

SALT AND SODIUM

BENEFITS

- Sodium helps to maintain fluid balance, regulate blood pressure, and transmit nerve impulses.
- Salt improves the flavor of many foods.
- Salt is a useful food preservative.

DRAWBACKS

- Sodium promotes fluid retention and may contribute to high blood pressure.

While the terms are often used interchangeably, salt and sodium are not the same. Sodium is an element that joins with chlorine to form sodium chloride, or table salt. Sodium occurs naturally in most foods, and salt is the most common source of sodium in the diet. Sodium works to maintain the body's acid-alkaline balance and helps maintain the body's fluid

balance. It also helps control nerve function and muscle movement.

Scientifically speaking, the term "salt" actually refers to a class of substances composed of ions held together by virtue of their opposite charges. Calcium carbonate (chalk) is a salt, as is sodium bicarbonate (baking soda). Sodium chloride is the most abundant salt occurring naturally in food. The amount of sodium the body needs daily is far less than what is usually consumed. Circumstances and climate will dictate the amount needed, but in general, the human body needs less than 500 mg of sodium per day to maintain health. Because salt is so abundant in our food supply, a dietary deficiency is unlikely. A typical North American diet can have 4,000 to 7,000 mg per day. One teaspoon of salt supplies over 2,000 mg of sodium. There is no health risk to moderating the amount of salt in your diet.

Sodium finds its way into food in several ways; it is naturally present in foods, added during processing or cooking, or added at the table. The major sources in the diet are processed and preserved foods. Salty foods, such as potato chips and salted crackers and nuts, are easy to identify, but hidden sodium has to be tracked down on package labels. Cereals, cold cuts, canned soups, canned vegetables, prepackaged meals, and commercial baked goods are usually high in sodium. Sodium is also found in MSG (monosodium glutamate), garlic salt or other seasoned salts, sea salt, meat tenderizers, commercially prepared sauces and condiments like ketchup, soy sauce, chili sauce, and steak sauce, in soups, cured or smoked foods, olives, and pickles. In general, the more processed a food is, the higher the sodium content.

THE CONNECTION BETWEEN BLOOD PRESSURE AND SALT

People with high blood pressure are typically advised to cut back on salt, because sodium affects the kidneys' ability to rid the body of wastes and fluid. When the body's sodium level is low, the kidneys retrieve the chemical from the urine and return it to the circulating blood. Some individuals, however, have a genetic tendency to conserve sodium, which may predispose them to high blood pressure. As the kidneys retain more salt than necessary, they excrete less urine so that fluid is available to maintain the sodium at the correct concentration. As a result, the heart is forced to pump harder to keep this extra fluid in circulation, and the blood pressure increases to maintain

the blood flow. Restricting salt intake may correct this form of high blood pressure.

The most controversial issue around salt is the extent of its impact on blood pressure. While no one disputes the low-sodium diet for people with high blood pressure, experts disagree when it comes to making recommendations for the public at large. Some say that asking everyone to try to reduce their salt intake is not based on science. But many people have undiagnosed high blood pressure and would benefit from reduced salt intake.

Studies have shown that as salt in the diet is increased, blood pressure goes up. Populations with low salt intake have lower blood pressure. The Yanomami Indians of Brazil add no salt to their food and hypertension is unknown. By contrast, North Americans, with their penchant for salty foods, such as hot dogs, chips, and pizza, are in the midst of a hypertension epidemic. Whether a reduced-salt diet lowers blood pressure in people who do not have high pressure to start with is not critical. Eating fewer salty processed foods automatically leads to a healthier diet, and limiting salt intake can cause no harm.

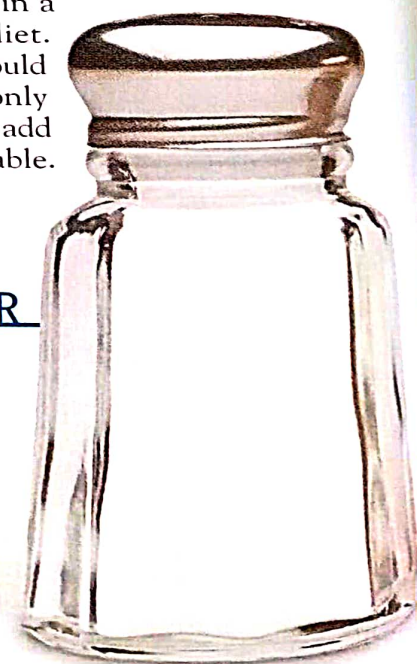
Some people are more salt-sensitive than others, and they will get the biggest payoff from cutting back on salt. African-Americans and people with diabetes tend to be more sensitive to salt, as are older people.

The increase in blood volume that occurs during pregnancy temporarily increases the body's need for salt, but the amount required is normally supplied in a varied, balanced diet. Pregnant women should prepare meals with only a little salt and not add salt to food at the table.

MYTH BUSTER

Myth: Sea salt is a healthier product than table salt.

Reality: There are no documented health advantages to sea salt, and the sodium content is similar.



FIVE WAYS TO CUT SALT

1. **Use spices that don't contain sodium**, like fresh herbs, garlic powder or fresh garlic, onion flakes (instead of onion salt), dry mustard, coriander, lemon, mint, cumin, chili, curry, rosemary, thyme, basil, bay leaves, ginger, hot peppers, pepper, chives, and parsley.
2. **Make your own salad dressing** rather than using the bottled ones. Use flavored vinegars instead of salt for extra taste.
3. **Eat more fresh or frozen fruits and vegetables**. If you use canned vegetables, buy them sodium reduced. Use fresh potatoes rather than instant, fresh cucumbers instead of pickles. Add spices and herbs instead of salt to the water in which you cook vegetables.
4. **Eat fresh or frozen fish** instead of canned or dried varieties, choose sliced roast beef or chicken instead of bologna, salami, or other processed meat.
5. **Re-educate your taste buds**. Taste food before adding salt. Cook from scratch instead of packages. Adapt your favorite recipes by using half the amount of salt called for.

REDUCING SALT INTAKE

Preparing most dishes from scratch and avoiding processed foods helps to cut down on salt intake. Supermarkets and food stores now stock a growing variety of salt-free or low-salt versions of processed foods, including canned broths. All food labels now list the amount of sodium in a serving; however, the serving specified on the label—and therefore the sodium content—may be much less than the amount you eat. Also check the label for code terms, such as brine, broth, corned, cured, pickled, soy sauce, and teriyaki sauce, that indicate other high-sodium ingredients have been added.

For many people, adding salt to food at the table is a reflex response to seeing the salt shaker; remove the shaker and you may not miss the salt. The amount of salt and other sodium-containing seasonings in most recipes can be cut by half or even more without a noticeable change in taste. Herbs and spices, fresh garlic, or lemon juice are healthful alternatives. Adding these ingredients shortly before serving keeps flavors from being lost during prolonged cooking.

Warning: Most commercial salt substitutes contain potassium. These may be dangerous for people with kidney disorders or those taking potassium-sparing diuretics or supplements. Before using a salt substitute, especially if you're taking a diuretic or potassium supplements, first check with a doctor.

Pickles and condiments, such as mustard, ketchup, salad dressings, and sauces, are high in sodium. When eating in restaurants, ask for dressings and sauces to be served on the side. In restaurants where the food is made to order, ask that it be prepared without salt.

The use of a home water softener may add a substantial amount of sodium to your drinking water. The company that installed the water softener should tell you how much sodium is in the system; you may prefer to drink bottled water instead.

Many over-the-counter medications contain sodium. If you are on a sodium-restricted diet, check with your physician or pharmacist before using antacids, painkillers, or laxatives. ❖