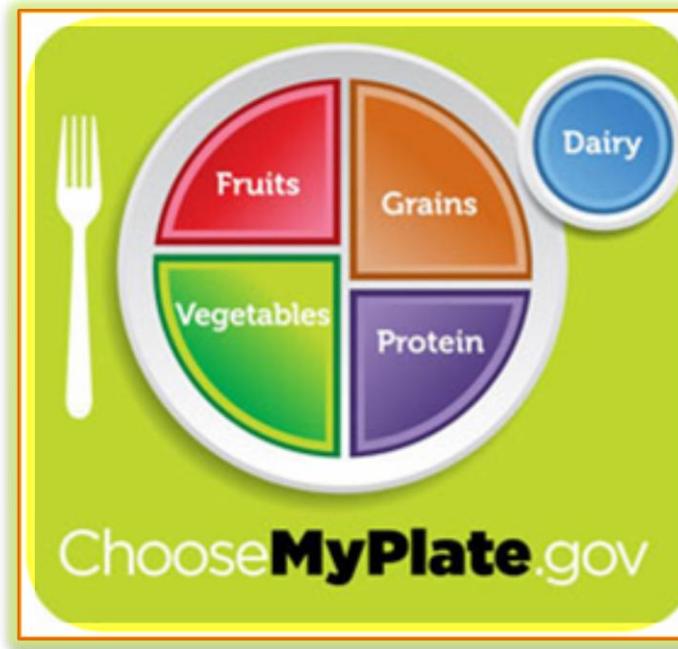


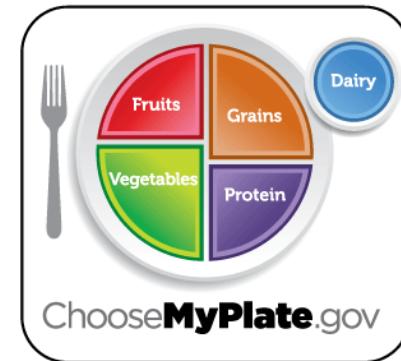
Choose My Plate



Your Guide to a Balanced Diet
and Good Health

What is MyPlate?

- The USDA guidance system to improve the nutrition and wellbeing of Americans.
- Replaced MyPyramid as the major nutrition icon.
- "... Illustrates the five food groups that are the building blocks for a healthy diet using a familiar image- a place setting for a meal. Before you eat, think about what goes on your plate or in your cup or bowl." www.choosemyplate.gov



April 2005-June 2011

June 2011-Present



How is it Different?

- Early Food Guides

<http://www.nal.usda.gov/fnic/history/early.htm>

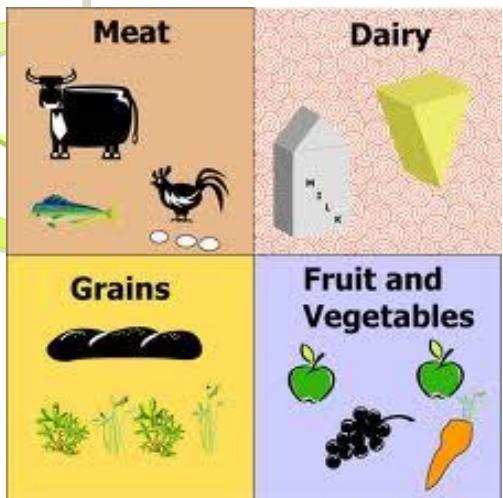
- Basic 4 Food Guide

<http://www.nal.usda.gov/fnic/history/basic4.htm>

- Patterns for Daily Food Choices

<http://www.nal.usda.gov/fnic/history/pat.htm>

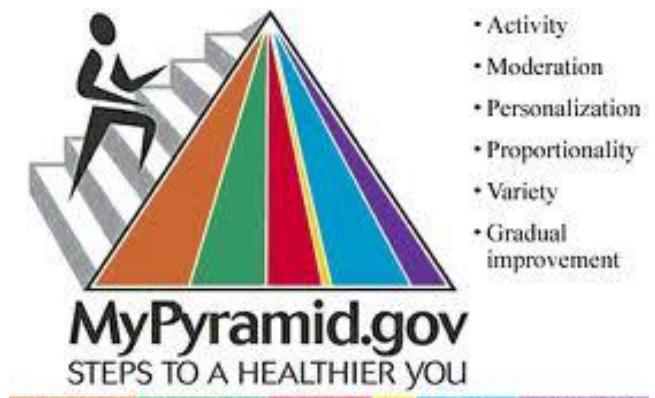
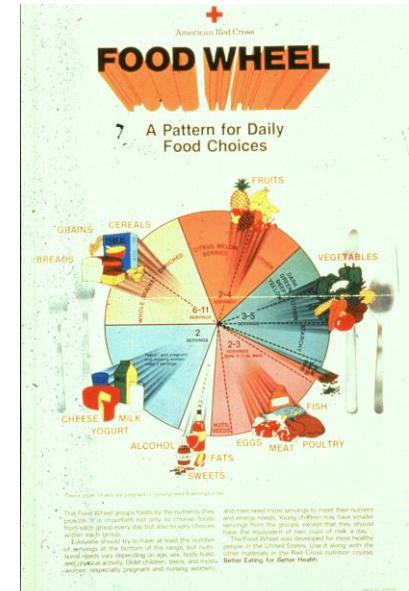
Earlier Models:



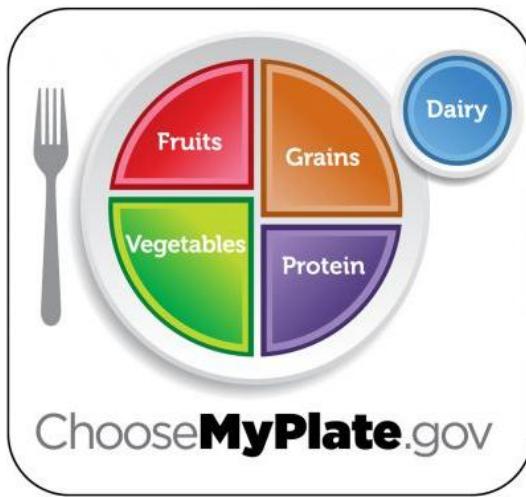
Healthy 4 Life



Dietary Guidelines
from the Weston A. Price Foundation
for Cooking and Eating
Healthy, Delicious, Traditional Whole Foods



Balance of Food Groups



To build a healthy plate:

- 1) Fill $\frac{1}{2}$ of your plate with fruits and vegetables.
- 2) Fill $\frac{1}{4}$ of your plate with grains (preferably whole).
- 3) Fill $\frac{1}{4}$ of your plate with a lean protein source.
- 4) Having a serving of dairy on the side.



Fruits

- Any fruit, fresh, frozen, or canned in **100% juice**
- 1 serving is equivalent to:
 - 1 cup fresh or frozen fruit (size of fist)
 - 1 medium piece of fruit
 - 1 cup 100% fruit juice
 - $\frac{1}{2}$ cup dried fruit



Vegetables

- Any vegetable, fresh, frozen, or canned (with no salt added) or rinsed in a strainer
- 1 serving is equivalent to:
 - 2 cups leafy greens
 - 1 cup raw or steamed vegetables
 - 1 cup of vegetable juice



Paint Your Plate: Health Benefits

- Blue/Purple

- **Benefits:** This dark color protects against heart disease by preventing clot formation and maintains healthy blood pressure
- **Examples:** Blueberries, blackberries, prunes, eggplant, blue potatoes, purple tomatoes, plums, purple onions





Paint Your Plate



- Red
 - **Benefits:** Contain powerful antioxidants that ward off some forms of cancer, and protect against heart attacks
 - **Examples:** Tomatoes and tomato products, watermelon, red peppers, guava, cranberries, strawberries
 - **Hint:** Heating up tomatoes helps your body absorb even more of their nutrients



Paint Your Plate

- Green
 - Benefits
 - Dark green - contain powerful antioxidants and help your body remove cancer-causing toxins.
 - Heart healthy and aid in regulating blood pressure
 - Examples: Broccoli, kale, spinach, collard greens, brussel sprouts, cabbage, green beans, kiwi





Paint Your Plate

- Orange
 - **Benefits:** Important for skin and bone health, and help maintain normal blood sugar
 - **Examples:** Oranges, tangerines, carrots, cantaloupe, pumpkins, sweet potatoes, apricots, orange peppers





Paint Your Plate

- Yellow
 - **Benefits:** Essential to protect vision and help keep your immune system healthy
 - **Examples:** Yellow squash, corn, avocados, endive, banana, lemons

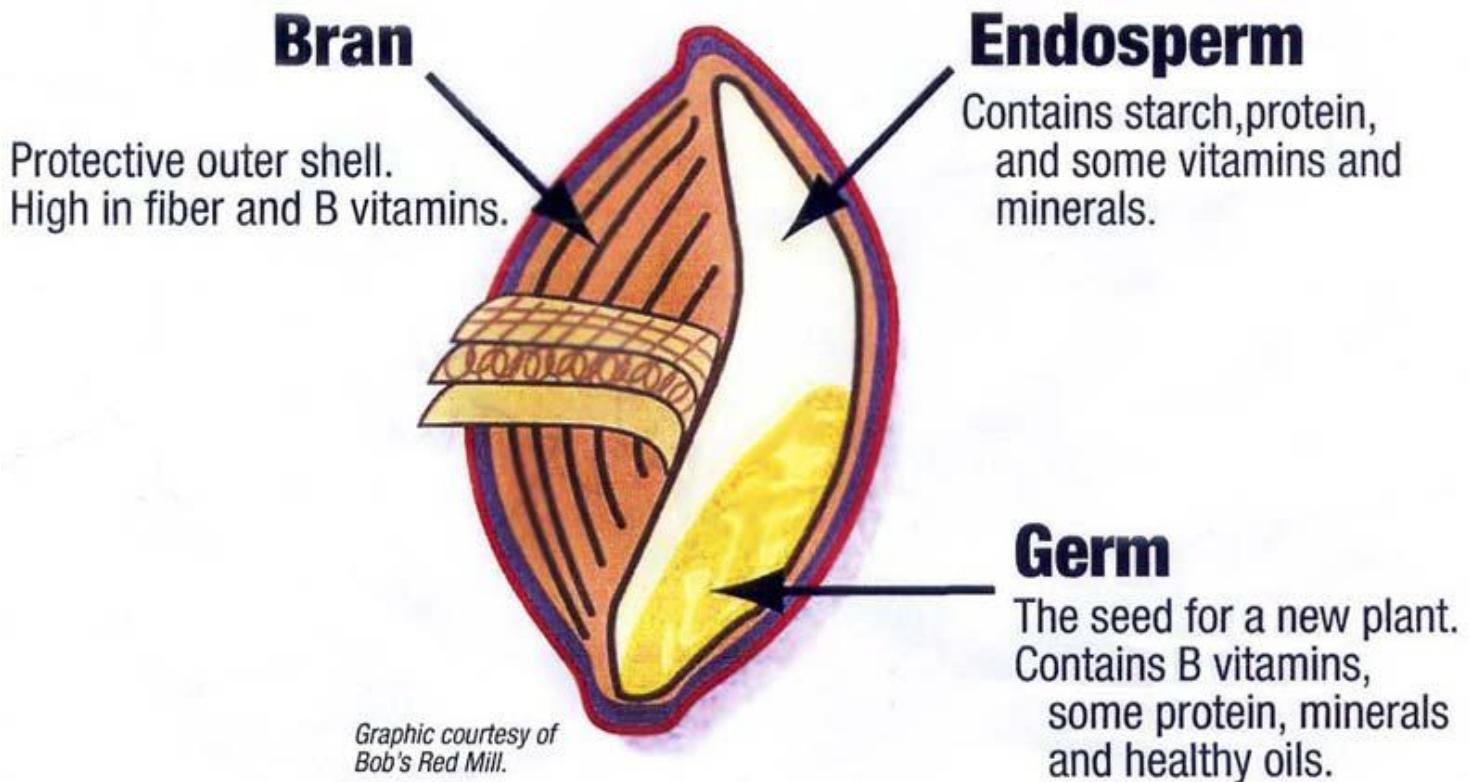




Grains

- Make at least $\frac{1}{2}$ of your daily grain servings whole grains
- Increase whole grain intake by replacing refined grains with whole grains
- 1 oz. of grains is equivalent to:
 - 1 slice of bread
 - 1 cup of ready-to-eat cereal
 - $\frac{1}{2}$ cup of cooked rice, cooked pasta, or cooked cereal

Diagram of a Grain





Refined Grains



- Grains milled to remove the bran and germ
- Milling gives grains a finer texture and improves shelf life
- The milling process also removes the most nutritious parts of the grain
 - Dietary fiber, iron, and many B vitamins

Enriched Grains

- Grain products with B vitamins (thiamin, riboflavin, niacin, folic acid) and iron added
- Refined grains are typically “enriched” to improve their nutritional profile





Whole Grains

- Include the entire grain seed, usually called the kernel
 - consists of 3 main components—the bran, germ, and endosperm
- Whole grains are consumed either as a single food (ex: wild rice or popcorn) or an ingredient in foods (ex: cereals, breads, crackers)





Identifying a Whole Grain

- Look at ingredient list
- The *first ingredient* should include the word **whole** before the grain type
- Examples:
 - Whole wheat or 100% whole wheat
 - Whole grain barley
 - Whole rye
- Other types of whole grains: Buckwheat, bulgur, millet, oatmeal, quinoa, rolled oats, brown or wild rice



Health Benefits of Whole Grains

- Dietary fiber
 - May help reduce blood cholesterol levels
 - May lower risk of heart disease, obesity, and type 2 diabetes
 - Helps maintain proper bowel function, reducing constipation and the likelihood of developing diverticulosis
 - Provides a feeling of fullness



Nutrients in Whole Grains

- B vitamins (thiamin, riboflavin, niacin, folate)
 - Help the body release energy from protein, fat, and carbohydrates
 - Essential for a healthy nervous system
- Iron
 - Used to carry oxygen in the blood



Nutrients in Whole Grains

- Magnesium
 - Used in building bones and releasing energy from muscles
- Selenium
 - Protects cells from oxidation
 - Helps maintain a healthy immune system



Protein Foods

- Make $\frac{1}{4}$ of your plate lean protein
- 1 ounce of protein is equivalent to:
 - 1 ounce of meat, poultry or fish
 - $\frac{1}{4}$ cup cooked beans
 - 1 egg or 2 egg whites
 - 1 tablespoon of peanut butter
 - $\frac{1}{2}$ ounce of nuts or seeds (Ex: 12 almonds, 24 pistachios, 7 walnut halves)



Lean Protein Sources

- Meat: Choose lean cuts
 - Eye of round roast or steak
 - Sirloin tip side steak
 - Top round roast and steak
 - Bottom round roast and steak
 - Top sirloin steak
 - Lean or Extra lean ground beef





Lean Protein Sources

- Poultry
 - Choose skinless, boneless breasts
 - Trim all visible fat
- Turkey
 - Choose lean or extra lean ground turkey



Lean Protein Sources

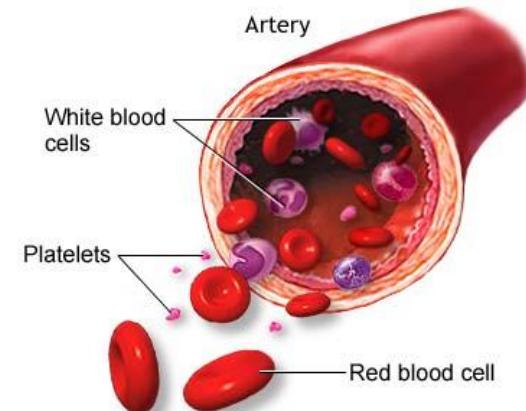
- Eggs
 - Use egg whites whenever possible
 - Note: *New studies recommend eating the egg yolk as many valuable nutrients are missed when eating egg whites only*
- Fish
 - Choose alternative varieties of shellfish to lower cholesterol intake (Ex: scallops, crab, lobster instead of shrimp)





Health Benefits of Protein

- Proteins function as building blocks for bones, muscles, cartilage, skin, blood, enzymes, hormones, and vitamins



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Nutrients in Protein

- B vitamins (thiamin, riboflavin, folate, B6, B12)
- Zinc
 - A mineral necessary for biochemical reactions and proper immune function
- EPA and DHA
 - Two types of omega-3 fatty acids found in varying amounts in seafood that have been shown to play a positive role in heart health



Saturated Fats

- Fats that have no double bonds and tend to remain solid at room temperature
- Higher intakes have been shown to be associated with higher levels of total and LDL cholesterol
- Examples: Full-fat meats and dairy products, hydrogenated shortening, coconut, or palm oils



Cholesterol

- Used in the body for physiological and structural functions
 - The body makes cholesterol and humans do not need to consume this in their diet
 - Varying levels can be found in different animal products: meat, seafood, poultry, eggs, dairy products
-
- <http://www.health.gov/dietaryguidelines/>



Recommendations

- Consume <10% of total calories from saturated fat
 - For a 2,000 calorie diet, this would equal 22 grams
- **Consume <300 mg/day of cholesterol
 - 1 egg yolk = 185 mg cholesterol
 - 3 oz. shrimp (about 4 large) = 166 mg cholesterol



Oils

- 1 teaspoon of oil is equivalent to:
 - 1 tsp. oil (Best choices: olive, canola, soybean, flaxseed)
 - 1 tsp. butter or margarine
 - 1 tsp. mayonnaise
 - $\frac{1}{2}$ Tbsp. peanut butter
 - 1 T. nuts or seeds
 - 1 T. regular salad dressing or 2 T. light dressing
 - 1/8 avocado
 - 8 olives



Oils and Cooking Methods

- Choosing lean cooking methods will help to reduce fat content of meals:
 - Poaching
 - Broiling
 - Baking
 - Sautéeing
 - Grilling
 - Steaming

Health Benefits of Oils



- MUFAs
 - May lower your total cholesterol and low-density lipoprotein cholesterol levels
 - May also help normalize blood clotting
 - May also benefit insulin levels and blood sugar control
- PUFAs
 - Omega 3 fatty acids have been shown to play a positive role in heart health



Nutrients in Oils

- Oils are the major source of monounsaturated fats (MUFAs) and polyunsaturated fats (PUFAs) in the diet
- PUFAs contain some fatty acids that are necessary for health—called "essential fatty acids"
 - Omega-6 PUFAs (liquid vegetable oils)
 - Omega-3 PUFAs (soybean oil, canola oil, walnuts, flaxseed, fish)
- Vitamin E
 - A powerful antioxidant that has may reduce the risk of heart disease and cancer



Dairy



- Include 1 cup of nonfat or low-fat dairy at each meal
- 1 cup of dairy is equivalent to:
 - 1 cup of milk, soymilk (soy beverage), or almond milk
 - 1 cup yogurt
 - 1 ½ ounces of natural cheese
 - 2 ounces of processed cheese



Health Benefits of Dairy

- Intake of dairy products is linked to improved bone health, and may reduce the risk of osteoporosis
- Intake of dairy products is also associated with a reduced risk of cardiovascular disease and type 2 diabetes, and with lower blood pressure in adults
- *Note: It is possible to obtain the same nutrient benefits offered by dairy from alternate food sources and have a healthy diet without dairy*

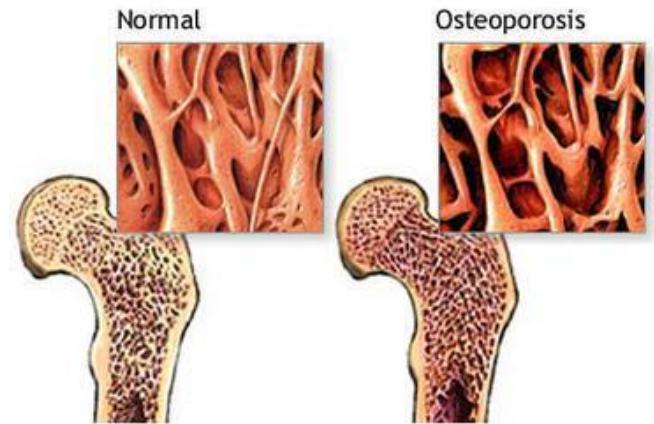


Nutrients in Dairy

- Calcium
 - Used for building bones and teeth and in maintaining bone mass
 - Adequate calcium intake is indicated for the following age groups:
 - Children: 9 years+
 - Adolescent girls
 - Adult women
 - Adults: 51 years+
 - Diets that include 3 cups of dairy a day can improve bone mass



Nutrients in Dairy



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- Potassium
 - Helps to maintain healthy blood pressure
 - Reduces risk of developing kidney stones and experiencing bone loss
- Vitamin D
 - Works to maintain proper levels of calcium and phosphorous, thereby helping to build and maintain bones
 - Can help reduce the risk of bone fractures



MyPlate Key Messages

- **Balancing Calories**

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

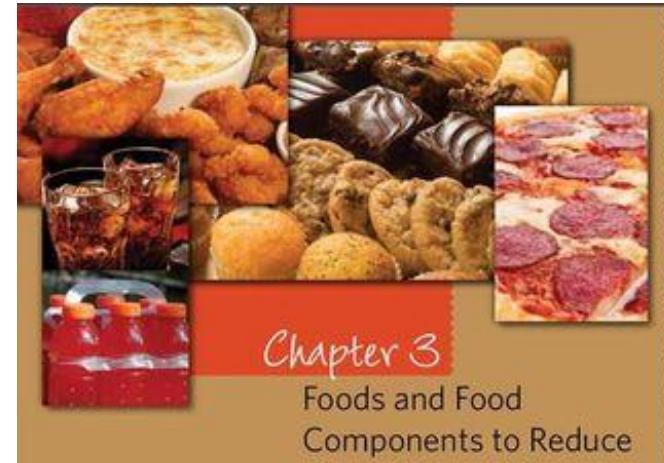
- **Foods to Increase**

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

- **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.

SoFAS



Chapter 3

Foods and Food Components to Reduce

- SoF= Solid Fats
 - Includes saturated fat and trans fatty acids
- AS= Added Sugars
 - Includes sugars that are added to foods during processing, preparation, or at the table
- The USDA food patterns include a SoFAS allowance for each calorie level, formerly known as “discretionary calories”



Trans Fatty Acids

- Trans Fatty Acids
 - Created through the process of hydrogenation, used to make products containing unsaturated fatty acids solid at room temperature
 - Hydrogenation allows fats to become more resistant to becoming spoiled or rancid
 - Consuming too many of these fats has been shown to raise LDL cholesterol and increase risk for heart disease



Trans Fatty Acids

- Examples of Foods:
 - Baked goods (cookies, cakes, frosting, crackers, donuts, pastries, and croissants)
 - Packaged snack foods (chips, crackers, snack mixes)
- How to identify:
 - Look at the ingredient label for the terms **“hydrogenated oil”** or **“partially hydrogenated oil”**
 - Even if the nutrition facts label reads “0 gm trans fat” the food can still contain trace amounts



Other Food Components to Decrease

- Sodium
 - Sodium is an essential nutrient and is needed by the body in relatively small quantities
 - The higher an individual's intake of sodium, the higher their blood pressure
 - The estimated average intake of sodium for all Americans ages 2 years and older is approximately 3,400 mg/day
 - *What is the daily requirement for sodium?*



Sodium

- The daily requirement for the average American is **2,300 mg/day (1 tsp)**
- For certain groups the requirement is **1,500 mg/day**
 - Individuals with hypertension, diabetes, or chronic kidney disease
 - Adults ages 51 years and older





Reducing Sodium Intake

- Use condiments less often and do not add salt to food at meals
- When eating at restaurants, ask that salt not be added to your food or order lower sodium options if available
- Increase the amount of potassium in your diet (works to counteract sodium in the body)



Reducing Sodium Intake

- Read the Nutrition Facts label for information on the sodium content of foods
- Consume more fresh foods and less processed foods
- Eat more home-prepared foods where you have more control over preparation methods
- Use spices, no salt seasonings, juice, or vinegar as flavoring instead of salt



Added Sugars

- Sugars are added to improve sweetness and palatability, serve as a preservative, and provide functional attributes (ex: browning capacity)
- Many foods that contain added sugars often supply calories, but few or no essential nutrients and no dietary fiber
- Both naturally occurring sugars and added sugars increase the risk of dental caries



Added Sugars



- Examples:
 - Any term that has an “-ose” on the end (dextrose, fructose, sucrose, maltose, lactose)
 - Any term that has “syrup” on the end (corn syrup, high-fructose corn syrup, malt syrup, pancake syrup)
 - Any type of sugar (brown sugar, invert sugar, raw sugar, confectioner’s sugar)
 - Dextrin, honey, nectar, molasses



Reducing Intake of Added Sugars

- Drink few or no regular sodas, sport drinks, energy drinks, and fruit drinks
 - Instead, choose water, seltzer, unsweetened tea or coffee
- Eat less cookies, cake, ice cream, candy, and other desserts
 - Select fruit for dessert
- Read the Nutrition Facts label and ingredient label to choose products with less sugar



Sources

- www.choosemyplate.gov
- 2010 Dietary Guidelines for Americans
- <http://www.mayoclinic.com/health/food-and-nutrition/AN01037>
- <http://www.hsph.harvard.edu/nutritionsource/what-should-you-eat/vitamin-e/index.html>
- <http://www.mayoclinic.com/health/cuts-of-beef/MY01387>
- “Color Me Healthy-Eating for a Rainbow of Benefits,” Schaeffer, *Today’s Dietitian*, Nov. 2008
- <http://prezi.com/yk15mtrs6rng/copy-of-my-plate/>
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