Sodium – Where Is It and Why Does it Matter?

Sodium, generally in the form of salt, is a mineral that is regularly added to foods for flavoring and preservation. It is a critical mineral for the human body, so you do need some sodium (a very small amount) in your diet. Your nervous and cardiovascular systems cannot operate properly without it. However, the average American gets too much sodium. Too much sodium increases a person's risk for high blood pressure, which can lead to heart disease and stroke. Heart disease is the leading cause of death in the U.S.

What's the Problem?

High blood pressure and stroke may seem a long way off for teens. According to the American Heart Association, children with high-sodium diets are almost 40% more likely to have elevated blood pressure than those with lower-sodium diets. About 1 in 7 youth aged 12 to 19 years old had high blood pressure (hypertension) or raised blood pressure. Youth with high blood pressure are more likely to have high blood pressure when they are adults. Raised blood pressure is a major cause of heart disease. Therefore, eating a diet lower in sodium can help lower blood pressure, and thus may prevent heart disease later in life.

How Much Is Recommended?

The 2020-2025 Dietary Guidelines for Americans recommend Americans ages 14 years old and older eat no more than 2,300 milligrams (mg) of sodium a day. For comparison, 2,300 mg is the amount in about a teaspoon of salt. Lower consumption — no more than 1,500 mg per day, about two-thirds of a teaspoon of salt — is recommended for younger children, middle-aged and older adults, African Americans, and people with high blood pressure. With most Americans getting much more than they need — 3,400 mg of sodium per day, on average – it easy to see that there is room for improvement in the American diet.

How Does Sodium Work in the Body?

Some sodium is necessary because it has many important jobs — sending nerve signals throughout the body, tightening and relaxing muscles, and maintaining proper fluid balance. The kidneys regulate the body's sodium level by getting rid of any excess. But if there's too much sodium in the blood, the kidneys can't keep up. Excess sodium in the blood pulls out water from the cells; as this fluid increases, so does the volume of blood. That means more work for the heart just to do its everyday job of pumping blood, which increases pressure in the blood vessels. Over time, this extra work takes its toll, and a person's chances of suffering from heart disease goes up.

Sodium by the Numbers

1,500 mg

- Recommended limit for young children, middle-aged and older adults, African Americans, and people with high blood pressure

2,300 mg

- Recommended limit for Americans ages 14 years old and older

3,400 mg

- What most Americans get in their diet

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Sources of Sodium

Most of the sodium in our diet comes from salt. The words “salt” and “sodium” are often used interchangeably, but they don't mean the same thing. The chemical name for salt is *sodium chloride*; salt is 40% sodium and 60% chloride.

Salt is the source of about 90% of sodium in the diet. But most salt doesn’t come from adding salt during cooking or at the table -- it comes from processed foods and restaurant meals.

Even though sodium plays a key role in many foods, more salt is often added than is necessary. Keep in mind that sodium levels vary in the same foods depending on the brand or restaurant.

1 teaspoon of salt = 2,300 mg of sodium

According to national data about Americans’ eating habits, these foods are the leading contributors to the sodium young people eat:


Pizza


Breads and rolls


Processed meats (such as bacon, sausage, cold cuts, and hot dogs)


Savory snacks (such as chips & pretzels)


Sandwiches (including burgers)


Cheese


Chicken patties, nuggets, and tenders


Pasta mixed dishes


Mexican mixed dishes (such as burritos and tacos)


Soup

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Read the Label

The sodium content can be found on the Nutrition Facts label. You can find the percentage of daily value (% DV) on the label, or by dividing the amount of sodium in a serving by 2,300 mg.

20% DV or more of sodium per serving is considered high.

5% DV or less of sodium per serving is considered low.

Sometimes it's easy to tell when foods taste salty. But other higher sodium foods are deceptive, such as bread, because they don't taste salty.

Then there are foods that taste salty, but they are lower in sodium. For example, with 120 mg per 1/4 cup serving, a store brand of salted mixed nuts has just 5% of the daily value for sodium. These examples mean that you have to pay special attention to sodium content when shopping and eating out and also pay attention to portion sizes.

Even though sodium plays a key role in many foods, more salt is often added than is necessary. Going for less-processed foods and making more meals at home are great ways to help control the sodium you eat.

Sodium Scavenger Hunt

Hands-on activities help young people learn. The *Sodium Scavenger Hunt* can be done several ways depending on the age of participants, the type and format of the meeting, and the time available. Whichever format you use, emphasize the key takeaways when you discuss the table.

- Before a virtual meeting, ask participants to gather several items. Share your screen with a blank table. Ask participants to share the information from their item and type it into the table. Then discuss conclusions that can be drawn from the group's table.
- Have participants bring their food items to an in-person meeting. Allow time for them to complete the table at the meeting. Draw the table outline on flip chart paper and have the participants fill in one or more of their items on the table. Have participants add items. Consider doing a low-sodium table and a high-sodium table.
- Have participants complete the table on their own before the meeting. Then when the group meets, whether in person or virtually, have them discuss what they learned.

Key Takeaways

- In general, Americans get more sodium in their diet than recommended.
- A high sodium diet is associated with heart disease, the leading cause of death in the U.S.
- You can find the amount of sodium by using the Nutrition Facts label.
- There are many ways to reduce the amount of sodium (salt) in your diet.

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Sodium Swaps

Sometimes a small adjustment can bring big results. Here are some ways to reduce sodium in your diet.

1. ***Eat mostly fresh foods.*** Include a variety of fresh fruits and vegetables. If you start with unsalted, fresh foods and prepare them yourself, you can exercise better control over your sodium intake. Choose lower sodium options for protein foods, such as fresh or frozen lean cuts of meat, chicken, seafood, eggs, or dried beans.

2. ***Prepare your own meals*.** Most of the sodium we eat comes from restaurant meals and processed foods, including canned vegetables and soups, pasta sauces, frozen entrees, lunch meats, and snack foods. Restaurant food tends to be higher in sodium compared with home-cooked meals. Increase the number of meals you prepare and eat at home as a general approach to reducing sodium intake.

3. ***Explore new flavors and make your own.*** People learn to like saltier foods when they eat them frequently. You can learn to like foods that taste less salty—try alternative flavorings such as fresh herbs, spices, or garlic; lemon or lime juice; or flavored vinegars. Cut back on salt by making your own blend of seasonings such as taco seasoning rather than prepared mixes.

4. ***Read labels.*** The Nutrition Facts label on packaged food lists milligrams of sodium per serving, so note the amount and how many servings the container holds. The percent daily value (% Daily Value or % DV) is based on 2,300 mg, so if your own daily sodium limit is lower, for you the amount of sodium in a serving is actually a higher percentage than the label indicates.

5. ***Compare and swap*.** Look for lower-sodium alternatives to higher-sodium foods at the grocery store. Always check the Nutrition Facts label; if there is more than 150 mg of sodium per serving, look for a lower-sodium version, reduce portion sizes, or have less frequently.

6. ***Reduce portion size.*** Less food means less sodium. Prepare smaller portions at home. Consume less when eating out—choose smaller sizes, split an entrée with a friend, or take home part of your meal.

7. ***Reduce frequency.*** Along with reducing portions sizes, if some of your favorites are high in sodium, don't eliminate them completely, but have them less often.

8. ***Take care with condiments.*** Sodium is found in many condiments besides ordinary table salt — including soy sauce, Worcestershire sauce, salad dressings, ketchup, seasoned salts, pickles, and olives. Limit amount or look for alternatives.

9. ***Reduce the amount of bread, chips, and crackers you eat.*** Even though they may not taste salty, store-bought breads, chips and crackers, and ready-made sandwiches and pizzas contribute large amounts of sodium to the diet. Some breads have 230 mg of sodium per serving—10% of the daily value in just 1 slice. Use the Nutrition Facts label to identify breads with less than 150 mg of sodium per slice and be aware of portion sizes.

10. ***Make lower-sodium choices at restaurants.*** When dining out, ask for your meal to be prepared without salt and request that sauces and salad dressings be served on the side, then use less of them. You can also ask for a lemon or lime wedge to add more flavor to your food. Before you go out to eat, check to see if the restaurant has nutrition information posted on their website. You can also ask if nutrition information is available and then choose options that are lower in sodium.

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Sodium Scavenger Hunt

Go on a scavenger hunt in your cupboards and refrigerator to locate sources of sodium. Collect at least five or six different foods and try to get different types of foods. If it is a food that does not have a food label (such as fresh fruit or vegetables), you can find expanded nutrient profiles in Food Data Central of the U.S. Department of Agriculture https://fdc.nal.usda.gov. Then use the information from the label to complete the table below.

The recommended amount of sodium is no more than 2,300 mg. You can find the percentage of daily value (%DV) on the Nutrient Facts label, or you can it by dividing the amount of sodium in a serving by 2,300 mg. As a general guide: 5% DV or less of sodium per serving is considered low, and 20% DV or more of sodium per serving is considered high. What conclusions can you draw from your table?

Example Food Item	Serving Size	Sodium Content (per serving)	Sodium Level (%DV)	Sodium Swap
Carrots, fresh	3 oz	65 mg	3%	Low sodium food - none needed
Chicken & white bean soup (store bought)	1 container	1,420 mg	62%	• Lower-sodium soup • Homemade soup

Food Item	Serving Size	Sodium Content (per serving)	Sodium Level (%DV)	Sodium Swap

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Sodium Scavenger Hunt

Food Item	Serving Size	Sodium Content (per serving)	Sodium Level (%DV)	Sodium Swap

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