

Sodium

Salt and Sodium

Even though the terms "salt" and "sodium" are sometimes used interchangeably, they are two different substances. The chemical name for salt, sodium chloride, reveals that sodium is in fact part of salt, and chloride is the second of the two elements. By weight, salt is about 40% sodium.

Sodium in the diet comes from several sources. Sodium may be found naturally in food or may be added during processing, during cooking, or at the table.

Function of Sodium

Sodium plays a major role in the maintenance of blood volume and blood pressure. It is also needed for nerve transmission and muscle contraction. However, as valuable as sodium is, the body needs very little. The National Academy of Sciences indicates that the safe and adequate level for adults is approximately 1100-3300 mg of sodium daily. Many people consume two to three times this amount.

Sodium and High Blood Pressure

In some people, excess sodium in the diet is believed to contribute to high blood pressure, or hypertension. High blood pressure puts an extra strain on the heart, which can lead to a heart attack, stroke or kidney failure. For this reason, a physician may advise a person with high blood pressure to decrease their sodium intake. However, only about a third of those individuals with high blood pressure find that their blood pressure is lowered by decreasing their sodium intake. There is no direct evidence to indicate that high levels of dietary sodium lead to high blood pressure.

Sources of Sodium

Common Sources. Some specific foods which are high in sodium include:

Food	Sodium Content
Pickle, 1 dill	928 mg
Sauerkraut, 1/2 cup	777 mg
Olives, 4 green	323 mg
Ham, 3 oz.	1114 mg
Frankfurter, 1	639 mg
Bacon, 2 slices	274 mg
Corned Beef, 3 oz. canned	893 mg
Tuna, 3 oz. water pack, light meat	288 mg
Vegetable Soup, 1 cup canned	823 mg
Vegetable Soup, 1 cup dehydrated	1146 mg
Cheddar Cheese, 1 oz. regular	176 mg
Butter, 1 tablespoon regular	116 mg

Canned vegetables, smoked meat, sausage, luncheon meats, canned and processed fish, bouillon cubes, commercial salad dressing, condiments and sauces also tend to be high in sodium.

Less obvious sources. These are foods which list any sodium containing compounds as one of the first few ingredients on the label. Read labels carefully, especially the list of ingredients. remember that ingredients are always listed in descending order by weight, so the first ingredient listed is present in the highest amount.

Be on the watch for ingredients such as monosodium glutamate (msg), a flavor enhancer; sodium bicarbonate, a leavening agent; sodium saccharin, an artificial sweetener; sodium nitrate, a curing agent; and sodium benzoate, a preservative. Also look for the words "soda" and "brine" as well as sodium or salt.

Drinking Water. The sodium content of water varies considerably throughout the country. In most states, the state department of public health can supply information on the sodium content of public water supplies and provide help in getting water from individual wells or water supplies analyzed.

It is also important to remember that although there are different kinds of water softening systems, many use sodium as the softening agent. the amount of sodium present in the water depends upon both the type of system and the hardness of the water. The softening system should be installed so that it bypasses the cold water faucet in the kitchen, but there may be an additional charge for installation.

Medications. Some over-the-counter drugs such as antacids, laxatives, and sleeping aids contain generous amounts of sodium. For example, Alka Seltzer Effervescent Antacid tablets contain 276 mg sodium per tablet and Instant Mix Metamucil contains 250 mg sodium per package. Read the labels carefully and ask your physician about using these drugs.

Ways to Lower Sodium Intake

The following suggestions can help you to lower your sodium intake:

- **Decrease use of table salt and seasonings, which are high in sodium (soy sauce, garlic salt, onion salt, etc.)**

By gradually decreasing the amount of salt added to foods, you become accustomed to the new taste, and eventually decrease your desire for salt. First, stop salting foods at the table, and then start using less and less salt during cooking.

Use herbs and spices instead of salt. Use your imagination or request a copy of USING HERBS AND SPICES from your County Home Economist.

Check with your physician before using low sodium salts or salt substitutes. these might be harmful for some people, especially those with kidney damage.

- **Limit your intake of foods which are known to be high in sodium, unless otherwise stated on the label.**
- **Avoid foods with less obvious sources of sodium**
- **Modify your recipes to include low sodium ingredients**
 - Avoid recipes that contain large amounts of baking powder or baking soda which are high in sodium.
 - Use low sodium or unsalted ingredients. as the following chart shows, these are much lower in sodium than regular ingredients.

Food	Sodium Content
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Margarine	
regular, 1 tablespoon	116 mg
unsalted, 1 tablespoon	2 mg
Canned tomatoes	
regular, 1 cup	390 mg
low sodium, 1 cup	16 mg
Crackers	
saltine, 1	35 mg
low sodium, 1	1 mg

- use fresh or frozen vegetables, meats and fish instead of canned products.

Food	Sodium Content
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Green beans	
fresh, 1 cup	5 mg
frozen, 1 cup	3 mg
canned, 1 cup	307 mg
Salmon	

fresh (broiled with butter), 3 oz. 99 mg
canned (pink), 3 oz. 443 mg

- Do not automatically add salt to boiling water when cooking pasta, vegetables and cereals.
- Remember, salt can be completely eliminated from any recipe except one containing yeast.
- **Think about the foods you order when eating out**
 - Choose foods without sauces or gravies. If you do prefer a sauce, ask for it "on the side" so you can control the amount.
 - Individually prepared dishes (such as grilled meat, fish, or poultry) can easily be cooked to order without added salt, at your request.
 - Avoid cooked vegetables since they may contain added salt.
 - Ask for a basic lettuce and tomato salad without dressing or with oil and vinegar.
 - Avoid salted breadsticks and crackers.
 - For dessert, choose fresh fruit, if available. Baked goods may be high in sodium.
 - Avoid "fast food". As a general rule, most of these foods are seasoned to the taste of the majority of the consumers and contain high levels of sodium.

Mention of brand names does not imply endorsement or criticism of specific products.