**Sodium** is a mineral found naturally in many foods; it is regulated by the kidneys and helps maintain fluid balance in the body. Eating a low sodium diet can help prevent fluid build-up in the blood vessels. Over time, too much fluid is harmful and causes a greater workload on the heart to pump blood through the vessels. A low sodium diet will help decrease fluid overload and can help control swelling your heart, lungs, arms or legs.

The average sodium intake for Americans age 2 and older is more than 3400 mg or 1.5 teaspoons per day. The human body needs ¼ teaspoon daily to function properly. The greatest source of sodium in the diet is consumed as table salt (sodium chloride). Additionally, processed foods and beverages make up 75 percent of sodium intake. The American Heart Association recommends no more than 2,300 milligrams (mg) sodium per day with **a goal of 1,500 mg /day for most adults.** Awareness of sodium in foods both at home and when dining out is important.

Along with understanding how sodium affects your body, four ways to feel better and keep a healthy body are to:

1. **Choose healthy foods or diet as prescribed**
2. **Read food labels**
3. **Prepare foods with less sodium**
4. **Choose low sodium foods when dining out**
5. **Choose healthy foods**

Taking control of your personal health is important. First, talk with your doctor about your low sodium diet prescription. One-fourth (¼) teaspoon of salt is about 600 milligrams; the best way to reduce sodium in the diet is **not** addingsalt *in the cooking* or *at the table.* Also, limit processed foods such as canned foods, luncheon meats, smoked or cured meats and chips, cheese spreads, instant cereals, commercial mixes, or buttermilk.



**How does your plate look?**

[**www.choosemyplate.gov**](http://www.choosemyplate.gov)provides great tips to limit salt and talks about each food groups, including fruits, vegetables, (whole) grains, low fat dairy products, lean meats, healthy fats, and limiting added sugars, along with serving sizes to meet personal goals.

**Recommended foods are:**

*Breads and Cereals*: Whole Wheat/ Whole- Grain bread, roll, pita, low-sodium crackers; cooked cereals, plain rice or pasta

*Vegetables and Fruits*: Fresh and frozen vegetables; If using canned options, look for brands without added sodium, low sodium vegetable juice. Rinse canned foods to reduce sodium content. *Fruits*: all fresh, frozen or canned, fruit juice (choose lite or low sugar options)

*Meat/Protein*: Fresh meat (deli) or meat alternatives are low in sodium; pre-cooked meats (baked, broiled, grilled)- check sodium content

*Milk/Dairy*: Low-fat milk (1%), low-fat/ Greek yogurt, low sodium cheese, low fat cottage cheese

*Fats*: unsalted nuts, (1 ounce), butter (1 teaspoon), avocado oil (1 tablespoon), olive oil (1 tablespoon), canola oil (1 tablespoon), peanut oil (1 tablespoon), safflower oil (1 tablespoon)

*Other*: (sparingly): Sherbet, homemade pudding

**Note:**

In addition to limiting sodium, getting enough potassium in the diet is important. Some medications to control blood pressure can make the potassium levels in the body to rise or fall. Talk with your doctor if you need to supplement or limit potassium in your diet.

**Good Sources of Potassium**

|  |  |
| --- | --- |
| Banana (1 small) | (Sweet) Potato (½ medium) |
| Orange (1 small) or orange juice (½ cup) | Beans (½ cup) |
| Tomato (1 medium) | Canteloupe ( 1/8 small) |
| Prunes (5) or prune juice (½ cup) | Spinach, cooked (½ cup) |
| Nectarine (1 small) | Honeydew melon (1/8 small) |
| Strawberries (1¼ cup) | Watermelon (1 cup) |

1. **Food label reading:**

Looking at food labels is an important way to monitor and select the best foods for your health. A low sodium food is considered **140 milligrams or less.** Aim to choose (frozen) entrée with a sodium content of about *600 mg or less*. Canned food products should contain *300 milligrams of sodium or less*. Be aware of other ingredients or preservatives in foods that contain sodium:

* Sodium bicarbonate (baking soda)
* Preservatives (disodium phosphate, sodium alginate, sodium nitrate, sodium sulfate, monosodium glutamate –MSG

**START HERE:** When looking at food label, begin by looking at serving size and servings per container. There are 1½ cups per serving and 4 servings per container.



The % Daily Value (%DV) on the food label is a guide to check nutrients. The percent Daily Values are based on a 2000 calorie diet. Calorie needs vary based on gender, age, and activity level. A low source of an item is 5% or less; in this example, refer to dietary fiber. A high source of an item is 20% or more. As you can see, sodium is 20% on %DV. This product is a high source of sodium and not the best option.

Look at the amount of sodium in the food product. There are 430 milligrams of sodium in 1 cup. If you eat 2 cups (twice the servings), then you are consuming 860 mg sodium. This is too much sodium.

The sodium content in the following food list can help you find foods that will best fit into your meal plan. Look at servings and sodium content per serving. If eating more than the serving size, your sodium intake will increase. It is helpful to write a daily log of how much sodium you are consuming in foods. Overtime, food adjustments may be made to ensure you are following your specific sodium diet prescription.

**High Sodium (more than 300 mg)**

|  |  |  |
| --- | --- | --- |
| **Food** | **Serving** | **Milligrams (mg)** |
| Bacon | 2 slices | 300 |
| Bagel, 4”, plain onion, or seeded | 1 each | 400 |
| Barbeque sauce | 2 tablespoons | 350 |
| Beans, baked, plain | ½ cup | 435 |
| Beef, dried | 1 oz | 790 |
| Biscuit, 2½” | 1 each | 350 |
| Catsup  | 2 tablespoons | 335 |
| Cheese, American | 1 oz. | 400 |
| Cheese, cottage | ½ cup | 460 |
| Croissant | 2 oz. | 425 |
| Fish, salmon, smoked | 3 oz. | 670 |
| Fish, sardines, canned | 3 oz. | 430 |
| Frankfurter, beef or pork | 1 each | 510 |
| Ham | 3 oz. | 1,125 |
| Miso | ½ cup | 1,280 |
| Mushroom, canned  | ½ cup | 330 |
| Pickle, dill | 1 large | 570 |
| Potatoes, au gratin or scalloped | ½ cup  | 500 |
| Pretzels | 1 oz | 400 |
| Pudding, instant, chocolate, prepared with milk | ½ cup | 420 |
| Salami, dry or hard | 1 oz. | 600 |
| Soy sauce |  2 tablespoon | 900 |
| Tomato or vegetable juice, canned | ½ cup | 325 |
| Tomato sauce, spaghetti or marinara | ½ cup | 510 |
| Veggie or soy patty | 1 each | 380 |

**Moderate Sodium (140-300 mg)**

|  |  |  |
| --- | --- | --- |
| **Food** | **Servings** | **Milligrams (Mg)** |
| Beans, green or yellow | ½ cup | 175 |
| Bread, pita, 4” | 1 each | 150 |
| Cheese, muenster, mozzarella, cheddar | 1 oz | 175 |
| Tortilla, flour, 6” | 1 each | 205 |
| Tuna, canned in water | 3 oz. | 290 |

**Low Sodium (less than 140 mg)**

|  |  |  |
| --- | --- | --- |
| **Food** | **Serving** | **Milligrams (Mg)** |
| Cereal, breakfast, corn, bran, or wheat | ½ cup | 100-150 |
| Cheese, Swiss | 1 oz. | 55 |
| Egg substitute, liquid | ¼ cup | 110 |
| Egg, whole | 1 large | 70 |
| Fish, Pollock, swordfish, perch, cod, halibut, orange roughy, salmon | 3 oz. | 60-100 |
| Milk, all types` | 1 cup | 100 |
| Mustard | 1 tsp. | 55 |
| Peanut butter |  1 tbsp. | 75 |
| Soy milk | ½ cup | 125 |
| Turkey, light or dark meat | 3 oz. | 60 |
| Yogurt, plain or fruited | 8 oz. | 100-175 |

**Very Low Sodium (less than 35 mg)**

|  |  |  |
| --- | --- | --- |
|  |  |  |
| Beef, ground | 1 oz. | 15 |
| Carbonated beverages | ½ cup | 20-40 |
| Dried beans and peas | ½ cup | 5-20 |
| Greens: Beet, collard, mustard | ½ cup | 10-20 |
| Noodles | ½ cup | 10 |
| Oatmeal, old-fashioned rolled | ½ cup | 5 |

**Simple ways decrease sodium in diet are:**

|  |  |
| --- | --- |
| **Choose:** | **Instead of:** |
| Unsalted nuts *(1 oz, less than 5 mg sodium)* | Regular mixed nuts (1 oz, 190 mg of sodium) |
| All types oils, 1 tbsp, less than 5 mg sodium | Salted butter (1 tbsp, 80 mg. sodium) |
| Vinegar and oil *(less than 5 mg sodium)* | Regular salad dressings, (1 tbsp, 200-300 mg of sodium |
| Unsalted pretzels (*1 oz., 75 mg sodium*) | Pretzels (1 oz, 400 mg of sodium |

1. **Low Sodium Food Preparation:**

The first step in low sodium cooking is ***not*** using salt during food preparation or at the table. Use herbs and spices to flavor foods. Other ingredients to try are onions, garlic and/or citrus juices. Sauces are generally high in sodium, buy ‘lite’ or low-sodium versions. Salt substitutes generally contain potassium; increased potassium intake may cause medical problems if consumed in excess. The sodium content in ‘lite’ salt may still be too high. Talk to your doctor or dietitian prior to using a salt substitute. A low sodium cookbook is helpful in finding new recipes and spice choices for foods.

**Sea Salt vs. Table Salt** –Sea salt and table salt both contain 40 percent sodium by weight. Table salt is processed. Sea salt is not processed, so it contains small amounts of trace minerals (magnesium, potassium, calcium, and others) and less iodine than table salt.

R**esources include:**

* American Heart Association Low-Salt Cookbook, 4th Edition: A Complete Guide to Reducing Sodium and Fat in Your Diet American Heart Association;

ISBN-13: 9780307589781

* The New American Heart Association Cookbook, American Heart Association; 9th edition; ISBN-13: 978-0553447187

**Ideas for use of spices for flavoring meats and meat alternatives without adding salt:**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Beef** | **Chicken** | **Eggs** | **Fish** | **Lamb** | **Pork** | **Vegetables** |
| BasilBay leafCarawayCurryDillDry mustardGarlicGreen pepperMushrooms (fresh)NutmegOnion or onion *powder*ParsleyPepperRosemarySage | BasilClovesMaceMushrooms (fresh)NutmegOreganoPaprikaParsleyPineappleSageTarragonThymeTurmericTarragonTomato | CurryDillDry mustardGarlic/garlic *powder*Green pepperMushrooms(fresh)NutmegOnion *powder*PaprikaParsleyRosemaryTarragonTomato | BasilBay leafCurryDillDry mustardGreen pepperLemon juice MarjoramMushrooms (fresh)PaprikaPepperTarragonTomatoTurmeric | ClovesCurryDillGarlic/garlic *powder*MintMint jellyOnionOreganoParsleyPineappleRosemaryTarragonThyme | ApplesauceBasilCarawayClovesGarlic/garlic *powder*Onion/ onion *powder*Rosemary Thymes | GingerLemon juiceMarjoramNutmegOnion or onion *powder*TarragonTomato |

1. **Dining Out**

Foods in restaurants are generally high in sodium. In addition, fast food contains high amounts of sodium. However, restaurants are becoming consumer-friendly in offering low sodium options. Talk to your waitserver about having entrée prepared without salt seasoning.

* Limit high sodium breads, chips, and dips before the meal. Avoid appetizers that are fried, breaded, or filed with cheese or meat.
* Request that sauces be served ‘on the side’ in a separate bowl to control how much is consumed.
* Be careful with alcoholic mixers high in sodium if choosing an alcoholic beverage.
* Choose regular size burgers (~600 mg sodium), grilled chicken options (salad or sandwich), or grilled fish (tacos with soft corn tortilla).
* Consider ordering the lunch portion or from the children’s menu.
* At the salad bar, consider fresh foods and low sodium salad dressings (oil and vinegar).
* Opt for broth based rather than cream-based soups.
* Don’t feel pressured to eat everything served, ask for a separate plate or a to-go box to take some food home.
* Look for the nutritional information for low sodium options at the restaurant or on-line and be consumer savvy.

**Quick Tips for a Healthy Budget:**

 **Plan meals for the week.**

* Look at store coupons for best deals prior to shopping; make a list and stick to it!
* Store brands generally cost less for big savings.
* Some stores will accept other store coupons.
* Use a calculator.
* Shop for lower cost lean meats like chicken or turkey. If meats seem too expensive, lower cost protein sources like beans, lentils, tuna, and eggs can help meet protein needs.
* Frozen foods or canned items can help meet caloric and food group needs at a low cost! Frozen fruits and vegetables can go a long way.
* Do not shop hungry!
* Avoid “impulse” items that may not be healthy.
* Know the flow- healthier foods are around the perimeter (outermost part) of the store; processed foods are generally in the middle aisles. Stay away from the snack aisles.
* Caution *On Sale* */ Card Price* or *Buy One, Get One Free* items that contain high fat, high calories, and/or high sodium, i.e. snacks crackers; bakery items, sauces, or desserts

**Wholesale stores (Costco or Sam’s) or ethnic grocery stores often have name brand items or organic foods at lower prices.**

* Buy in bulk.
* Food products may be portioned instead of purchasing individual commercially- prepared foods for cost saving.
* Stock up on shelf-stable items when *on sale* at the store: rice, pasta, oatmeal, unsweetened cereals

**References**

American Heart Association [www.heart.org](http://www.heart.org)

Academy of Nutrition and Dietetics [www.eatright.org](http://www.eatright.org)

Center for Disease Control [www.cdc.gov](http://www.cdc.gov)

National Institute of Health [www.nih.gov](http://www.nih.gov)

USDA Choose My Plate [www.choosemyplate.gov](http://www.choosemyplate.gov)

(United Stated Department of Agriculture)