Utah State University
DigitalCommons@USU

Food and Health | Archived USU Extension Publications

8-21-1988

Sodium

Georgia C. Lauritzen
Utah State University

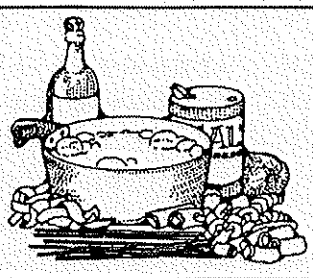
Kris Saunders
Utah State University

Warning: The information in this series may be obsolete. It is presented here for historical purposes only. For the most up to date information please visit The Utah State University Cooperative Extension Office

Recommended Citation
Lauritzen, Georgia C. and Saunders, Kris, "Sodium" (1988). *Food and Health.* Paper 9.
http://digitalcommons.usu.edu/extension_histfood/9

This Factsheet is brought to you for free and open access by the Archived USU Extension Publications at DigitalCommons@USU. It has been accepted for inclusion in Food and Health by an authorized administrator of DigitalCommons@USU. For more information, please contact digitalcommons@usu.edu.

Cooperative Extension Service
Utah State University



Nutrition and Food Sciences Fact Sheet

EL 220

SODIUM

INTRODUCTION

Sodium is a common element that, in small quantities, is essential to life. Nutrition experts agree that intakes of 1.1 to 3.3 grams of sodium per day are adequate for adults. However, the daily American diet provides 3-17 grams of sodium per day. Most of this daily sodium intake is added to food as salt which is sodium chloride.

WHAT ARE THE FUNCTIONS OF SODIUM IN THE BODY?

Sodium is found mainly in body fluids. It plays a major role in maintaining blood volume and blood pressure by attracting and holding water. Sodium is also important in cellular osmotic pressure (the passage of fluids in and out of the cells) and in transmitting nerve impulses.

There are several factors believed to contribute to high blood pressure; high sodium intake is one of them. By decreasing the amount of sodium in the diet, a person, especially someone with a family history of high blood pressure, may be decreasing the risk of high blood pressure.

WHAT ARE THE MAIN SOURCES OF SODIUM IN OUR DIET?

Dietary sodium may come from several sources.

1. It may be found naturally in foods such as meat, fish, dairy products and vegetables.

2. Many processed foods contain added salt or other sodium-containing additives such as baking soda, baking powder, sodium nitrate, and monosodium glutamate (MSG).

3. Salt is often added to food during cooking or at the table. Highly salted foods such as sauerkraut, pretzels, dried beef and bouillon often taste salty, but many foods with natural or added sodium do not.

4. Water treated with a softener will have a high sodium content. And, water from deep wells often contains some sodium.

5. There are many over-the-counter drugs that contain significant amounts of sodium in combination with other compounds. For example: aspirin, Alka-Seltzer, Rolaids, Metamucil, Fleet's Enema, Miles Nervine, Milk of Magnesia, Maalox, and Digel are a few.

SODIUM IN YOUR DIET

To balance the sodium in your diet, let's look at the basic food groups.

1. Vegetables & Fruit Group. Fresh, frozen and canned fruits and fruit juices contain about 8 milligrams of sodium per 1/2 cup serving. Fresh or frozen vegetables are relatively low in sodium if they are cooked without added salt (1/2 cup = 35 mg). Canned vegetables and those frozen in a sauce are quite high in sodium (1/2 cup = 140-460 mg).

2. Bread & Cereal Group. Grains are naturally low in sodium (1/2 cup = 5 mg); it is the cooking process and the sauces that increase the sodium content of grains. Be sure to read the labels on ready-to-eat cereals. Many have between 110 and 260 mg of sodium per serving. Breads, unless they are made without salt, are another source of sodium containing between 110 and 150 mg sodium per slice.

3. Milk & Cheese Group. Sodium is a naturally occurring element in milk (about 125 mg per cup).

Cheese and especially processed cheese are high in sodium because salt is used during the manufacturing process. (Natural cheeses, 75-300 mg per ounce; processed cheeses, 350-450 mg per ounce.)

4. Meat, Poultry, Fish & Beans Group. Fresh meat, poultry and fin fish generally contain less than 75 mg of sodium per 3-ounce serving. Processed meats such as sausages, hot dogs, lunch meats, and ham contain large amounts of sodium (750-1350 mg per 3 ounces). Canned meats, fish and poultry are quite high in sodium (90-150 mg per ounce). Shellfish are higher in sodium than fin fish and eggs contain 60 mg each.

5. Fats, Sweets & Alcohol Group. Salted snacks are high in sodium. Unsalted nuts, popcorn, potato chips and pretzels are low in sodium. Desserts vary in their sodium content depending upon how much salt was added when they were made. Condiments are high sodium foods with soy sauce, 1000 mg per tablespoon, being the highest. Catsup, mustard and other common condiments contain about 125 to 275 mg sodium per tablespoon.

HOW TO USE LESS SODIUM AT HOME

Read food labels. If the amount of sodium is not included in the nutrition information, check the ingredients and learn to recognize those that contain sodium. Learn to cook without added salt. Many herbs can take the place of salt in cooking and enhance the natural flavor of the food. The salt in most baked products can be reduced by half without noticeable differences. Remember when planning menus that unprocessed foods contain less sodium than processed and convenience foods. Last, keep the salt shaker off the dinner table.

Written by:

Georgia C. Lauritzen, Ph.D.
Food & Nutrition Specialist

Kris Saunders
Cache County Home Economist

REFERENCES

U. S. Department of Agriculture and U. S. Department of Health and Human Services, Sodium, Think About It... Home & Garden Bulletin No. 237.

General Mills, Inc., A Current Prospective on the Sodium Issue, General Mills, Inc., Minneapolis, MN, Spring, Number 10.

USDA, The Sodium Content of Your Food, Home & Garden Bulletin No. 233.

The Utah Cooperative Extension Service, an equal opportunity employer, provides programs and services to all persons regardless of race, age, sex, color, religion, national origin or handicap.

Issued in furtherance of Cooperative Extension work, Acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture. R. Paul Larsen, Vice President and Director, Cooperative Extension Service, Utah State University.

(8-21-88)