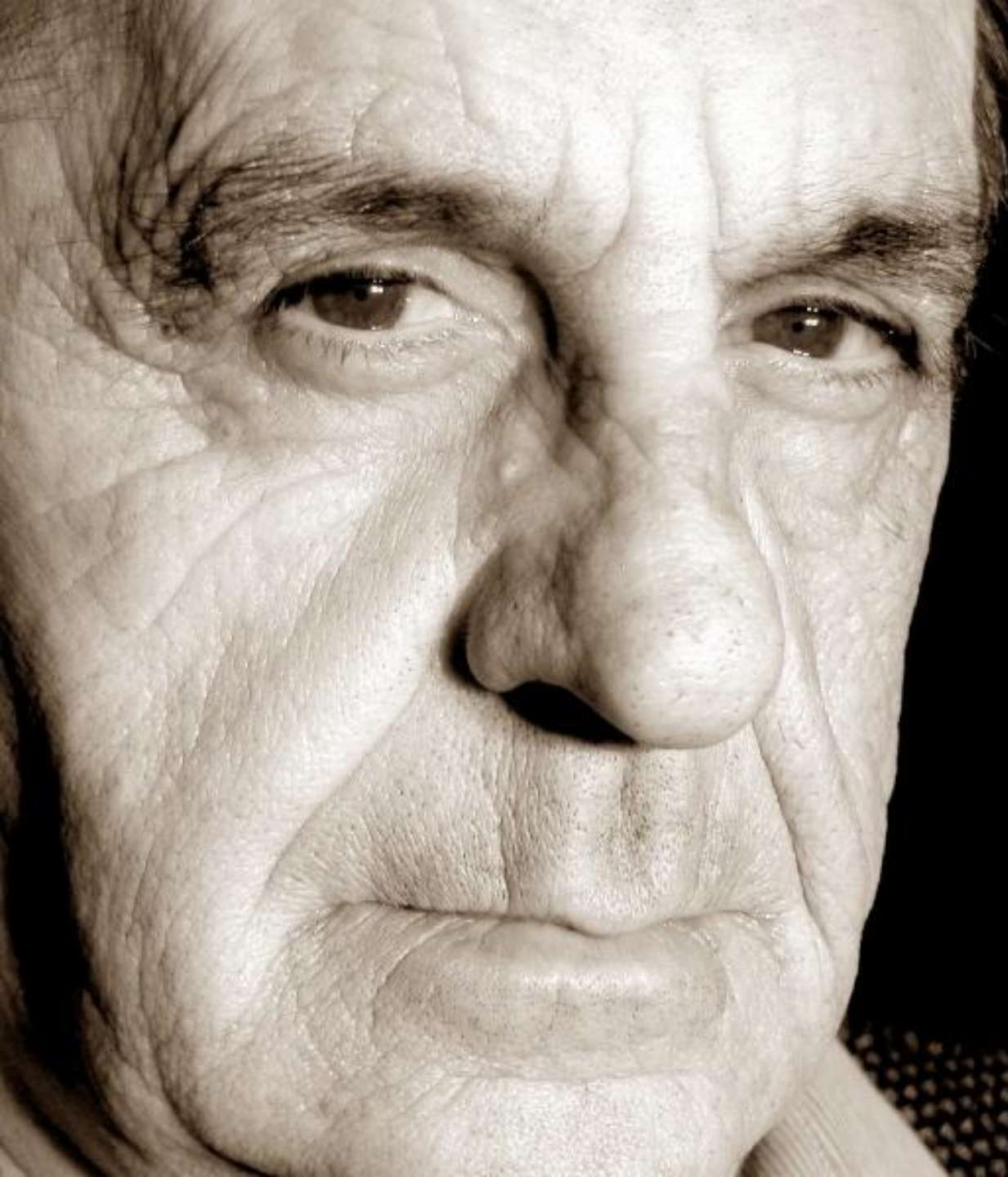
***Get  
active  
10  
minutes  
3  
times  
a day***





**You can live as  
if there's no  
tomorrow ...**

**... but,  
tomorrow  
will probably  
come ...**



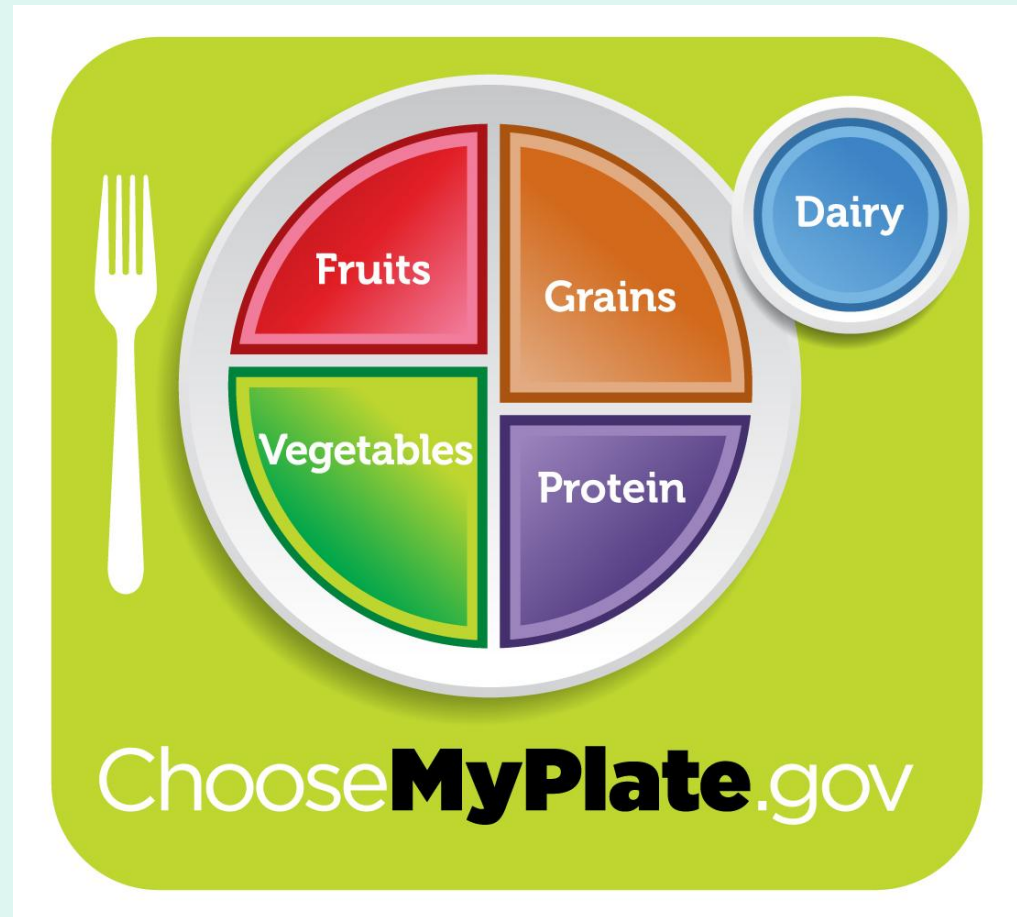
“If I’d known  
I was going  
to live so  
long, I’d  
have taken  
better care  
of myself.”

*~Leon Eldred*

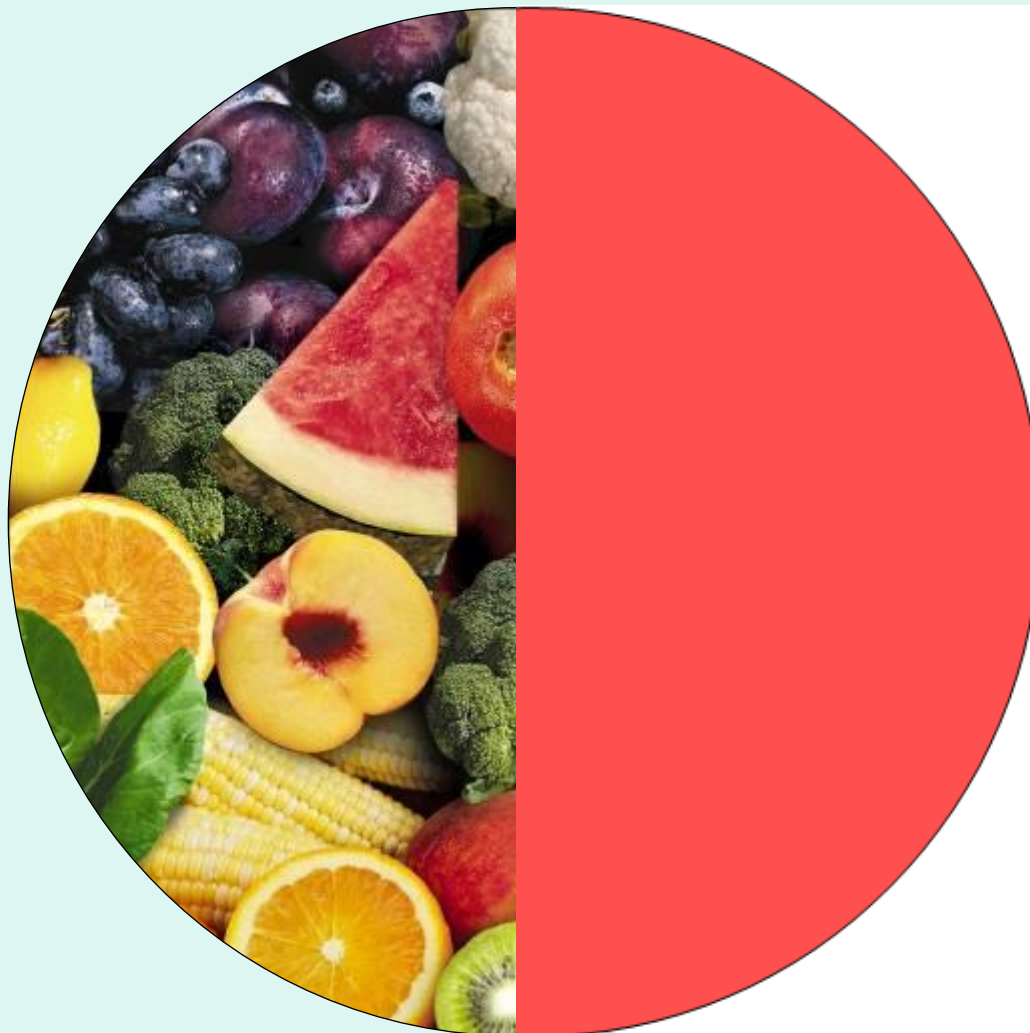
# Choose MyPlate “Menu”

## 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



# **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 ...



**Green peas**



**Green beans**

**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**

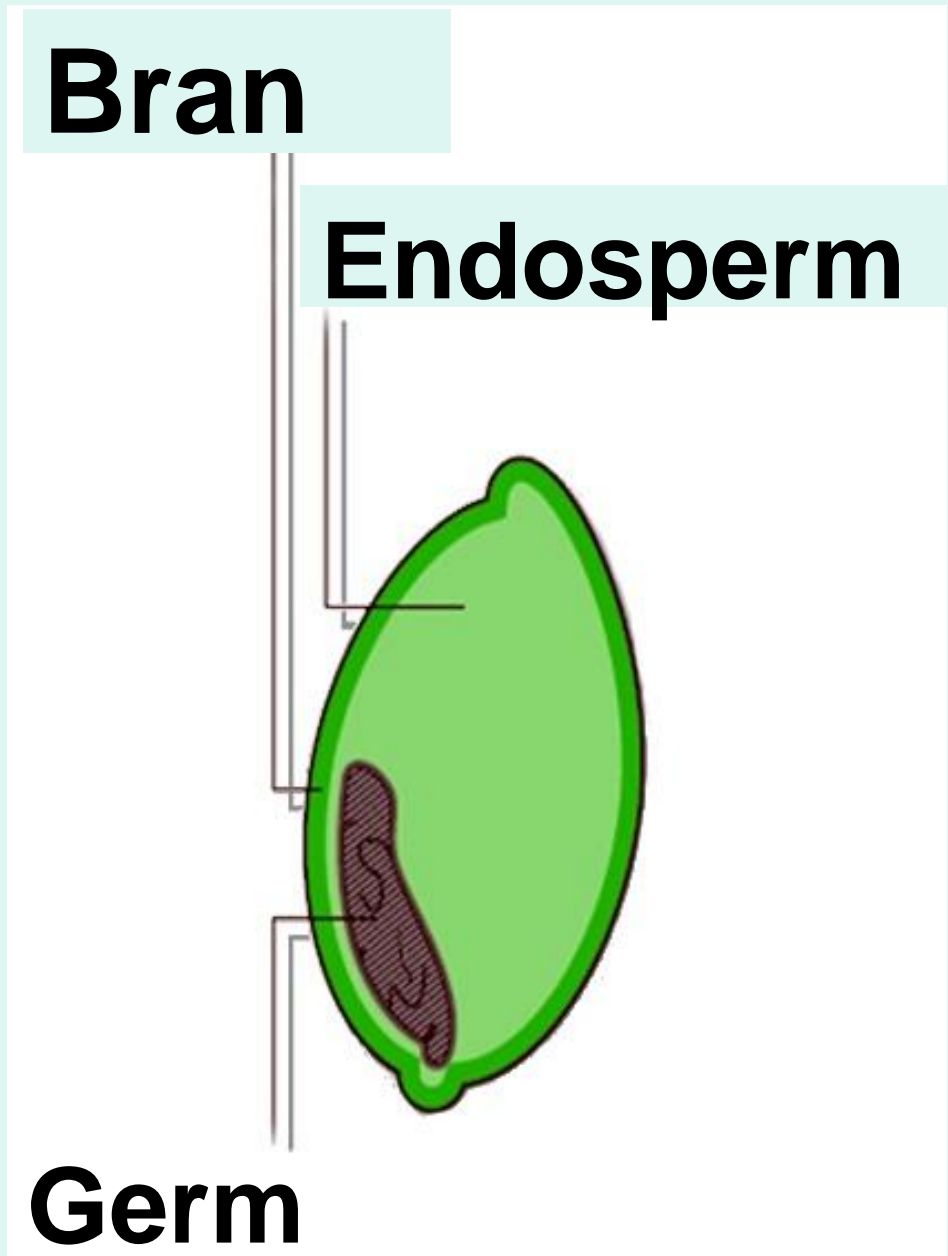
**C. Both A and B**

**D. Neither A or B**



At least half  
your grains  
should be  
whole grains

**Whole grains contain the entire grain seed or “kernel”**



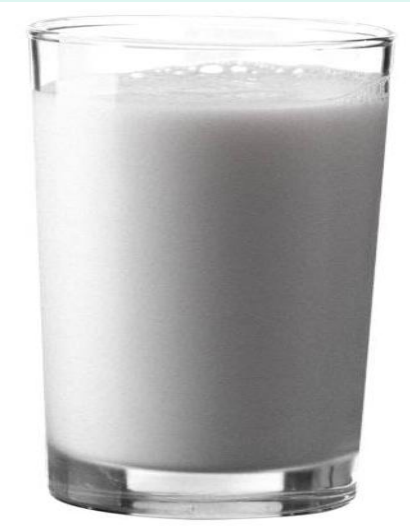
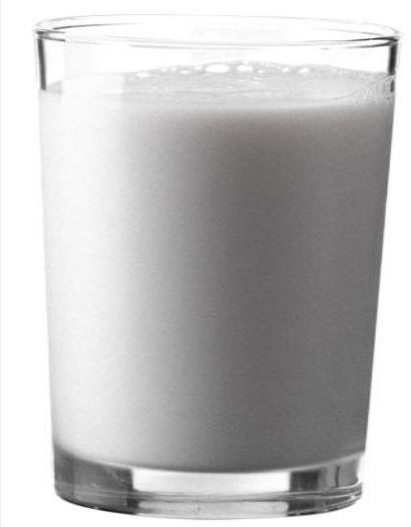
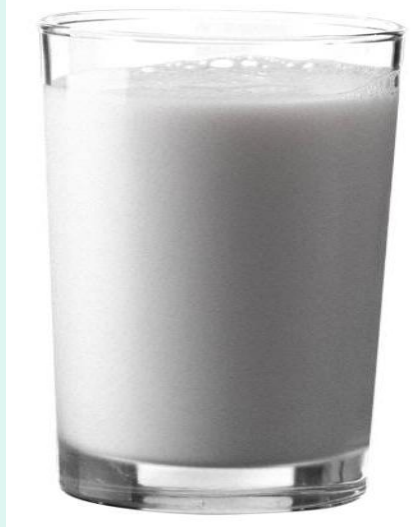
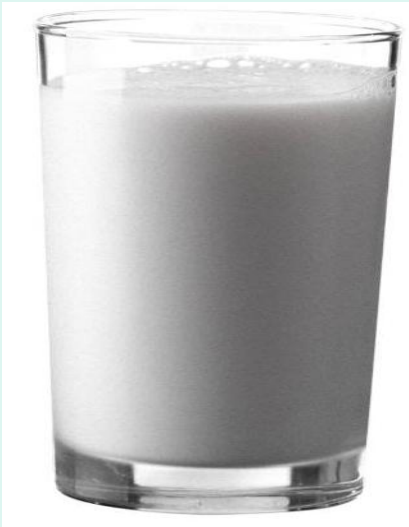
Partially whole grain products providing half or more whole grains per ounce-equivalent serving have **at least** either:

- 51% of total weight as whole grains OR
- 8g of whole grains





# Switching to fat-free or low-fat (1%) milk makes a difference!



**Whole**

165  
calories

**Calories  
saved**

**2%**

125  
calories

**40**

**1%**

100  
calories

**65**

**Fat-free**

85  
calories

**80**

# **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**

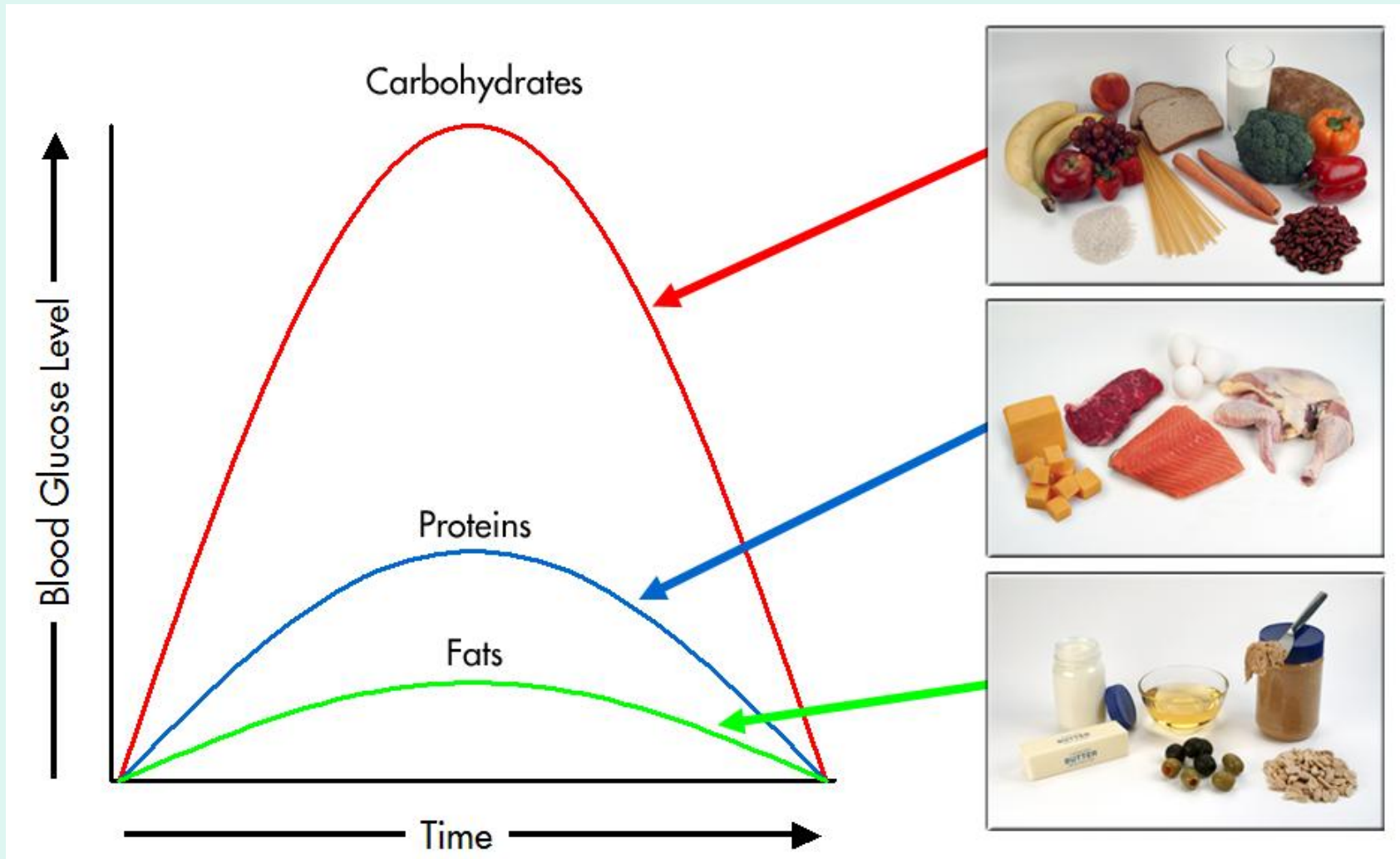
**Can you guess: Which is more nutrient-dense?**

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**B. Whole milk**

**C. They are equally nutrient-dense**

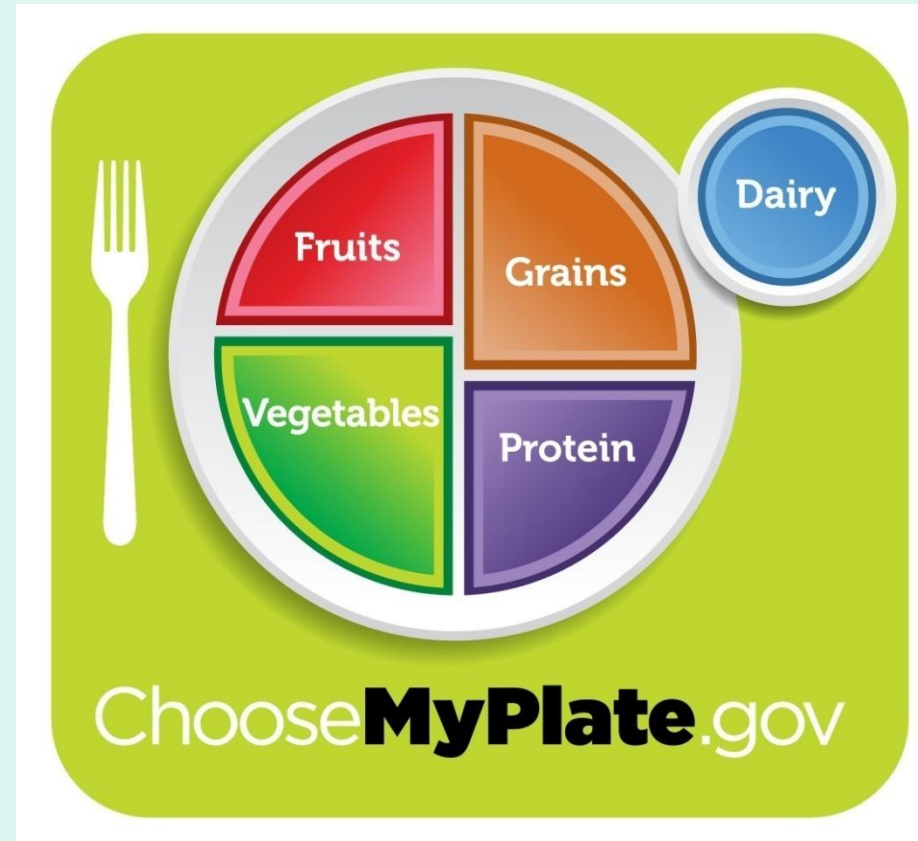
# How Nutrients Affect Blood Sugar



# 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

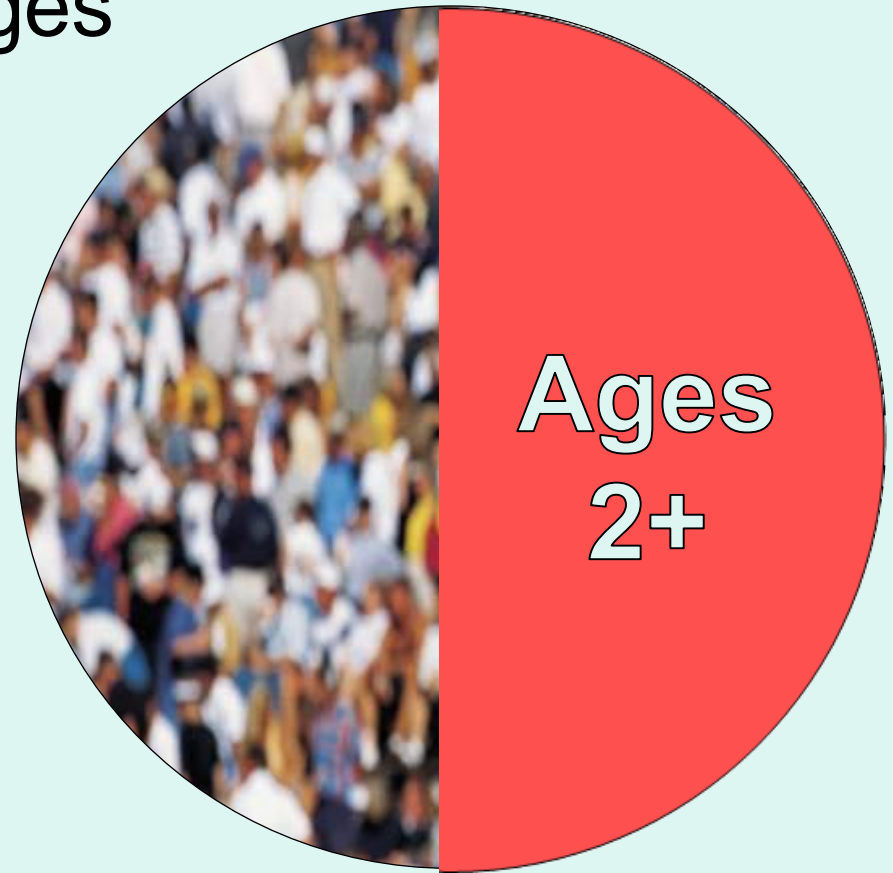
**Can you guess:** People ages 2 and older should reduce daily sodium intake to less than ...

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



ChooseMyPlate.gov

OME Number 0584-0535



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Go

Subjects

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  - Tips & Resources
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  - Kids
  - Weight Loss
- Multimedia
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**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.

**I Want To...**

- Look up a food
- Learn about food groups
- Get a personalized Plan
- Learn healthy eating tips
- Get weight loss information
- Plan a healthy menu
- Analyze my diet
- Ask a question

**Tip of the Day**

Cook together. Eat together. Talk together. Make mealtime a family time!

[Click here for more tips](#)

**10 tips**  
Nutrition Education Series

# 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](http://www.choosemyplate.gov) and [www.diabetes.org](http://www.diabetes.org) websites.