

## UW HEALTH - ONLINE HEALTH FACT

### Sodium

The average American eats about 3500 milligrams of sodium every day. Almost one-fourth of that sodium comes naturally in our food. The rest we either add with our saltshaker or eat as processed foods.

A diet lower in sodium is often recommended for people with heart disease, kidney disease, high blood pressure, liver failure, or long-term steroid use. Decreasing sodium intake has been recommended for all Americans in an effort to prevent high blood pressure. The American Heart Association recommends a daily sodium intake of 2400 milligrams (mg) per day. To give you an idea of how much sodium that is, consider that one teaspoon of salt equals about 2300 milligrams of sodium, but remember that there is sodium naturally in food. Your doctor will recommend a level that best suits your needs.

It is recommended that people with moderate to severe heart failure eat 2000 milligrams or less of sodium per day. Eating less sodium will help:

- keep the body from retaining extra water
- help medicines work more effectively
- control blood pressure

Another advantage of limiting salt intake is decreased risk of kidney stones and bone mineral loss.

**The following are some commercially processed (high sodium) foods that should be Avoided.**

#### All Salted, Cured, or Smoked Meat or Fish:

-bacon	-bratwurst	-herring	-canned tuna
-Canadian bacon	-pepperoni	-corned beef	-canned chicken
-frankfurters	-sardines	-bologna	-beef jerky
-ham	-smoked fish	-luncheon meats	-SPAM®
-breakfast sausage	-smoked sausage	-salami	-frozen breaded meat

#### Dairy

-buttermilk	-processed cheese (Velveeta, American)
-cheese spreads	-cottage cheese
-Camembert cheese	-party dips
-Roquefort cheese	-instant puddings
-Gorgonzola cheese	

**Grains/Starches:**

- instant hot cereals
- salted popcorn
- canned baked beans
- bread/crackers with salted tops
- croutons

**Vegetables:**

- canned vegetables\*
- sauerkraut
- stewed tomatoes
- pickles (sweet and dill)
- spaghetti sauce\*
- pizza sauce\*
- tomato sauce/paste\*
- tomato and vegetable juices

**\*unless salt-free**

**Convenience and Processed Foods:**

- frozen dinners
- packaged entrees
- packaged potatoes, rice, and noodle mixes
- Oriental dinners
- soups: canned, frozen, dehydrated
- biscuit and pancakes mixes
- gravy and sauce mixes
- stuffing mixes
- deli meats
- potato chips
- salted nuts
- pretzels
- relish
- olives
- bouillon cubes
- regular broth
- macaroni & cheese (boxed)

**Condiments/Seasonings:**

- barbeque sauce
- regular ketchup
- chili sauce
- celery salt
- mustard
- steak sauce
- teriyaki sauce
- horseradish sauce
- lite salt
- meat tenderizer
- garlic salt
- onion salt
- taco seasoning
- taco sauce
- monosodium glutamate (MSG)
- salad dressings
- seasoned salt
- tarter sauce
- soy sauce (regular and lite)
- Worcestershire sauce
- stir fry mixes/sauces

**Eliminating Major Sources of Salt**

General guidelines to eliminate the major sources of salt (sodium chloride) from your diet:

- buy fresh, plain frozen, or canned “with no salt added” vegetables
- use fresh poultry, fish, and lean meat, rather than canned or processed types
- use herbs spices, and salt-free seasoning blends in cooking and at the table
- cook rice, pasta, and hot cereal without salt; cut back on instant or flavored rice, pasta, and cereal mixes, which usually have added salt
- choose “convenience” foods that are low in sodium; cut back on frozen dinners, pizza, packaged mixes, canned soups or broths, and salad dressings-these often have a lot of sodium
- rinse canned foods, such as tuna, to remove some sodium
- when available, buy low- or reduced-sodium or no-salt-added versions of foods
- choose ready-to-eat breakfast cereals that are low in sodium

## Reading Food Labels

Learning to read food labels is key to following a low sodium diet. Begin by reviewing the serving size and sodium content information. The sodium content is given in milligrams.

According to this sample food label, 1 large pretzel contains 470 mg of sodium.



<b>Nutrition Facts</b>	
Serving Size 1 pretzel (about 25 g)	
Servings Per Container 20	
Amount Per Serving	
% Daily Value	
<b>Calories</b> 90	Calories from Fat 0
<b>Total Fat</b> 0g	0%
Saturated Fat 0g	0%
<b>Sodium</b> 470 mg	20%
<b>Total Carbohydrate</b> 19g	6%
Dietary Fiber less than 1g	4%
Sugars less than 1g	
<b>Protein</b> 1g	
Vitamin A *	Vitamin C *
Calcium *	Iron *
*Contains less than 2% of the Daily Value of these nutrients.	
*Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs:	
Calories: 2,000 2,500	
Total Fat	Less than 65g 80g
Sat Fat	Less than 20g 25g
Cholesterol	Less than 300mg 300mg
Sodium	Less than 2,400mg 2,400mg
Total Carbohydrate	300g 375g
Dietary Fiber	25g 30g

Next, look at the ingredient list of a product for the words **SALT** or **SODIUM**. Examples of sodium-containing ingredients include:

- salt (sodium chloride)
- monosodium glutamate (MSG)
- baking soda (sodium bicarbonate)
- baking powder
- sodium propionate

When cooking and baking, use the following table to estimate how much sodium (in milligrams) per serving will be added from salt.

<b>Sodium Amount per Serving</b>					
<b>Amount of Salt</b>	<b>Number of Servings in a Recipe</b>				
	<b>1</b>	<b>2</b>	<b>4</b>	<b>6</b>	<b>8</b>
1/4 teaspoon	575	288	144	96	72
1/2 teaspoon	1150	575	255	192	144
1 teaspoon	2300	1150	<b>575</b> ▲	383	288
1/2 teaspoons	3450	1725	863	575	431
2 teaspoons	4600	2300	1150	767	575

For example, a recipe that serves 4 and calls for 1 teaspoon of salt will contain 575 mg of sodium per serving from salt.

## Claims

Food manufacturers are offering many low sodium versions of your favorite foods. Check the label when shopping for low sodium foods. The following are some examples of claims and what they mean.

- sodium-free --- 5 mg of sodium or less
- low sodium --- 35 mg or less
- moderately low sodium --- 140 mg or less
- reduced sodium --- significantly less sodium than the regular item, but higher than 140 mg per serving

**Caution**-Food products that are ‘**reduced fat**’, ‘**fat-free**’, or labeled as ‘**good for your heart**’ are often higher in sodium and calories.

## Regular vs. Low Sodium

The following table compares regular food items to their low sodium counterparts.

Regular	Sodium (mg)	Low sodium	Sodium (mg)
Bouillon, 1 cube	960	Bouillon, unsalted	3
Peanuts, salted, ¼ cup	246	Peanuts, unsalted	2
Corn, canned, salted, ½ cup	192	Corn, unsalted, fresh	1
Soy sauce, 1 tablespoon	1029	Soy sauce, reduced sodium	840
Pickle, large	1425	Cucumber	1
Tuna, ½ cup	384	Tuna, 50% less salt	192
Tomato juice, 1 cup	878	Tomato juice, unsalted	14
Tomato soup, 1 cup	932	Tomato soup, low sodium	34
Salt, 1 teaspoon	2300	Salt (Lite), 1 teaspoon	968
Garlic salt, 1 teaspoon	1480	Garlic powder, 1 teaspoon	1
Peanut butter, 2 tablespoons	150-250	Unsalted peanut butter, 2 tablespoons	0
Canned pasta sauce, ¼ cup	125-275	No salt added pasta sauce, ¼ cup	25
Saltine crackers, 1 cracker	70	Low-sodium saltine crackers, 1 cracker	7
Ham, 3 ounces	1025	Fresh pork, 3 ounces	60
Instant oatmeal, ¾ cup	180	Regular cooked oatmeal, ¾ cup	5
Turkey ham, 3 ounces	865	Turkey, 3 ounces	75
Corned beef, 3 ounces	800	Roast beef, 3 ounces	60

### Alternatives to Salt

Try using herbs and spices to enhance the flavor your food. The following are examples of low sodium spices, herbs, and seasonings:

- allspice
- ginger
- thyme
- dill
- parsley
- basil
- curry
- cloves
- oregano
- sage
- garlic powder
- cayenne pepper
- cocoa powder
- fresh garlic
- cinnamon
- nutmeg
- chives
- cumin
- paprika
- vinegar
- chili powder
- onion powder
- lemon juice
- dry mustard

Another alternative to salt is salt substitutes. It is important to be careful with the use of some substitutes because of their high potassium content. People with **liver disease** must **NOT** use salt substitutes at all. Individuals with kidney disease or anyone watching their potassium intake must choose salt substitutes that are low in potassium because these products are made with potassium chloride (vs. sodium chloride). The products listed below with an asterisk (\*) contain high amounts of potassium and should not be used without your doctor's permission.

Product	Serving Size	Sodium (mg)	Potassium (mg)
Salt	1 tsp	2300	0
Mrs. Dash	1 tsp	0	40
Shilling Salt-Free Seasonings	¼ tsp	-	-
Spike (Salt-Free)	1 tsp	0	96
Veg-It	1 tsp	<65	<65
Adolph's Sodium Free Tenderizer	¼ tsp	-	420
Accent Low Sodium Seasoning	1 tsp	600	0
Salt Sense	1 tsp	1560	0
*Morton Lite Salt	1 tsp	1100	1500
*Estee Salt-It	1 tsp	0	3520
*Morton Nature's Seasons	1 tsp	?	2800
*Morton Salt Substitute	1 tsp	?	2730
*No Salt	1 tsp	5	2500
*Nu-Salt	1 tsp	0	529

### Sodium and Prescription and Over-the-Counter Drugs

Some drugs contain large amounts of sodium. Read the labels on all over-the-counter (OTC) drugs. Look for the ingredient list and warning statement to see if sodium is in the product. If a statement of sodium content does not appear, ask your physician or pharmacist about the sodium content of the prescription drug.

## Fast Food

Many fast foods contain high amounts of sodium. The following are some examples:

Restaurant	Food Item	Sodium (mg)
Burger King	Whopper with cheese	1177
Culver's	Chef salad	1918
Culver's	Butter burger bacon deluxe	1855
Pizza Hut	Supreme pan pizza, 2 slices	1447
Subway	Sandwich, ham, foot long	1678
Taco Bell	Bean burrito with red sauce	1148
Wendy's	Hamburger, single, plain	500
Wendy's	Hamburger, single, the works	890
McDonald's	Hotcakes with margarine & syrup	1190

## Websites for Sodium Information

Your Guide to Lowering High Blood Pressure

<http://www.nhlbi.nih.gov/hbp/index.html>

The DASH Eating Plan

<http://www.nhlbi.nih.gov/health/public/heart/hbp/dash/index.htm>

American Heart Association-Delicious Decisions

<http://www.deliciousdecisions.org/>

Heart Failure Society of America-How to Follow a Low Sodium Diet

<http://www.hfsa.org/pdf/module2.pdf>

Salt Talk

<http://my.execpc.com/~veggie/salt.html>

University of Maine Cooperative Extension-Sodium Content of Your Food

<http://www.umext.maine.edu/onlinepubs/htmpubs/4059.htm>

If you have more questions, please contact UW Health at one of the phone numbers listed below.

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