

## Halt Salt!

Most Americans eat too much salt. A pinch of salt here and a dash of salt there can quickly add up to unhealthy levels of sodium in the diet. Choosing foods that are lower in salt and sodium is a key to healthy eating.

Salt is sodium chloride. Table salt is 40% sodium and 60% chloride. Food labels list sodium rather than salt content. Foods that are low in sodium are also low in salt.

Sodium is an essential mineral which does the following for the body:

- helps maintain the right balance of fluids.
- helps transmit nerve impulses.
- influences the contraction and relaxation of muscles, including the heart.
- helps regulate blood pressure.

Since humans are not born with a love for salt, taste buds can be retrained by gradually cutting back on the salt and sodium. The taste buds will adjust within a few weeks, allowing the natural taste of the food to be enjoyed. Using spice and herb blends instead of salt adds satisfying flavor to almost any recipe. Select more fresh foods, less processed items, and less sodium-dense foods.

Foods naturally contain very little sodium. Most dietary sodium does not come from the salt shaker on the table. Instead, it is added to foods by the manufacturer during processing to preserve or flavor them.

Sources of Salt in Food	%
Naturally in food	12
Added during cooking	5
Added at the table	6
Added during processing	77

### HOW MUCH SODIUM IS NEEDED?

The 2005 Dietary Guidelines for Americans recommends eating only 1 teaspoon of salt per day, which is less than 2,300 milligrams (mg) of sodium. This includes ALL salt and sodium eaten. Currently Americans consume an average of 4,000 mg per day, almost double the recommended amount.

Consuming a diet of 1,500 mg of sodium has even better blood pressure lowering benefits. People over fifty years of age, African Americans, and people with chronic diseases such as hypertension, diabetes, and kidney disease should consume less salt. The minimum sodium required is 250-500 mg per day.

Up to 30% of Americans are salt-sensitive and should be especially careful about how much salt is eaten. There is no way to tell if an individual's blood pressure is salt-sensitive.

Pregnant women should not eliminate salt in order to minimize water retention and swelling. More sodium is needed during pregnancy, although the amount eaten in pre-pregnancy should be adequate.

Athletes and heavy laborers should replace sodium lost through perspiration by including salt at the next meal. Drinking sports drinks with electrolytes is not necessary. Salt tablets are not recommended since they may lower performance and cause dehydration.

### HIGH BLOOD PRESSURE

Approximately one in four Americans has high blood pressure, or hypertension. On average, the higher a person's salt intake, the higher the blood pressure. Keeping blood pressure in the normal

range reduces the risk of coronary heart disease, stroke, congestive heart failure, and kidney disease.

Middle-aged adults have a 90% chance of developing high blood pressure. Two risk factors over which a person has no control are: advancing age and a family history of high blood pressure.

Hypertension is preventable, however. To prevent or delay the onset of high blood pressure and to lower elevated blood pressure:

- reduce salt intake.
- increase potassium intake.
- lose excess body weight.
- increase physical activity.
- eat an overall healthful diet.
- avoid excessive alcohol intake.
- stop smoking.

A diet containing the recommended amounts of potassium, calcium and magnesium helps protect against hypertension, also. Fruits and vegetables are good sources of potassium, which blunts the effects of salt and reduces the risk of kidney stones and bone loss. Calcium is available in dairy foods and some vegetables, and magnesium is found in whole grains, legumes, nuts and green vegetables.

The DASH (Dietary Approaches to Stop Hypertension) diet is high in potassium, calcium and magnesium. It may help lower blood pressure, even among people within the “normal” range.

### SALT SUBSTITUTES

It is advisable to consult a healthcare provider before trying salt substitutes. They can be useful for some people but can cause health problems for others. For example, a person with a kidney impairment may not be able to get rid of the extra potassium contained in salt substitutes.

### READ THE FOOD LABEL

Reading nutrition labels is the best way to find out what is in foods. Foods high in sodium do not always taste salty. For example, a 4-inch oat-bran bagel contains 452 mg of sodium.

Consider portion size and compare the amount eaten to the serving size given. Eating a whole can of food, which can be considered as two servings, will double the amount of salt eaten.

The Daily Value for sodium is 2,400 mg. The sodium content of the food is listed in milligrams, as well as a percent of the daily value.

Use the Percent Daily Value to compare the amount of sodium among brands. Choose foods that have lower values, or less than 20% of the daily recommended sodium intake per serving. One serving of the product on the food label below contains 20% sodium, or one-fifth of the amount recommended for the entire day.

<b>Nutrition Facts</b>			
<b>Servings Size 1 cup (228g)</b>			
<b>Servings Per Container 2</b>			
Amount Per Serving			
<b>Calories 250</b>	<b>Calories from Fat 110</b>		
<b>% Daily Value*</b>			
<b>Total Fat 12g</b>			<b>18 %</b>
<b>Saturated Fat 3g</b>			<b>15 %</b>
<b>Trans Fat 3g</b>			
<b>Cholesterol 30mg</b>			<b>10 %</b>
<b>Sodium 470mg</b>			<b>20 %</b>
<b>Potassium 700mg</b>			<b>20 %</b>
<b>Total Carbohydrate 31g</b>			<b>10 %</b>
<b>Dietary Fiber 0g</b>			<b>0 %</b>
<b>Sugars 5g</b>			
<b>Protein 5g</b>			
<b>Vitamin A</b>			<b>4 %</b>
<b>Vitamin C</b>			<b>2 %</b>
<b>Calcium</b>			<b>20 %</b>
<b>Iron</b>			<b>4 %</b>
*Percent Daily Values are based on a 2,000 calorie diet			
Your Daily values may be higher or lower depending on your calorie amounts.			
	<b>Calories</b>	<b>2,000</b>	<b>2,500</b>
<b>Total Fat</b>	Less than	85g	80g
<b>Sat Fat</b>	Less than	20g	25g
<b>Cholesterol</b>	Less than	300g	300mg
<b>Sodium</b>	Less than	2,400 mg	2,400mg
<b>Total Carbohydrate</b>		300g	375g
<b>Dietary Fiber</b>		25g	30g

Ingredients on a food label are listed in descending order by weight. Any salt or sodium-containing compounds will be included on the list of ingredients. These include:

- Na (symbol for sodium)
- Monosodium glutamate (MSG)
- Baking soda
- Baking powder
- Disodium phosphate
- Sodium alginate
- Sodium nitrate

Foods described as broth, cured, pickled, corned or smoked contain sodium, also.

**Choose foods described by these terms:**

Label Lingo	Sodium per Serving
Sodium Free	5 mg or less
Very Low Sodium	35 mg or less
Low Sodium	140 mg or less
Reduced or Less Sodium	Sodium reduced by 25% or more
Light in Sodium	50% less sodium than the traditional food*
No Salt Added, Unsalted	No salt added during processing; however, product may still contain sodium

*\*restricted to foods with more than 40 calories per serving or more than 3 grams of fat per serving*

**TIPS ON EATING LESS SALT**

**Season Foods Sparingly:**

- Choose and prepare foods with little salt or no salt added.
- Always taste food before salting it. If salt is needed, use one “shake” instead of two or more.
- Remove the salt shaker from the table, or at least cover up some of the holes on the shaker. Pepper is a better choice.
- Season food with herbs and spices rather than with salt.
- Vegetables can be seasoned with a light sprinkling of lemon juice.
- Serve sauces and salad dressings on the side.

**Eat More Fresh Foods:**

- Include more fresh fruits and vegetables in the diet. Both are low in sodium and high in potassium.
- Eat vegetables that are fresh, plain frozen, or canned “with no salt added.” One-half cup

of fresh green beans has less than 5 mg sodium, while the same amount of canned green beans has 170 mg.

- Choose fresh or frozen poultry, lean meat and fish instead of canned or processed meats. For example, prepare fresh lean pork roast instead of country ham. All meats should be baked, broiled, or grilled.

**Eat Less Processed Foods:**

- Avoid mixes and instant products like flavored rice or pasta, and ready-to-eat and instant cereals.
- Enjoy favorite high sodium foods in moderation. Cut back on frozen dinners, pizza, salty snack foods, packaged mixes, sauerkraut, and smoked, cured, and processed meats.
- Limit use of pickled foods and high-sodium condiments such as mustard, catsup, relish, soy sauce, Worcestershire sauce, steak sauce, mustard, tartar sauce, salad dressings and dips. A medium cucumber marinated in vinegar has only 5 mg of sodium, compared to a medium dill pickle with 835 mg of sodium. One small pickle has 474 mg of sodium, and five green olives contain about 235 mg of sodium.
- Prepare condiments at home using ingredients with little or no sodium.
- Rinse canned vegetables and fish, such as tuna, to remove some of the sodium. Vegetables should be rinsed one minute in a colander, then cooked in fresh water. Rinsing canned legumes can reduce the sodium content by 30-40%.

**Read Nutrition Facts Labels on Foods:**

- Choose foods that have the lowest Percent Daily Value for sodium.
- Buy the low-sodium, reduced-sodium, or no-salt-added versions of your favorite foods. Low-sodium chicken broth contains only 70 mg sodium per cup, while regular canned chicken broth has 1,005 mg.
- Compare the nutrition labels on canned soups and choose brands that are lowest in sodium per serving. Many national brands are loaded with salt, containing 600 or more mg of sodium per 100 calories. Rice, pasta or potatoes can be added to offset this.

- In general, select canned soups with an equal number of calories and milligrams of sodium. If the soup has 100 calories, then the sodium content should be 100-200 mg of sodium.

### **Minimize Use of Sodium-Containing Medications:**

- These everyday medications contain added salt: antacids, laxatives, headache remedies, cough medicines, and some nonsteroidal anti-inflammatory drugs. Check with a pharmacist about the sodium content of any medications taken frequently. According to the American Heart Association, these medications must be labeled if they contain more than 5 mg of sodium per dose.

### **CONVERT RECIPES TO LOW-SALT**

- Remove all salt from recipes if possible.
- The salt in main dishes, soups, salads and many other recipes can be reduced by one-half or omitted. Gradually reduce the salt each time the recipe is prepared, and the taste change will not be noticed.
- Try new recipes that contain less salt. Watch out for high-sodium ingredients like canned soups, bouillon cubes, and commercial condiments.
- To enhance the flavor of food, replace salt with fresh or dried herbs, spices, vinegars, lemon juice, fruit juices, or the zest from citrus fruit. Liven up salads and soups with lemon or lime zest, which is the outermost layer of the fruit's peel.
- Use garlic powder instead of garlic salt, celery seed instead of celery salt, and replace onion salt with onion flakes or finely chopped onions.
- Do not add salt when cooking vegetables, rice, pasta, noodles and hot cereals. Salt toughens beans and some other vegetables during cooking.
- Cook with vegetable oil rather than margarine or butter.
- Choose lower sodium products. Use low-sodium broth or bouillon cubes, as well as salt-free seasoning mixes in recipes.
- Limit use of smoked or salt-cured meat products, even for flavoring foods. This

includes ham, sausage, corned beef, bacon and Canadian bacon.

- If wine is used as a flavor enhancer, choose table wine rather than cooking wine, which has added sodium.
- Prepare stews, soups, salads and sauces without salt the day before served so that the natural flavors will blend.
- Omit the salt from quick breads; however, salt cannot be omitted from baked goods containing yeast. Yeast breads and rolls require salt for leavening. Otherwise, they will be flat and dense.

### **WHEN EATING OUT**

Most of the salt in the diet comes from processed foods and restaurant foods, which sometimes contain hidden salt. Follow these tips to eat less salt:

- While waiting for the entrée, enjoy raw vegetables instead of salty foods.
- Ask that the meal be prepared without added salt or monosodium glutamate (MSG). Restaurants will usually prepare food with less salt upon request.
- Make wise choices from the menu. For example, choose a pasta dish and steamed vegetables with the grilled chicken rather than a salad loaded with bacon, cheese, and salad dressing.
- Order meat broiled or grilled, without salty seasonings and sauces.
- Select foods without sauces and salad dressings, or ask that they to be served "on the side."
- Instead of salad dressing, season salads with lemon or vinegar.
- Avoid menu items described as smoked, pickled, in broth, au jus, or soy sauce.
- Add lettuce, tomatoes, and onions to meat sandwiches, and cut back on high-sodium condiments like catsup, mustard, olives and pickles.
- Season food with a lemon wedge or add an herb blend brought from home.
- Always taste food before adding salt.
- Better yet, move the salt shaker to another table and use only the pepper shaker.

Sources:

1. U.S. Department of Health and Human Services and U.S. Department of Agriculture. *Dietary Guidelines for Americans, 2005*. [www.health.gov/dietaryguidelines/dga2005/document/pdf/Chapter8.pdf](http://www.health.gov/dietaryguidelines/dga2005/document/pdf/Chapter8.pdf)
2. American Dietetic Association. 2004. *Flavor: A Matter of Taste*. [www.eatright.org/ada/files/Dashfinal.pdf](http://www.eatright.org/ada/files/Dashfinal.pdf)
3. Duyff, Roberta Larson. American Dietetic Association *Complete Food And Nutrition Guide, 2<sup>nd</sup> Edition* 2002.
4. Mayo Clinic. May 24, 2004. *Sodium Surplus: Shake the Habit for Better Health*. [www.mayoclinic.com/invoke.cfm?objectid=533DC0A6-5C23-44F6-97D852ADDDE573A5](http://www.mayoclinic.com/invoke.cfm?objectid=533DC0A6-5C23-44F6-97D852ADDDE573A5)
5. Mayo Clinic. November 5, 2004. *Ingredient Substitutions: Make the Switch for healthier Recipes*. [www.mayoclinic.com/invoke.cfm?objectid=B20BD1C9-15FF-4DAF-A736C80FA0592CA4](http://www.mayoclinic.com/invoke.cfm?objectid=B20BD1C9-15FF-4DAF-A736C80FA0592CA4)
6. National Heart, Lung, and Blood Institute. *Reduce Salt and Sodium in Your Diet*. [www.nhlbi.nih.gov/hbp/prevent/sodium/sodium.htm](http://www.nhlbi.nih.gov/hbp/prevent/sodium/sodium.htm)
7. National Heart, Lung, and Blood Institute. *Spice Up Your Life! Eat Less Salt and Sodium*. September 1997. [www.nhlbi.nih.gov/health/public/heart/other/chdblack/spice.pdf](http://www.nhlbi.nih.gov/health/public/heart/other/chdblack/spice.pdf)
8. Thompson, Mariko. New York Times Syndicate, March 12, 2003. *Remember Sodium? We're Still Getting Too Much – And the Risks, Besides Heart Attack and Stroke, Include Osteoporosis and Kidney Trouble*.
9. Crawley, Connie. *Cutting the Salt*, FDNS-E 59. July 2001. The University of Georgia Cooperative Extension Service. [www.fcs.uga.edu/pubs/PDF/FDNS-E-59.pdf](http://www.fcs.uga.edu/pubs/PDF/FDNS-E-59.pdf)
10. Anderson, J. and L. Young. *Sodium in the Diet*, no.9.354. Reviewed 2/03. Colorado State University Cooperative Extension. [www.ext.colostate.edu/pubs/foodnut/09354.pdf](http://www.ext.colostate.edu/pubs/foodnut/09354.pdf)

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