

Shopping for Health: Sodium¹

Wendy Dahl and Lauren Foster²

Sodium is a mineral found in table salt. While sodium is necessary for the body to maintain fluid balance and blood volume, consuming excess sodium may lead to high blood pressure and heart disease or stroke.

How much sodium do I need?

For optimum health, it is recommended that adults not exceed 2,300 mg of sodium (USDHHS and USDA 2020), which is the equivalent of about one teaspoon of salt per day. The sodium recommendation for healthy adults is 1,500 mg per day (National Academies of Science 2019). Most people consume far more sodium than they require.

Individuals with high blood pressure or other health conditions may be recommended by their doctors to follow a low-sodium diet. Most low-sodium diets limit sodium intake to no more than 1,500 mg per day (American Heart Association n.d.).

What foods are high in sodium?

In the United States, the main sources of sodium in the diet are breads and rolls, sandwich meats, pizza, poultry, soups, sandwiches, cheese, pasta and meat dishes, and savory snacks (CDC 2012). Salt is often added during processing to preserve foods and add flavor. For example, one slice of a typical frozen pizza has about 900 mg of sodium (USDA-ARS 2019). Boxed meals with prepackaged flavorings are usually high in sodium as well—a single serving may contain more than 900 mg of sodium (USDA-ARS 2019).

Avoiding highly processed foods may greatly decrease your daily sodium intake.

Adding condiments such as salad dressings or soy sauce may significantly increase the sodium content of foods. One tablespoon of soy sauce contains about 1,000 mg of sodium, and one tablespoon of salad dressing typically contains about 200 mg (USDA-ARS 2019). Choose lower-sodium options when they are available. Also, consider using an oil and vinegar dressing with herbs and spices instead of commercial salad dressings.

Shopping for Lower-Sodium Foods

A lower-sodium diet does not require cutting out specific food groups, but it does require conscientious shopping. Different brands of the same food may have dramatically different sodium contents, so it is important always to read the food labels. According to the FDA, “low-sodium” foods contain 140 mg or less of sodium per typical serving (USDHHS 2013). Foods with less than 5 mg of sodium can be labeled “salt-free” or “sodium-free.” “No salt added” does not necessarily mean that the food is a low-sodium food. It may naturally contain sodium.

Vegetables

When buying vegetables, consider how they have been processed. Canned vegetables often contain high sodium levels, added to enhance flavor and shelf life. Choosing fresh or frozen vegetables (without sauce), and canned

1. This document is FSHN10-06, one of a series of the Department of Food Science and Human Nutrition, UF/IFAS Extension. Original publication date July 2010. Revised January 2011, November 2012, February 2016, August 2019, July 2020, and June 2024. Visit the EDIS website at <https://edis.ifas.ufl.edu> for the currently supported version of this publication.

2. Wendy J. Dahl, associate professor; and Lauren Foster, former student, Department of Food Science and Human Nutrition; UF/IFAS Extension, Gainesville, FL 32611.

vegetables labeled “low sodium” or “no added salt” will help decrease your daily sodium intake, as long as you do not add salt at the table or during preparation. Table 1 lists various vegetables and their sodium contents based on how they have been processed (USDA-ARS 2019).

Bread

Although breads may not always taste “salty,” they may be high in sodium. Table 2 lists different types of breads and the amount of sodium in each (USDA-ARS 2019). Low-sodium alternatives to bread include corn tortillas, unsalted crackers, and lower-sodium, sprouted breads.

Meat

As with vegetables, meats vary in sodium content depending on their preparation. Processed meats, such as luncheon and smoked or cured meats, are high in sodium. Table 3 compares the amounts of sodium in fresh meat roasts to those in processed luncheon meats (Agarwal, Fulgoni, and Spence 2015).

The recommended serving size for most luncheon meats is 2 oz. However, many restaurant-style deli sandwiches provide about 5–6 oz of meat. One 2 oz serving of salami provides almost one-third of the recommended daily amount of sodium. If you were to prepare a sandwich with two slices of bread and 2 oz of luncheon meat, you would have already consumed nearly half of the recommended 1,500 mg of sodium for a day!

Cereal

Ready-to-eat breakfast cereals vary greatly in their levels of sodium. While there are some low-sodium cereals available, most have added salt. Sodium contents range from under 10 mg per serving in shredded wheat to over 350 mg per serving in some breakfast cereals. Examples of low-sodium cereals are shown in Table 4 (USDA-ARS 2019).

Cheese

Processed cheeses are generally high in salt and should be limited in lower-sodium diets. Some grocers carry low-sodium cheeses. Ricotta offers a lower-sodium alternative to cheese spread. The sodium contents of various cheeses are listed below in Table 5 (USDA-ARS 2019).

Snacks

Many popular snack foods, such as chips and crackers, are high in added salt. Pretzels have about 500 mg of sodium per serving, and a bowl of microwave popcorn has about

350 mg (USDA-ARS 2019). As with other food groups, some snacks may not taste “salty” but still contain a lot of sodium. For example, one snack-size pudding cup may have almost 200 mg of sodium (USDA-ARS 2019).

To satisfy the need to munch without the extra salt, you might try fruit or unsalted nuts as alternatives. Another option may be to look for brands that offer unsalted or lower-sodium versions of potato chips and pretzels that are unsalted.

Be an informed shopper!

Always be sure to read food labels to check sodium contents. The amount of sodium per serving is listed in milligrams (mg) on the Nutrition Facts panel. The Daily Value (DV) for sodium is 2,300 mg. When shopping, choose foods with a DV of 5% or less. Foods with more than 20% DV are considered high in sodium.

The next time you are grocery shopping, keep the following general guidelines in mind to limit sodium intake:

- Choose fresh, frozen, or low-sodium canned vegetables.
- Choose roasted meats rather than meats that have been smoked, cured, dried, or canned.
- Choose low-sodium salad dressings instead of regular dressings.
- Choose low-sodium soups or prepare low-sodium homemade soups.
- Avoid pre-packaged biscuit and waffle mixes. Instead, choose low-sodium cereals or oatmeal.
- Substitute dried or fresh herbs for higher-sodium condiments.
- Substitute unsalted crackers and corn tortillas for high-sodium snacks and breads.

References

Agarwal, S., V. L. Fulgoni, 3rd, L. Spence, and P. Samuel. 2015. “Sodium intake status in United States and potential reduction modeling: An NHANES 2007–2010 analysis.” *Food Sci Nutr.* 3 (6): 577–85.

American Heart Association. “How much sodium should I eat?” <https://www.heart.org/en/healthy-living/healthy-eating/eat-smart/sodium/how-much-sodium-should-i-eat-per-day>

CDC 2012. “Vital signs: food categories contributing the most to sodium consumption—United States, 2007–2008”. *MMWR Morb Mortal Wkly Rep.* 61 (5): 92–8.

Graudal, N., G. Jurgens, B. Baslund, and M. H. Alderman. 2014. “Compared with usual sodium intake, low- and excessive-sodium diets are associated with increased mortality: A meta-analysis.” *Am J Hypertens.* 27 (9): 1129–37.

National Academies of Sciences, Engineering, and Medicine. 2019. *Dietary Reference Intakes for Sodium and Potassium*. Washington, DC: The National Academies Press. <https://doi.org/10.17226/25353>

US Department of Agriculture, Agricultural Research Service (USDA-ARS). 2019. *FoodData Central*. <https://fdc.nal.usda.gov/>

US Department of Health and Human Services (USDHHS). 2013. Guidance for Industry: A Food Labeling Guide (9. Appendix A: Definitions of Nutrient Content Claims). <https://www.fda.gov/regulatory-information/search-fda-guidance-documents/guidance-industry-food-labeling-guide>

U.S. Department of Agriculture and U.S. Department of Health and Human Services. Dietary Guidelines for Americans, 2020-2025. 9th Edition. December 2020. Available at [DietaryGuidelines.gov](https://www.dietaryguidelines.gov).

Table 1. Sodium content of vegetables.*

	Sodium (mg per ½ cup serving)			
	Fresh	Frozen (no salt)	Canned	Canned (low or no sodium)
Asparagus	1	3	346	32
Carrots	42	43	295	42
Collards	4	43	490	240
Yellow Corn	11	3	286	15
Green Beans	3	58	311	17
Peas, Green	3	4	214	11
Spinach	12	92	373	88

*Adding sauces or high-sodium dressings when preparing vegetables can significantly affect the sodium content.

Table 2. Typical sodium content of breads.

Bread	Sodium (mg/slice)
Italian	117
Mixed Grain	109
Pita, white (4")	150
Pumpernickel	174
Raisin	81
Rye	211
White	128
Whole Wheat	132

Table 3. Sodium contents of roasted meats and luncheon meats.

	Roast Meats Sodium mg/serving	Luncheon Meats Sodium mg/serving
Chicken	43	705
Turkey	40	705
Beef	32	630

2 oz servings

Table 4. Low sodium cereals.

Cereal	Sodium (mg/serving)
Puffed Rice, Puffed Wheat and Toasted Wheat Germ Cereals	0
Kellogg's Frosted Mini-Wheats®	5
Kellogg's Mini-Wheats Original®	0
Quaker® 100% Natural Cereal with Oats, Honey & Raisins	127
Kellogg's Smacks®	51
Kellogg's All-Bran Original®	81
Kellogg's Corn Pops®	124

mg = milligrams

Table 5. Sodium contents of typical cheeses.

Cheese	Sodium (mg/oz)
Parmesan	433
American	422
Blue	395
Swiss	54
Provolone	248
Mozzarella	178
Cheddar	176