

Sodium: How To Change Your Salt Habit Now



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A Little History of Salt



- ❖ As far back as 6050 BC, salt has been an important and integral part of the world's history
- ❖ Salt's ability to preserve food was a foundation of civilization
- ❖ Salt was difficult to obtain and so it was a highly valued trade item



- ❖ The word “**salary**” was derived from the word “**salt**”
- ❖ Used as a method of trade and currency
 - ❖ Roman Soldiers were sometimes paid in salt. “Worth their salt”
 - ❖ A trade in ancient Greece involving exchange of salt for slaves. “Not worth his salt”



- ❖ The word “**salad**” originated from “salt”.
Early Romans would salt their leafy greens and vegetables
- ❖ History in US: Settlers reported that Native Americans made salt at Kanawha, West Virginia before 1755 by boiling brine from salt springs
- ❖ Kanawha Valley supplied the Confederacy with salt during the Civil War

QUIZ!

Test your Sodium Knowledge



Salt

Sodium Chloride

60 percent

40 percent



Na Sodium

Atomic Number: 11

Atomic Mass: 22.99

Cl Chlorine

Atomic Number: 17

Atomic Mass: 35.45

Sea Salt Versus Table Salt



Same basic nutritional value



- ❖ Sea Salt often marketed as more natural and healthy alternative
- ❖ Difference is their taste, texture, and processing
- ❖ Sea salt processed through evaporation of sea water. Leaves some trace minerals and elements add flavor and color (variety of coarseness)
- ❖ Table salt is mined from underground salt deposits. Eliminates trace minerals. Added iodine.



Objectives



- Function of Sodium
- How much do we need?
- Sodium intake as a factor in disease development
- Main Dietary Sources
- Reading Labels
- Salt content of some foods
- Steps to reduce sodium intake/seasoning foods without the salt shaker



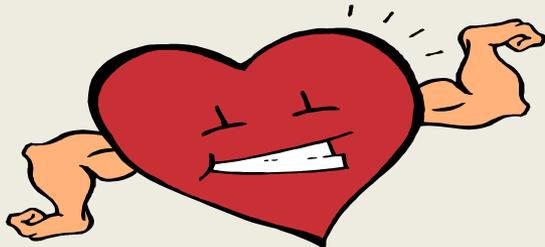
Why do we need sodium?

❖ Helps maintain the right balance of fluids in your body

❖ Helps transmit nerve impulses



❖ Influences the contraction and relaxation of muscles



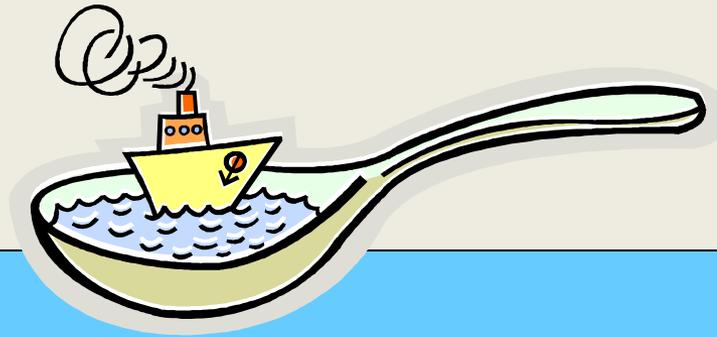
2010 Dietary Guidelines



- Limit Sodium to less than 2300 mg per day
- Limit to 1500 mg if:
 - You are 51 or older
 - You are African American
 - Have High Blood Pressure, Diabetes, or Chronic Kidney Disease

How much salt per day?





1 teaspoon salt=2325 mg sodium

- Need to limit to 1 tsp a day
- Or a little less than 2/3 tsp if over 51 years old, African American, or you have High Blood Pressure, Diabetes, or Chronic Kidney Disease

Hypertension (HTN) 'High Blood Pressure'

- ❖ Tends to develop as people age
- ❖ High intake of sodium early in life might weaken genetic defenses against developing Hypertension
- ❖ Reduce sodium intake while blood pressure is normal to decrease risk of developing Hypertension

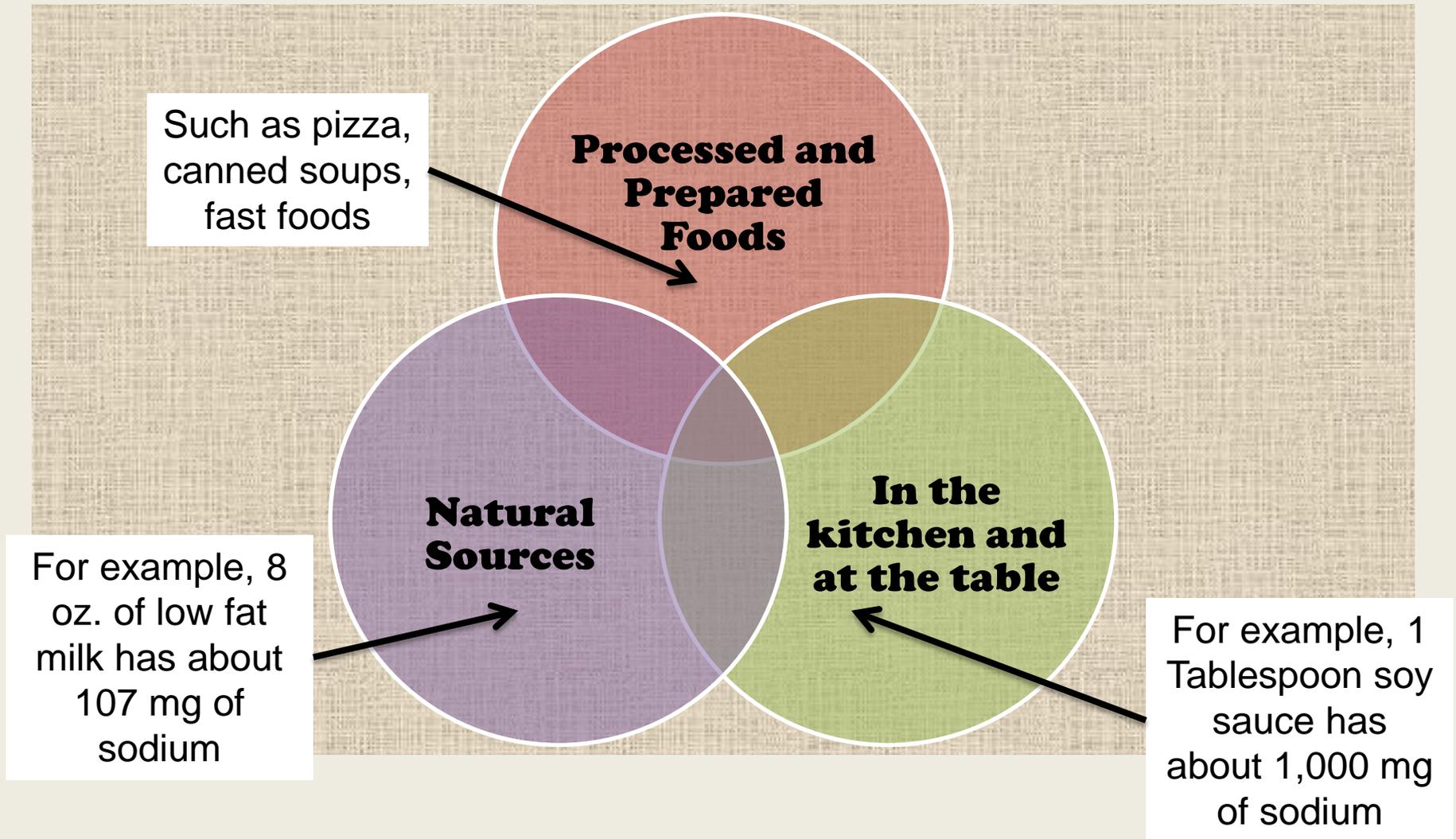


Untreated Hypertension

- ✓ Makes the heart work harder to pump blood through the body
- ✓ Heart Attack
- ✓ Arteriosclerosis or Atherosclerosis
- ✓ Stroke
- ✓ Enlarged Heart
- ✓ Kidney Damage



Sodium: Main Dietary Sources



Sodium Labeling

Nutrition Facts

Serving Size ½ cup (114g)

Servings Per Container 4

Amount Per Serving

Calories 90 Calories from Fat 30

% Daily Value*

Total Fat 3g 5%

Saturated Fat 0g 0%

Cholesterol 0mg 0%

Sodium 300mg 13%

Total Carbohydrate 13g 4%

Dietary Fiber 3g 12%

Sugars 3g

Protein 3g

Vitamin A 80% • Vitamin C 60%

Calcium 4% • Iron 4%

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

		Calories:	2,000	2,500
Total Fat	Less than	65g	80g	
Sat Fat	Less than	20g	25g	
Cholesterol	Less than	300mg	300mg	
Sodium	Less than	2,400mg	2,400mg	
Total Carbohydrates				
Dietary Fiber		25g	30g	

Calories per gram:

Fat 9 • Carbohydrate 4 • Protein 4

- ❖ Nutrition Labels list the Daily Value (DV) for specific ingredients, including sodium
- ❖ The DV for sodium is 2400 mg
- ❖ The sodium content of food is listed in mg and as a percent of the daily value
- ❖ Amount of sodium listed per serving includes sodium naturally present in food as well as sodium added during processing

More about Sodium Labels

- ❖ Ingredients for all foods must be listed on the label
- ❖ Ingredients are listed in descending order by weight
- ❖ Salt is the major, but not the only source of sodium in food products
- ❖ Any ingredient that has sodium, salt or soda as part of its name contains sodium
- ❖ Soy sauce and other condiments used also contribute sodium



Example



Ingredients: Potatoes, vegetable oil, whey, **salt**, dried milk solids, sour cream, **onion salt**, **monosodium glutamate**, dried parsley, lactic acid, **sodium citrate**

Specific Health Claims

- Health Claims can be made about sodium for food products that meet certain requirements (For example “A diet low in sodium may reduce the risk of high blood pressure”)
- In order to make a health claim about Na and HTN, the food must be low or very low in sodium



Terms that help reduce sodium intake



- Sodium free: Less than 5 mg per serving
- Very low sodium: 35 mg or less per serving
- Low sodium: 140 mg or less per serving
- Reduced or less sodium: At least 25 percent less per serving than the referenced food

Frozen Peas

Serving Size ½ cup

Servings Per Container about 3

Amount Per Serving

Calories 60 Calories from Fat 0

% Daily Value*

Total Fat 0g 0%

Saturated Fat 0g 0%

Cholesterol 0mg 0%

Sodium 125 mg 5%

Total Carbohydrate 11g 4%

Dietary Fiber 6g 22%

Sugars 5g

Protein 5g

Vitamin A 15% • Vitamin C 30%

Calcium 0% • Iron 6%

* Percent Daily Values are based on a 2,000 calorie diet.

Canned Peas

Serving Size ½ cup

Servings Per Container about 3

Amount Per Serving

Calories 60 Calories from Fat 0

% Daily Value*

Total Fat 0g 0%

Saturated Fat 0g 0%

Cholesterol 0mg 0%

Sodium 380 mg 16%

Total Carbohydrate 12g 4%

Dietary Fiber 3g 14%

Sugars 4g

Protein 4g

Vitamin A 6% • Vitamin C 10%

Calcium 2% • Iron 8%

* Percent Daily Values are based on a 2,000 calorie diet.

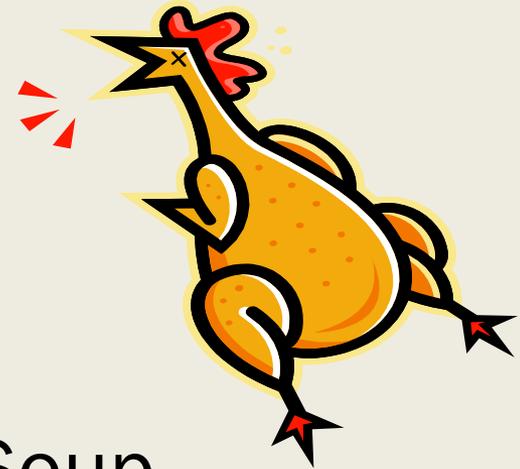
How much sodium in chicken?

1/2 Chicken Breast

Frozen Chicken Pot Pie

1 C. Canned Chicken Noodle Soup

Fast Food Chicken Dinner



How much sodium in chicken?

1/2 Chicken Breast= 69 mg sodium

Frozen Chicken Pot Pie= 907mg sodium

1 C. Canned Chicken Noodle Soup= 1,107 mg

Fast Food Chicken Dinner= 2,243 mg

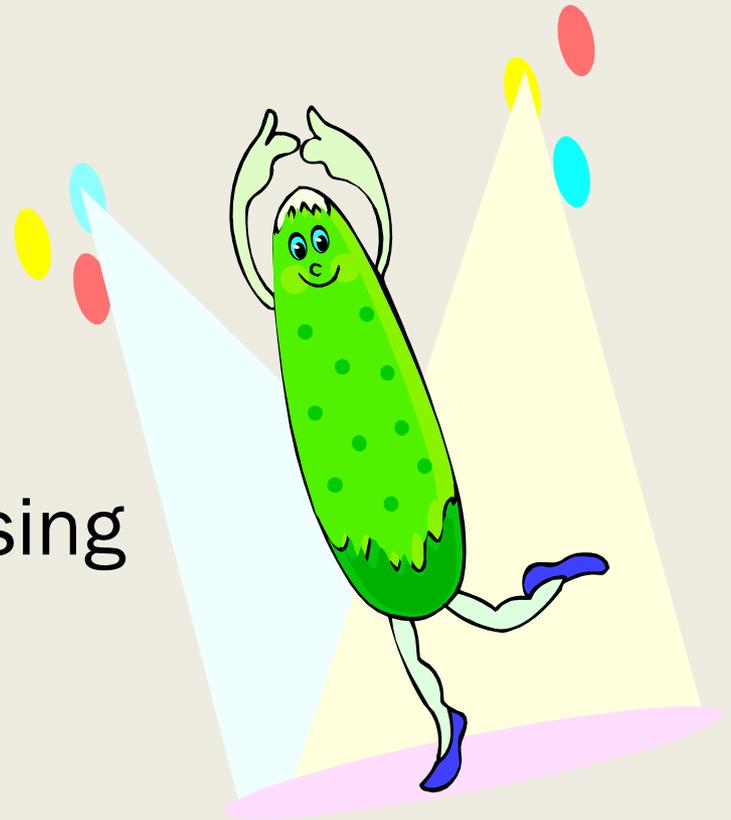
How much sodium in cucumbers ?

7 slices fresh cucumber

1 sweet pickle

Cucumber with salad dressing

Dill Pickle



How much sodium in cucumbers ?

7 slices fresh cucumber=2 mg sodium

1 sweet pickle=128 mg

Cucumber with salad dressing=234 mg

1 Dill Pickle=928 mg

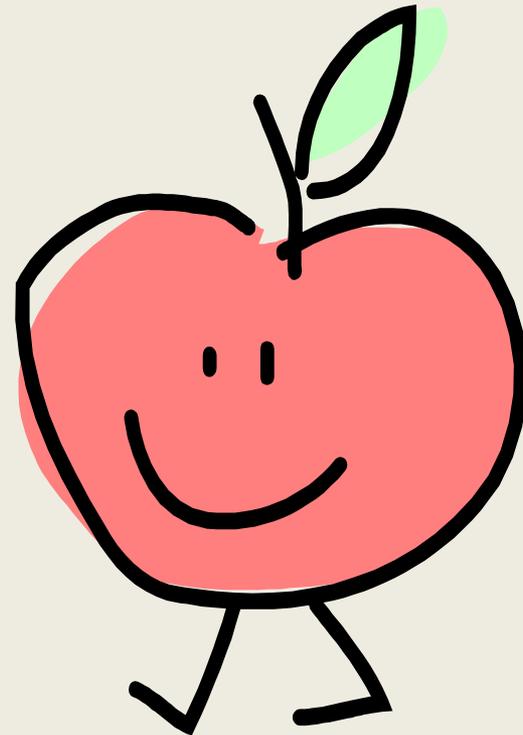
How much sodium in apples ?

1 Apple

1/2 C. Applesauce

1/8 Frozen Apple Pie

1 Fast Food Apple Pie



How much sodium in apples ?

1 Apple=less than 2 mg sodium

1/2 C. Applesauce=3 mg sodium

1/8 Frozen Apple Pie=208 mg sodium

1 Fast Food Apple Pie=400 mg sodium

Steps to Reduce Sodium



- ❖ Use a salt shaker with less holes or just keep the salt shaker off of the table
- ❖ Use more fresh fruits, vegetables, and meats. The more processed the food is, the more sodium it may contain. (See Table 1)
- ❖ Use canola oil or olive oil instead of butter or margarine in cooking

More Steps to Reduce Sodium

- ❖ Check Food Labels for the words of salt or sodium. Salt is often used as a preservative or flavoring agent (See Table 2)
- ❖ Season foods with herbs or spices rather than salt (See Table 3)
- ❖ Make your own condiments, dressings and sauces that are low sodium
- ❖ Taste your food before you salt it!

Additional Steps to Reduce Sodium

- ❖ Buy fresh, plain frozen, or canned “with no salt added” vegetables
- ❖ Use fresh poultry, fish, and lean meat, rather than canned or processed types
- ❖ Cook rice, pasta and hot cereals without salt. Cut back on instant or flavored rice, pasta and cereal mixes
- ❖ Rinse canned foods, such as tuna

IMPORTANT!!!

CAUTION

DO NOT USE SALT SUBSTITUTE, ESPECIALLY THOSE THAT CONTAIN POTASSIUM, WITHOUT FIRST TALKING WITH YOUR PHYSICIAN

Make Foods Tasty Without Using Salt



- Beef-Bay leaf, marjoram, nutmeg, onion, pepper, thyme
- Pork-Garlic, onion, sage, pepper, oregano
- Chicken-Ginger, marjoram, poultry seasoning, rosemary
- Fish-Curry powder, dill, dry mustard, lemon juice, paprika, pepper

Make Foods Tasty Without Using Salt



- Carrots-Cinnamon, cloves, marjoram, nutmeg, ginger, lemon peel, orange peel
- Green Beans-Dill, curry, lemon juice, oregano, tarragon, thyme
- Greens-Onion, pepper
- Tomatoes-Basil, bay leaf, dill, marjoram, onion, oregano, pepper

Thank You For Your Participation

Questions

Comment



Concerns

Questions