



## Sodium (salt) and chronic kidney disease

### About sodium (salt)

Sodium (salt) affects your fluid balance and blood pressure. When your kidneys are not working well, you need to control your salt intake and avoid foods that are high in sodium. Too much sodium (salt) can cause high blood pressure, which can cause further damage to your kidneys. It can also increase the water that stays in your body and cause swollen face, legs and hands, and shortness of breath. Following a healthy diet that is low in sodium will help control these symptoms.

### Low sodium guidelines

Here are some general guidelines to decrease the amount of sodium you eat.

- **Try different flavourings:** Do not use salt in cooking or at the table. That includes sea salt, salted spices, salted herbs, and salt substitutes, especially those that contain *potassium chloride* (e.g. No Salt™, Half Salt™, Nu-Salt™). Instead, try using fresh or dried herbs and spices, vinegar, lemon, and salt-free flavourings to enhance the flavour of foods. Use an “herb shaker” made up of any combination of your favourite herbs and spices. *Example:* mix together 2 tsp thyme, 2 tsp marjoram, 2 tsp rosemary and 2 tsp sage.
- **Eat fresh foods:** Choose unseasoned fresh and frozen vegetables, meat, chicken and fish instead of canned, pickled, breaded or processed foods. Also, avoid fresh or frozen meats that are labelled “seasoned” since these foods have been treated with a salt solution.
- **Make homemade foods:** When possible make homemade soups, sauces, casseroles and salad dressings without added salt.
- **Watch out for convenience foods:** Avoid buying prepared fresh or frozen entrees, canned soups; dried soup, and pasta /rice with sauce mixes; pickles, sauces, processed cheese and salty snack foods such as potato chips, pretzels, cheese flavoured snacks and salted nuts.
- **Study food labels:** Read food labels to help you choose low sodium varieties of your favourite foods. Choose foods in which sodium appears *at the end* of the ingredient list and have lower than 500 mg of sodium per serving for an entrée or less than 125 mg for a snack item. Other sources of sodium on food labels include *monosodium glutamate (MSG)*, *sodium benzoate*, *sodium bicarbonate*, *sodium saccharin*, *brine*, *soy sauce*, *baking soda* and *sodium phosphate*.

- **Eating out:** Many restaurants provide healthy menu choices. Ask your server for low sodium choices available on the menu. Your registered dietitian can also suggest low sodium foods to eat in restaurants. Another helpful resource is the “Eating Out on a Kidney Diet” factsheet which is available at the Kidney Community Kitchen website ([www.kidneycommunitykitchen.ca](http://www.kidneycommunitykitchen.ca))

### Did you know that...

Processing foods adds a lot of sodium. Here are some examples of the sodium content in fresh versus processed foods.

Examples of sodium content			
<b>Cucumber</b>	7 fresh cucumber slices = <b>2 mg</b>	cucumber and 2 Tbsp Ranch salad dressing = <b>242 mg</b>	1 medium dill pickle = <b>569 mg</b>
<b>Pork</b>	3 oz pork = <b>59 mg</b>	4 slices bacon = <b>548 mg</b>	3 oz ham = <b>1, 114 mg</b>
<b>Chicken</b>	½ breast = <b>69 mg</b>	217 g frozen chicken pie = <b>825 mg</b>	219 g crispy chicken fillet sandwich with mayonnaise = <b>1424 mg</b>
<b>Flavourings</b>	1 Tbsp lemon juice = <b>1 mg</b>	1 Tbsp soy sauce = <b>1,029 mg</b>	1 tsp salt = <b>2,325 mg</b>

**Please Note:** The food lists below show examples of foods to choose and avoid, but the lists are by no means complete.

### What can I eat?

Here are some suggestions for lower sodium (salt) foods and snacks.

- **Beverages:** Water, coffee, tea, low sodium mineral water, fruit juice, lemonade
- **Candies and sweets:** Sugar candy, honey, jam, jelly, marmalade
- **Cereals** with less than 125 - 160 mg sodium per serving
- **Cheese and other dairy foods:** Natural cheese (*limit to 1 oz. every other day*) and bocconcini. *Aim for ½ to 1 cup per day* of low fat milk and/or plain or fruit yogurt and/or low sodium cottage cheese.
- **Cold desserts:** Sherbet (sorbet), gelatin, plain flavoured ice cream
- **Cookies** with less than 125 mg sodium per serving
- **Crackers** with less than 125 mg sodium per serving
- **Crunchy snacks:** Unsalted pretzels, unsalted corn chips, unsalted air-popped popcorn (try adding herbs/spices for flavour), unsalted rice crackers, apple cinnamon or caramel rice cakes, homemade pita chips

- **Fats, oils and flavourings:** Low sodium margarine, vegetable oils, homemade salad dressing (without salt), whipped topping, whipped cream, sour cream, gravy made without salt, dry spices, vinegars (such as balsamic, wine, raspberry, etc.), lemon and lime juice, low sodium baking powder (available at bulk food stores)
- **Frozen dinners** with less than 500 mg sodium per serving—limit to once per week
- **Fruit and vegetables:** Best choice is fresh, canned or frozen fruits and fresh vegetables. Frozen vegetables (check label to make sure there is no added salt). Low sodium canned vegetables.
- **Meat and other protein foods:** Fresh (not seasoned) beef, veal, fish, pork, poultry, eggs and unsalted peanut butter. Left over roast beef, turkey, pork, etc. Home made chicken, tuna or salmon salad (made with low sodium tuna or salmon).  
*Note:* If using regular canned fish because you can't find unsalted or low sodium, be sure to rinse before using.
- **Snack bars** with less than 125 mg sodium per bar
- **Soups** with less than 250 mg sodium per serving
- **Specialty flavourings (limit these foods to 1 Tbsp per day):** Chili sauce, ketchup, mustard, mayonnaise, salad dressing

### **What foods should I avoid?**

Here are some foods that you should avoid because of their high sodium (salt) content.

- Bottled or canned sauces (soy, barbeque, oyster, steak, teriyaki, etc.)
- Bouillon cubes, consommé, dry soup mixes, canned soups
- Canned vegetables (with salt) and vegetable juices
- Canned beans or pasta in sauce, chili, stew
- Packaged mixes for macaroni and cheese, noodles and sauce, flavoured rice
- Pickled, cured, and smoked foods (such as pickles, relish, olives, lox and herring, bacon, salt pork, sauerkraut)
- Processed cheese slices and cheese spreads, feta cheese, blue cheese, buttermilk
- Processed meats such as ham, wieners, hot dogs, sausages, salami, pepperoni, pastrami, lunch meats/cold cuts/deli meats
- Salted crackers
- Salted snack foods (potato chips, pretzels, popcorn, nuts, etc.)
- Seasoned meat, fish, poultry

### **How to read product labels regarding sodium (salt)**

Product labels (“Nutrition Facts”) on many foods show how much sodium they contain. This number is shown in both *mg* and as a *percentage of the daily value*.

Here are some guidelines you can use when shopping for food in the grocery store based on information given on the “Nutrition Facts” label.

**Important note:** If you have kidney disease a good goal for sodium intake is 2000 mg per day. Check with your doctor or registered dietitian to confirm what your maximum daily sodium limit should be.

<b>% Daily value</b>	<b>How much sodium per serving?</b>	<b>What it means...</b>
<b>Less than 5%</b>	Less than <b>125</b> mg of sodium	<b>Good choice</b> – A <b>low</b> sodium product that can be enjoyed every day
<b>5 – 10%</b>	Less than <b>250</b> mg of sodium	<b>Good choice</b> – A <b>lower</b> sodium product that can easily fit into a low sodium diet
<b>10 – 20%</b>	Between <b>250</b> mg – <b>500</b> mg of sodium	<b>Beware</b> – A <b>medium</b> sodium product that can fit into a low sodium diet with caution.
<b>More than 20%</b>	More than <b>500</b> mg of sodium	<b>Beware</b> – A <b>high</b> sodium product that should <b>not</b> be eaten when trying to follow a low sodium diet

**Example: Ready to Enjoy Chicken Noodle Soup**

<b>Nutrition Facts</b> per 250 ml			
<b>Amount</b>		<b>% Daily Value</b>	
Calories 100			
Fat	1.5 g	2%	
Saturated Fat	0.5 g		
+ Trans Fat	0 g	3%	
Cholesterol	15 g		
Sodium	910 mg	38%	
Potassium	190 mg	5%	
Carbohydrate	14 g	5%	
Fibre	2 g	8%	
Sugar	3g		
Protein	8 g		
Vit A	20%	Vit C	10%
Calcium	2%	Iron	4%
Niacin	20%		

- This product label shows that one serving (250 ml) of this soup contains 910 mg of sodium – which is 38% of the recommended daily value. Since this product provides more than 20% of the recommended daily value, it is a high sodium choice and should **not** be eaten by someone following a low sodium diet.

- Some products have a statement about the amount of sodium in the product on the front of the packaging. For example: “25% less sodium than our original recipe”. This product may still be very high in sodium, so it is also important to check the Nutrition Facts table to determine the actual sodium content of the item and if it can be included.

- Please note that the level of sodium used for calculating % daily value for sodium in the Nutrition Facts table is more than recommended for a patient with kidney disease.

- If there is no label, or the product content is not listed on the

label, many manufacturers provide a toll-free phone number where you can call and request this information.

**For information and tools to help you manage your kidney-friendly diet, visit [www.kidneycommunitykitchen.ca](http://www.kidneycommunitykitchen.ca)**

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No one associated with The Kidney Foundation of Canada will answer medical questions via e-mail. Please consult a healthcare professional for specific treatment recommendations.