

Sodium

What is sodium?

Sodium is a mineral that is required for maintaining blood pressure and a normal fluid balance in the body and transmitting nerve impulses.

Is sodium the same as salt?

No. Table salt (sodium chloride) is the most common form of sodium. Others include: sodium bicarbonate (baking soda), sodium benzoate (preservative), sodium cyclamate (sweetener) and sodium nitrate (preservative).

How much sodium is in table salt?

Table salt is about 40 per cent sodium. One teaspoon of salt contains approximately 2300 milligrams (mg) of sodium.

How much sodium do I need?

Most Canadians consume far more sodium than is needed. The recommended amount per day is between 1500 mg (considered adequate intake) and 2300 mg (upper amount) for people 9 -50 years of age. For people over 50 years of age, an adequate intake drops to 1300 mg per day until 70 and then 1200 mg over 70 years of age. However, the average daily intake in the Canadian diet is about 3500 mg of sodium, although many Canadians eat well in excess of 5000 mg per day.

Can I get too much sodium?

Yes. The higher your sodium intake, the greater risk you are at for high blood pressure and stroke. If high blood pressure is already present, a high sodium intake may make it worse. High blood pressure is a health risk associated with heart and kidney disease. It is a good idea to have your blood pressure checked regularly by a health care provider. Often an individual can be unaware of having high blood pressure.

How does sodium relate to my liver disease?

As the function of the liver deteriorates, fewer proteins such as albumin are produced, resulting in an accumulation of fluid in the abdominal cavity known as ascites and in the legs and feet, known as edema. Both conditions result from abnormal accumulation of sodium associated with portal hypertension and liver disease. Patients with ascites should restrict their sodium intake to no more than 2000 mg per day.



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Do I have to avoid all salty foods?

Not necessarily all the time. However, if you want to lower your sodium intake to meet current recommendations, you should avoid eating salty foods on a daily basis. Your physician will advise you as to whether or not you need to restrict your sodium intake. Learning to read food labels to check the sodium level per serving will help you to compare foods for sodium content and to make food choices with lower sodium content.

HIGHER SODIUM CHOICES	LOWER SODIUM CHOICES
Canned vegetables	Fresh or frozen vegetables
Vegetable juices	
Creamed vegetables	Uncreamed vegetables
Bouillon cubes	Homemade stock/broth*
Processed cheeses	Block cheeses
Dill Pickles	Fresh cucumbers
Sauerkraut	Fresh cabbage
Ready-to-eat cereals	Home-prepared cereals
Instant cooked cereals	Quick cooked cereals
Canned and dehydrated soup	
Ready to eat and frozen store bought meals	
Jelly powders	Homemade gelatin desserts
Rice & pasta mixes Casserole mixes Cake & cookie mixes Instant potato mixes Gravy, sauce & dip mixes	Homemade versions of these foods
Smoked, pickled canned or seasoned meats, fish and poultry Luncheon meats	Fresh meat, fish and poultry
Garlic salt, onion salt, celery salt	Garlic powder, onion powder, fresh celery, garlic, onion
Ketchup, soya, steak, & Worcestershire sauce	Lemon, vinegar, herbs
Salt shaker	Herb shaker**
Restaurant meals	Home cooked meals

* When you make your homemade stock or broth, be careful when you use commercial products, they may contain unexpected additional sodium.

**Read labels carefully to ensure low sodium content.

Always taste before salting!

This usually means you will use less salt. Try this test. Place wax paper or foil over a plate and pretend you are salting a meal. Measure the salt. One teaspoon contains about 2300 mg of sodium.



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Add less salt when you prepare and cook food!

Try adding less salt to your food for example, when cooking vegetables, pastas, soups and stews.

Reduce the salt in recipes!

Your taste for salt is a learned taste that can be unlearned. Gradually reduce the salt in recipes so your taste for salt can adjust more easily. The salt in most recipes can be halved with no effect on the product.

Experiment with other flavourings!

Lemon and vinegar are natural flavour enhancers that are low in sodium. Replace the salt shaker with an herb shaker (combine one tablespoon each: dried basil, parsley, marjoram, thyme, sage, onion and/or garlic powder).

Plan ahead to reduce your reliance on high sodium convenience foods!

The more 'instant' or processed a food, the more likely it is to be high in sodium. The same food made from scratch has less sodium added and tends to be less expensive.

Be aware of the sodium content of the food you eat!

Read the list of ingredients on labels for other sodium-containing compounds in addition to salt such as: monosodium glutamate (MSG), sodium benzoate, sodium nitrate and sodium bicarbonate.

Should pregnant women cut down on salt?

Sodium used to be restricted in pregnancy because it was thought this would help reduce fluid retention. However it is now known that a certain amount of fluid retention is part of having a normal pregnancy and a healthy baby. Sodium is necessary to 'balance' the extra fluid in the pregnant woman's body. Therefore sodium restriction is NOT recommended in pregnancy. If you think you use a lot of salt, it would be a good idea to discuss this with your physician.

Choose your food wisely.

The following table shows some interesting differences in the sodium content of some foods. Try to get in the habit of considering the sodium content of the meal as a whole. Ask yourself if there is a lower-sodium alternative. For example, if you use canned instead of fresh tomatoes in a recipe, you could add less salt than called for by the recipe. Fresh or frozen corn would be a lower-sodium alternative to canned or creamed corn and



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would thus be a better accompaniment to a high-sodium meat such as ham. Remember that 3/4 of your daily sodium intake could be from pre-made or packaged foods.

How Sodium Increases With Processing

Apple 2 mg	Applesauce 1 cup - 6 mg	Apple Pie 1/8 frozen- 208 mg
Bread 1 slice, white - 114 mg	Pound Cake 1 slice - 171 mg	English Muffin 393 mg
Butter 1 tbsp, unsalted - 2 mg	Butter 1 tbsp, salted - 116 mg	Margarine 1 tbsp - 140 mg
Chicken ½ breast - 69 mg	Chicken Pie frozen - 907 mg	Chicken Dinner Fast food - 2243 mg
Corn 1 mg	Canned Corn 1 cup - 194 mg	Corn Flakes 1 cup - 256 mg
Cucumber 7 slices - 2 mg	Cucumber with salad dressing - 234 mg	Dill Pickle 928 mg
Lemon 1 mg	Soy Sauce 1 tbsp - 1029 mg	Salt 1 tbsp - 1938 mg
Milk 1 cup - 122 mg	Dry Milk ½ cup - 322 mg	Cottage Cheese 4 oz. - 475 mg
Pork 3 oz. - 59 mg	Bacon 4 slices - 548 mg	Ham 3 oz. - 1114 mg
Potato 5 mg	Potato Chips 10 pcs - 200 mg	Instant Mashed 1 cup - 485 mg
Steak 3 oz. - 55 mg	Jumbo Burger Fast food - 990 mg	Meat Loaf frozen dinner - 1304 mg
Tomato 14 mg	Tomato Soup 1 cup - 932 mg	Tomato Sauce 1 cup - 1498 mg
Water - Tap 8 oz. - 12 mg	Club Soda 8 oz. - 39 mg	Antacid in water 564 mg

Does the sodium content of the water supply vary?

YES! The sodium content of the water supply varies from one area to another. Some bottled water has sodium compounds added as well. Check the ingredients on the bottle. However, the level of sodium may not be listed.

LOW SODIUM 100 mg or less per litre	MEDIUM SODIUM 101-300 mg per litre	HIGH SODIUM 301 mg or more per litre
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What about softened water?

Hard water contains a lot of calcium and magnesium. A water softener replaces these minerals with sodium. Softened water therefore contains more sodium. If you have a softened water supply in your home, the taps from which you take your drinking water should not be hooked up to the softener.

Some quick tips to help reduce the sodium in your diet:

- remove the salt shaker from the dinner table
- watch the extras such as condiments like ketchup, soy sauce, pickles and relish
- have home cooked meals most often
- season with herbs, lemon, garlic and spices
- choose unsalted snacks
- choose unprocessed foods such as fresh vegetables
- compare food labels and learn what they mean
- cut the salt in recipes in half
- choose your food wisely and plan ahead

Resources: www.dieteticsatwork.com; www.ontario.ca/eatright or 1-877-510-5102.

This information is current for April 2011.