



So Much Sodium

Lesson

Goals

Students will learn about how much sodium they should have each day and which foods are high in sodium. Students will also review caloric, fat and fiber intake recommendations.

Objectives

Students will determine the healthiest option for eating at a fast food restaurant based on sodium, calories, fat and fiber content.

Standards

Comprehensive Health: Physical & Personal Wellness

GR.3-S.2-GLE.1

GR.4-S.2-GLE.1

GR.5-S.2-GLE.2

GR.6-S.2-GLE.4

Total Time – 60 minutes

Did you know?

Salt used to be so rare that soldiers were paid with salt instead of money. Actually the word “salary” comes from the word salt.

Materials

- Examples of commonly consumed processed foods
- 1 teaspoon
- Salt
- Copies of fast food nutritional information (end of lesson)
- Copies of recipe (end of lesson)

Background for Teachers

Dietary recommendations vary by age. For children ages 4-8 the recommended amount of sodium is 1200-1900mg, ages 9-13 the recommended amount of sodium is 1500-2200mg. Adults should limit their salt intake to less than 2300mg, which is equal to about 1tsp of table salt. Adults over 50 should consume less than 1500mg, which is about 2/3 tsp of table salt.

Method

Introduction (10 minutes)

1. Review with the class the importance of eating a healthy diet, which includes knowing what the recommendations for daily nutritional intake are. Review what calories, fat and dietary fiber are and their recommended daily intake.
2. Ask the class: *Does anybody know what sodium is? (Salt). What kinds of food would we find sodium in? (Most foods)*
 - a. *Sodium is necessary for our bodies to function correctly. Sodium maintains the balance of fluids in your body, helps transmit nerve impulses and allows your muscles to contract and relax. Humans need at least 500mg of sodium per day for their body to*

- function correctly. If we consume extra sodium our kidneys help get rid of it through our urine.*
- b. However, Americans consume much more sodium than they need. The average American consumes 4,000-6,000mg of sodium each day. That is 8-12 times the amount our body needs to function. Kids your age should consume about 1,800mg of sodium per day. That is about the equivalent of 2/3 teaspoon of table salt. Show this amount to the class. Ask: How many of you think that you consume this amount? Less? More?*
 - c. Some people's bodies cannot handle too much sodium and are not able to get rid of it. In this case, your body retains more water than is necessary. This excess water must be pumped through your blood stream, which can cause a strain on your heart and increases the pressure on your arteries. This leads to high blood pressure (hypertension), which can cause all types of health problems.*

Activity (30 minutes)

1. *Today we are going to look at some sources of sodium and discuss ways that we can reduce our sodium intake.*
2. *Let's name some foods that we think might be high in sodium. Any processed foods, cheese, processed meats, canned soups, salad dressings, chips, crackers, pizza, hamburgers, etc. Write their ideas on the board.*
3. Hand out the nutrition information from various fast food restaurants. Have each student (or group of students) choose two menu items and fill out the nutrition worksheet (end of lesson) for their two items.
4. Have each student or group give a presentation on what food they chose to be the healthiest and why.

Snack & Conclusion (20 minutes)

1. Prepare a low-sodium snack, such as fruit kabobs, which is included at the end of the lesson.
2. Have the class write in their journals one thing they learned about sodium that they did not know before. Then have them write ways that they can reduce the amount of sodium they eat.

Assessment Tools

- Participation
- Journaling

Possible Modifications and Extensions

- Instead of having the class look at the fast food options, have them bring in nutrition labels from their favorite foods. Have them fill out the worksheet for two different items.
- Do a create-a-meal activity. For example, have the class create a turkey sandwich or a burrito and add up the amount of sodium with each new item. You can turn this into a fun math competition of who can do the addition the fastest.
- Discuss ways that people can easily reduce their sodium when ordering out or cooking at home.

Suggested Products

- High sodium items: frozen pizzas, chicken nuggets, cheese, lunchmeats, canned soups, etc.

Make Your Own Fruit Kebabs

Before making the kebabs, discuss with the class how the skewers are allowed to be used (fruit kebabs) and not allowed to be used (poking, stabbing, running, etc.).

- wooden skewers
- different kinds of fruit (you choose)
- whole berries and grapes
- low-fat or fat-free yogurt

Preparation (5 minutes): Place fruit pieces on wooden skewers. Use your creativity to make beautiful designs and patterns. Dip in yogurt and eat. Yum!

Sources

- Sodium content for McDonald's, Taco Bell, Pizza Hut and Dairy Queen were found on their websites on January 31, 2012.
- Sodium content for other products:
http://www.cspinet.org/new/pdf/salt_report_update.pdf

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	Calories	Sodium (mg)	Fat (g)	Fiber (g)
McDonalds				
Big Mac	540	1040	29	3
Grilled Chicken Sandwich	350	820	9	3
Chicken Nuggets (6 pieces)	280	540	18	1
Fries (small)	230	160	11	3
Pizza Hut				
Slice Cheese	240	530	10	1
Pepperoni	250	590	12	1
Taco Bell				
7-Layer Burrito	500	1090	18	12
Bean Burrito	370	980	10	10
Taco Salad (Beef)	770	1270	42	11
Cheesy Nachos	280	230	17	2
Dairy Queen				
Cookie Dough Blizzard (large)	1300	750	52	2

Remember...

Recommended daily intake of calories: **1600-1800 calories**

Recommended daily intake of sodium: **1800mg = 2/3 tsp. of table salt**

Recommended daily intake of total fat: **25-35% of your calories should come from fat (about ¼ cup of olive oil)**

Recommended daily intake of dietary fiber: **5 + your age**

Name of Food Choice A: _____

Name of Food Choice B: _____

Which has the most calories per serving?

Choice A

Choice B

Which has the most sodium per serving?

Choice A

Choice B

Which has the most total fat per serving?

Choice A

Choice B

Which has the most dietary fiber per serving?

Choice A

Choice B

Which food item do you think is the healthiest? Why? _____

Foods to be Cautious About

- **Bacon:** 2 slices is about 280mg
- **Cheese:** 1 slice of cheddar is about 180mg
- **Sandwich Meats:** 1 slice of turkey is about 250mg
- **Pizza:** 1/5 of frozen pepperoni pizza is about 740mg
- **Other Processed Meats:** 1 hotdog is 450-740mg
- **Chips:** 20 plain potato chips is about 180mg
- **Canned Soups:** 1 cup of tomato soup is 610-1110mg
- **Salad Dressings:** 2 Tbsp of ranch dressing is about 300mg
- **Other Sauces:** 2 Tbsp of ketchup or BBQ sauce is 230-510mg

Chili's Sodium Content

- **Boneless Buffalo Wings Appetizer:** 4,590 milligrams (46 McDonald's Chicken McNuggets)
- **Texas Cheese Fries with Chili & Ranch Appetizer:** 5,920 milligrams (17 orders of large McDonald's french fries)
- **Boneless Buffalo Chicken Salad:** 4,310 milligrams (8 slices of Pizza Hut cheese pizza)
- **Ribs Platter:** 6,510 milligrams (6 and a half Burger King Whoppers)
- **Crispy Shrimp Tacos:** 4,760 milligrams (1,100 Goldfish crackers — yes, eleven hundred!)
- **Jalapeño Smokehouse Burger with Ranch:** 6,600 milligrams (6 and a half large cans of Pringles)
- **Brownie Sundae:** 930 milligrams (1 Egg McMuffin with sausage)