Salt & Stone Disease

Although sodium, or salt, has important roles in the body, most people consume far more than they need. If you are a kidney stone former, limiting the amount of salt in your diet can significantly reduce the risk of kidney stone recurrence.

Dietary salt, also known as sodium, is found naturally in many foods, although usually in small amounts. While some people add salt and salty sauces in cooking and at the table, most dietary sodium comes from food to which salt has already been added during processing or preparation.

While sodium has many important functions in the body, such as maintaining water balance between tissues, the transmission of nerve impulses and the absorption and transport of some nutrients, most people consume far more than needed. For an adult, the Adequate Intake (AI) for sodium is 1500 milligrams (½ to 1 tsp) each day. The typical Canadian diet, however, provides two to four times this amount! The average intake of sodium among adults in B.C. is approximately 2700 - 3600 milligrams (mg) per day 1.

For kidney stone formers with elevated urine sodium, we recommend consuming less than 2000 mg or one teaspoon of salt per day ². When reading nutrition labels, the claims "lightly salted" and "reduced sodium" do not guarantee low salt content. "Sodium-free" foods contain less than 5 mg of sodium per serving.

Sources of Sodium

The Saltshaker: Table salt is the most common source of sodium. A level teaspoon contains over 2000 mg of sodium. You can reduce sodium in your food by not salting food during cooking or at the table.

Natural Sources: All foods that come from animals contain some sodium, and some plants, such as beets, carrots, celery and spinach, contain more sodium than other plants.

<u>Processed Foods</u>: During preparation, salt is added to prepared and processed foods for flavour or preservation. Avoid processed foods as much as possible.

Medications: Many overthe-counter medications contain sodium. Check the label of over-the-counter medications for sodium content.

Salty Foods: If a food tastes salty, it is! Avoid salted snack foods such as nuts and pretzels and salty sauces such as soy sauce and fish sauce. Avoid pickled products or those packed in brine.

^{1.} Forster-Coull L, Levy Milne R, Barr SI. BC Nutrition Survey. Ministry of Health Services, Health Canada and University of British Columbia: 2004

Taylor EN, Curhan, GC. Diet and fluid prescription in stone disease. International Society of Nephrology. Kidney International 2006;70: 835-839

Comparing the salt (sodium) content of some foods 3:

	Food item	Serving	Sodium content (mg)
Vegetables and Fruit	Tomato sauce, canned	1 cup (260 g)	1357
	Tomato sauce, no salt added	1 cup (260 g)	28
	Dill pickle	1 medium pickle	833
	Cucumber, raw, sliced	½ cup (65 g)	1
	Potato salad	½ cup (132 g)	699
	Baked potato, plain	1 medium	17
	Vegetable juice cocktail, canned	1 cup (256 g)	690
	Orange juice	1 cup (256 g)	3
	Broccoli, cooked	½ cup (82 g)	34
	Spinach, raw	1 cup (32 g)	25
	Strawberries	½ cup (88 g)	1
	Banana	1 banana	1
Grain Products	Bread crumbs, seasoned	1/4 cup (30 g)	535
	Bread crumbs, plain	1/4 cup (30 g)	200
	Croissant	1 medium	424
	Bread, whole wheat	1 slice	179
	Saltine crackers, regular	5 crackers (15 g)	166
	Saltine crackers, unsalted tops	5 crackers (15 g)	115
	Saltine crackers, low salt	5 crackers (15 g)	96
	Brown rice, cooked	½ cup (103 g)	1
Milk and Alternatives	Cottage cheese, 1%, regular	½ cup (125 ml)	500
	Cottage cheese, 1%, no salt	½ cup (125 ml)	16
	Cheddar cheese, regular	1.5 oz (50 g)	311
	Cheddar cheese, low sodium	1.5 oz (50 g)	11
Meat and Alternatives	Cheeseburger (fast food), single patty	1 burger	1589
	Chicken breast, roasted	3.5 oz (85 g)	64
	Baked beans, with beef, canned	1 cup (270 g)	1335
	Baked beans, canned, no salt added	1 cup (270 g)	3
	Deli ham, sliced	3 oz (85 g)	1112
	Turkey breast, roasted	3 oz_(85 g)	44
	Almonds, roasted, salt added	1/4 cup (35 g)	249
	Almonds, roasted, no salt added	½ cup (35 g)	0
	Salmon, baked or broiled	3.5 oz (100 g)	0
Other foods, snacks, condiments, etc.	Table salt	1 tsp (6 g)	2373
	Vegetable soup, canned	1 cup (255 g)	1068
	Vegetable soup, low sodium	1 cup (255 g)	139
	Soy sauce	1 tbsp (15 ml)	1044
	Mrs Dash ® salt substitute	½ tsp (0.6 g)	0
	Pretzels, salted	10 pretzels	1029
	Pretzels, unsalted	10 pretzels	173



Developed by:
Meredith Cushing, RD, MS, MSHSE
Kristin Wiens, BSc (FNH)

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For more information, please call (604) 875-5006.