Low sodium diet Page 1 of 10





UpToDate Official reprint from UpToDate® www.uptodate.com ©2013 UpToDate®

Patient information: Low sodium diet (Beyond the Basics)

Authors

Norman M Kaplan, MD

Barbara Olendzki, RD, MPH, LDN

Section Editor

George L Bakris, MD

Deputy Editor

John P Forman, MD, MSc

LOW SODIUM DIET OVERVIEW

Sodium is an element that is found in many foods as well as water. The body requires a small amount of sodium in the diet to control blood pressure and blood volume. However, most people consume many times the amount of sodium needed. A low sodium diet contains fewer than 2.3 grams (2300 milligrams) of sodium each day. People with certain medical conditions such as high blood pressure, kidney disease, and heart problems can benefit from a diet that is low in sodium.

This topic will review how to read food labels, how to choose foods that are low in sodium, and how to live with less salt.

WHY SHOULD I REDUCE SODIUM IN MY DIET?

Reducing sodium intake lowers blood pressure in people with high and borderline high blood pressure. Reducing sodium can also help to prevent the collection of fluid in the lower legs or abdomen. People with chronic kidney disease must control sodium intake to prevent volume overload, which increases blood pressure and causes swelling. (See "Patient information: Chronic kidney disease (Beyond the Basics)".)

Decreasing sodium can also assist people who have heart failure. (See "Patient information: Heart failure (Beyond the Basics)".)

Switching from a higher sodium diet to a lower sodium diet can modestly reduce blood pressure in people who have normal blood pressure. When the sodium intake is lowered from 4000 mg to 2000 mg per day, blood pressure falls by 2 to 3 mmHg. This reduction may be as great as 10 mmHg over several years and can substantially lower the risk of heart disease.

Benefits — In addition to directly reducing blood pressure, a lower sodium intake may also enhance the effectiveness of high blood pressure medications and other non-drug treatments, such as weight loss. A lower sodium intake has also been associated with other health benefits, including a reduced risk of dying from a stroke, reversal of heart enlargement, and a reduced risk of kidney stones and osteoporosis. (See "Patient information: Kidney stones in adults (Beyond the Basics)" and "Patient information: Osteoporosis prevention and treatment (Beyond the Basics)".)

WHERE IS SODIUM FOUND?

The main source of sodium in the diet is the salt added to packaged and processed foods, and in foods from restaurants. Processed foods include prepared frozen meals, canned foods, pickled foods, snack

Low sodium diet Page 2 of 10

foods, lunch meats, cheese, condiments, sauces, dressings, breads, cereals, and soda (including diet soda) just to name a few. Sodium found in processed food accounts for about 80 percent of a person's daily sodium intake in a typical Western diet, and can quickly add up, even without the use of the salt shaker.

In addition, many people add more salt to foods; just one teaspoon of table salt contains about 2300 milligrams of sodium, which is more than many people need for the entire day. Most fresh foods (fresh unprocessed meats, fish, vegetables and fruit) have a low sodium content, and can be substituted for foods that are high in sodium.

Terms like "low sodium" and "reduced sodium" can be confusing. The following table provides a guide to what these terms mean (table 1).

Guidelines — Several professional organizations have issued evidence-based guidelines for reducing sodium intake. Most clinicians agree that people with high blood pressure should consume less than 2300 milligrams (2.3 grams) of sodium per day. People with other conditions may be advised to consume even less (1500 to 1800 mg per day).

The sodium content of packaged, processed, and prepared foods can usually be determined by reading food labels (<u>figure 1</u>) or consulting a reference book. Many websites provide nutrient data (eg, <u>www.nutrition.gov</u>), and low sodium cookbooks are also available.

It is important to remember that the amount of sodium listed is for a particular serving size; eating more or less than the listed serving size changes the amount of sodium consumed.

HOW DO I CUT DOWN ON SODIUM?

Although it is difficult to abruptly cut back on the amount of sodium in the diet, most people find that they do not miss the sodium if they cut back gradually. Fresh herbs, spice blends without sodium, citrus and flavored vinegar make tasty alternatives to the salt shaker. Salt is an acquired taste and taste buds can be retrained in less than one to two weeks, if people stick with the lower sodium diet.

It may be helpful to keep a detailed food record and add up sodium intake. Within a short period of time (less than a week), the main sources of sodium can be identified and daily intake can be calculated.

Suggestions to decrease sodium include the following:

- Put away the salt shaker and reduce or eliminate salt in cooking. Experiment with spices, garlic, onions or lemon instead.
- Look for low sodium products such as spice blends, tomato products, and tuna.
- Make a list of healthy low sodium foods to substitute. Many groceries now supply this information for their stores.
- When dining out, request the food be prepared without salt, have dressings or sauces on the side, and avoid bacon bits, cheese, and croutons at the salad bar.
- Do not add salt to food while cooking or before eating. Teach family members to taste food before adding salt.
- Avoid eating at fast food restaurants. If this is not possible, choose restaurants that offer fruits or vegetables without sauces or dressings. Ask that no salt be used to prepare food, when possible.