

# Sodium: q&a

The Centers for Disease Control and Prevention (CDC) is dedicated to keeping Americans healthy by monitoring health, detecting and investigating health problems, conducting research to enhance prevention, developing and advocating sound public health policies, implementing prevention strategies, promoting healthy behaviors, fostering safe and healthful environments, and providing leadership and training. In fiscal year 2009, Congress encouraged CDC to work with major food manufacturers and chain restaurants to reduce sodium levels in their products. This document provides general background information for CDC-funded programs and partners on reducing sodium.

## Is it salt or sodium?

Sodium chloride is the chemical name for dietary salt.<sup>1</sup> The words “salt” and “sodium” are not exactly the same, but consumers often use them interchangeably. For example, the Nutrition Facts Panel uses “sodium,” whereas the front of the package may say “salt free.”<sup>2</sup> Ninety percent of the sodium we consume is in the form of salt.<sup>1</sup>

## Why should Americans be concerned about sodium?

High sodium consumption raises blood pressure, and high blood pressure is a major cause of heart disease and stroke.<sup>1</sup> Sodium consumption has increased substantially since the 1970s.<sup>3,4</sup> The average daily sodium intake for Americans aged 2 years and older is more than 3,400 milligrams (mg).<sup>3</sup> For most American adults, the recommended limit is 1,500 mg of sodium per day.<sup>5</sup>

## What are the dietary guidelines for sodium?

The *2005 Dietary Guidelines for Americans* recommend limiting sodium to less than 2,300 mg per day (equal to about 1 teaspoon of table salt). The guidelines further recommend that specific populations (blacks, people with high blood pressure, and middle-aged and older adults) limit their intake to 1,500 mg per day (equal to about 2/3 teaspoon of table salt).<sup>6</sup> Middle-aged and older adults, blacks, and people with high blood pressure account for about 70 percent of adults.<sup>5</sup> The *2010 Dietary Guidelines for Americans* are expected to be released in fall 2010.

## Where does most of the sodium in our diet come from?

The majority of the sodium Americans consume comes from processed and restaurant foods. Only a small portion is used in cooking or added at the table (in the form of table salt), and the rest occurs naturally in foods.<sup>7</sup>

## Why is reducing sodium intake important?

Consuming more sodium than is recommended can raise blood pressure.<sup>1</sup> Reducing sodium consumption to within recommended limits also helps those with hypertension to get and keep their blood pressure under control.<sup>1</sup> Even if a person does not have high blood pressure, reducing sodium intake is important because the lower one’s blood pressure in general, the lower the risk for heart disease and stroke.<sup>8</sup> Because nearly 400,000 deaths each year are attributed to high blood pressure, reducing sodium intake could prevent many thousands of deaths annually.<sup>9</sup>

## Can't individuals reduce their sodium intake on their own? Why are policies needed?

According to research, the majority of the sodium Americans consume comes from processed and restaurant foods. Only a small portion is used in cooking or added at the table, and the rest occurs naturally in foods.<sup>7</sup> Foods can have high sodium content but not taste salty. Also, sodium content can vary significantly within a food category (e.g., a regular

slice of frozen cheese pizza ranges from 450 to 1,200 mg, a can of tomato juice ranges from 340 to 1,040 mg, regular fat salad dressings range from 110 to 505 mg).<sup>6</sup> Some ready-to-eat foods, particularly those sold in restaurants, do not have nutrition content on a label. As a result, decreasing personal sodium intake can be hard, even for motivated people. Working through policy change can help lower the amount of sodium in the food supply and improve the health of the nation. Lowering sodium in food may help create a healthier food environment and reduce blood pressure while requiring little personal behavior change.

### What does “salt sensitive” mean? Who is “salt sensitive”?

Some people are more salt sensitive than others<sup>1</sup>—that is, they experience greater changes in blood pressure in relation to changes in sodium consumption. These individuals often include those who are older, black, have high blood pressure, have diabetes, or have chronic kidney disease.<sup>1</sup> Currently, no screening test exists for salt sensitive people.

### Table salt provides iodine. Will reducing salt intake lead to iodine deficiency?

The majority of the sodium Americans consume comes from processed and restaurant foods.<sup>7</sup> The sodium used in these foods typically contains little to no iodine.<sup>10</sup> Reducing sodium in these foods would have minimal impact on iodine status in the population.<sup>11</sup>

### How will reducing sodium affect the taste of foods?

Research shows that gradual reductions in sodium content of up to 10 percent per year are not noticeable to the palate.<sup>12</sup> Consuming lower sodium foods may shift a person’s taste for salt or sodium.<sup>6</sup> As a result, policies that aim to reduce sodium intake at this rate may not be noticeable to the public.

### Are other countries working on sodium reduction?

In a 2003 report, the World Health Organization recommended a daily intake of less than 2 grams (2,000 mg) of sodium.<sup>13</sup> Australia, Canada, Finland, France, Ireland, Japan, the Netherlands, Sweden, and the United Kingdom have had or currently have national activities on sodium reduction.<sup>14</sup> The

work in Finland and the United Kingdom offers examples of progress that can be made in sodium reduction. Finland has used media campaigns, worked with the food industry, and created labeling legislation. Starting in 2003–2004, the United Kingdom used sodium reduction targets, a public health campaign, and front-of-pack labeling systems to counter increasing sodium intake. By 2008, U.K. data showed a decrease from an average intake of 9.5 grams of salt per day to 8.6 grams per day.<sup>14</sup>



### Are states or localities in the United States working on sodium reduction?

Yes. Many states and localities have developed plans or are taking action on sodium reduction.

### If this is a national effort, why should states or localities be involved?

There are opportunities for sodium reduction at the national, state, and local levels. Building awareness and demand at local levels can add support for voluntary sodium reduction initiatives. Examples of sodium reduction activities for states and localities include conducting assessments of sodium policies, developing position statements or issue briefs, educating stakeholders, implementing policy interventions such as procurement policies, and making information available to consumers at the point of purchase. Many states and localities also are participating in the National Salt Reduction Initiative led by the New York City Department of Health and Mental Hygiene (see <http://www.nyc.gov/html/doh/html/cardio/cardio-salt-coalition.shtml>).

## What can individuals do to lower sodium consumption?

- Know your recommended daily limits for sodium intake.
- Choose foods like fresh and frozen fruits and vegetables or canned fruits and vegetables with no salt added.
- Compare the Nutrition Facts Panels for different products to find foods that have less sodium. Foods considered low in sodium have less than 5 percent of the daily value of sodium.
- Ask that foods be prepared without added salt, MSG, or salt-containing ingredients.
- Ask for low-sodium options at the local grocery store if not already available.

## Other countries or organizations report dietary sodium guidelines in grams or millimoles (mmol). What is the conversion?

Sodium chloride, commonly known as salt, consists of 40 percent sodium and 60 percent chloride. One level teaspoon of salt contains approximately 2,300 mg of sodium.<sup>15</sup>

- To convert mg of sodium to mg of salt, multiply the mg of sodium by 2.5.<sup>1</sup>
- To convert mmol of sodium to mg of sodium, multiply mmol of sodium by 23.<sup>1</sup>
- To convert mmol of sodium to mg of sodium chloride, multiply mmol of sodium by 58.5.<sup>1</sup>

For more information, visit <http://www.cdc.gov/salt>.

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