

Station 6

Ingredient Investigation

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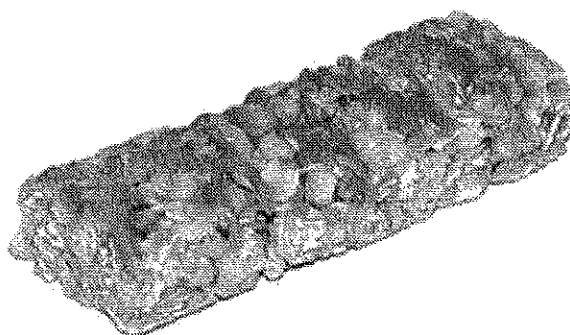
Instructions:

- Sugar and sodium can be called many different names. Can you spot them all?
- Choose at least four food labels.
- Use dry erase markers to circle the different names for sugar in blue and sodium in red on the ingredient list.
- Use the worksheet to answer the questions.

Hint: Look at the “***Station 6: Ingredient Investigation***” ***Fact Sheet*** and “***Label Reading the Healthy Way***” ***handout.***

Chocolate Chip Granola Bar

Nutrition Facts	
Per 1 bar (26 g)	
Amount	% Daily Value
Calories 110	
Fat 3 g	5 %
Saturated 1 g	5 %
+ Trans 0 g	
Cholesterol 0 mg	
Sodium 60 mg	3 %
Carbohydrate 19 g	6 %
Fibre 2 g	8 %
Sugars 5 g	
Protein 1 g	
Vitamin A 0 %	Vitamin C 0 %
Calcium 0 %	Iron 4 %



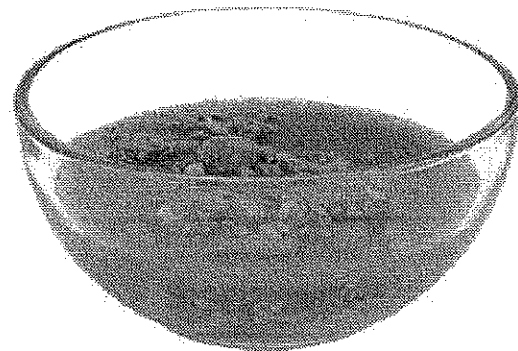
INGREDIENTS

GRANOLA (ROLLED OATS, ROLLED WHOLE WHEAT, BROWN SUGAR, BARLEY FLAKES, SUNFLOWER OIL, INULIN, HONEY, NATURAL FLAVOUR, MODIFIED MILK INGREDIENTS), GLUCOSE, CHOCOLATE CHIPS (SUGAR, CHOCOLATE LIQUOR, COCOA BUTTER, SOY LECITHIN, SALT, VANILLIN), WHOLE GRAIN BROWN RICE CRISPS (WHOLE GRAIN BROWN RICE FLOUR, SUGAR, BARLEY MALT, SALT, MIXED TOCOPHEROLS), GLYCERIN, SHORTENING (CANOLA OIL, MODIFIED PALM AND PALM KERNEL OILS), BROWN SUGAR, SORBITOL, INULIN, SALT, NATURAL AND ARTIFICIAL FLAVOUR, SOY LECITHIN, BHT (PRESERVATIVE).

CONTAINS OAT, WHEAT, BARLEY, MILK, AND SOY INGREDIENTS.

Vegetable Beef Canned Soup

Nutrition Facts	
Per 1 cup (250 ml)	
Amount	% Daily Value
Calories 110	
Fat 0.5 g	1 %
Saturated 0.3 g + Trans 0 g	1 %
Cholesterol 5 mg	
Sodium 790 mg	33 %
Carbohydrate 19 g	6 %
Fibre 2 g	8 %
Sugars 3 g	
Protein 7 g	
Vitamin A 10 %	Vitamin C 2 %
Calcium 2 %	Iron 4 %



INGREDIENTS

BEEF BROTH (WATER, BEEF STOCK), CARROTS, POTATOES, SEASONED BEEF, BARLEY, GREEN BEANS, FLAVOUR, CORN, PEAS, MODIFIED CORN STARCH, YEAST EXTRACT, SUGAR, SALT, MONOSODIUM GLUTAMATE, WHEAT FLOUR, ONION POWDER, HYDROLYZED PROTEIN (SOY, CORN, WHEAT), CARAMEL, PARSLEY FLAKES, DEHYDRATED GARLIC.

Buttery Microwave Popcorn

Nutrition Facts			
Per 7.5 cups popped (50 g)			
Amount	% Daily Value		
Calories 270			
Fat 16 g	25 %		
Saturated 8 g + Trans 0 g	40 %		
Cholesterol 0 mg			
Sodium 250 mg	10 %		
Carbohydrate 28 g	9 %		
Fibre 6 g	24 %		
Sugars 0 g			
Protein 4 g			
Vitamin A 0 %	Vitamin C 0 %		
Calcium 0 %	Iron 6 %		



INGREDIENTS

100% WHOLE GRAIN POPPING CORN, PALM OIL (CONTAINS TBHQ, CITRIC ACID), SALT, POTASSIUM CHLORIDE, NATURAL AND ARTIFICIAL BUTTER FLAVOUR, BUTTER, COLOUR (ANNATTO, TURMERIC, PAPRIKA).

CONTAINS MILK.

Hot Hot Chicken Instant Noodle Cup



Nutrition Facts	
Per 1 container (64 g)	
Amount	% Daily Value
Calories 280	
Fat 10 g	15 %
Saturated 5 g + Trans 0 g	25 %
Cholesterol 0 mg	
Sodium 740 mg	31 %
Carbohydrate 42 g	14 %
Fibre 2 g	8 %
Sugars 1 g	
Protein 7 g	
Vitamin A 2 %	Vitamin C 0 %
Calcium 2 %	Iron 15%

INGREDIENTS

NOODLE:

ENRICHED WHEAT FLOUR, PALM OIL, MODIFIED STARCH, SUGAR, SALT, GUAR GUM, GARLIC POWDER.

VEGETABLES:

TEXTURED SOY PROTEIN, DEHYDRATED CABBAGE, DEHYDRATED GREEN ONION, DEHYDRATED CARROTS, FREEZE DRIED CORN, FREEZE DRIED PEAS.

SOUP BASE:

ARTIFICIAL CHICKEN FLAVOUR, SALT, MONOSODIUM GLUTAMATE, SUGAR, SOY SAUCE POWDER (SOYBEANS, SALT, WHEAT), YEAST EXTRACT POWDER (DRIED BREAD YEAST, WATER), DISODIUM INOSINATE AND DISODIUM GUANYLATE, PAPRIKA EXTRACT, WHITE PEPPER POWDER, DRIED LEEK, CAMEL.

CONTAINS WHEAT, SOY.

Chicken Nuggets

Nutrition Facts	
Per 4 nuggets (67 g)	
Amount	% Daily Value
Calories 180	
Fat 12 g	18 %
Saturated 2 g + Trans 0 g	10 %
Cholesterol 30 mg	
Sodium 330 mg	14 %
Carbohydrate 11 g	4 %
Fibre 1 g	4 %
Sugars 0 g	
Protein 10 g	
Vitamin A 0 %	Vitamin C 0 %
Calcium 0 %	Iron 4 %



INGREDIENTS

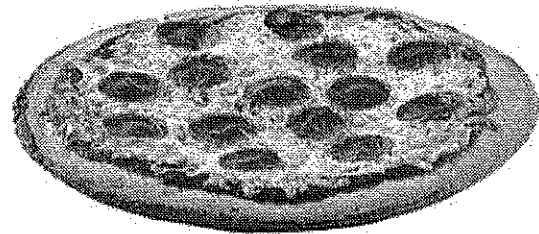
CHICKEN:

BONELESS SKINLESS CHICKEN BREAST MEAT, WATER, 100% VEGETABLE OIL (CANOLA OIL, CORN OIL, SOYBEAN OIL, HYDROGENATED SOYBEAN OIL [TBHQ], CITRIC ACID, DIMETHYLPOLYSILOXANE), WHEAT FLOUR, YELLOW CORN FLOUR, MODIFIED CORN STARCH, RICE STARCH, SALT, BAKING POWDER, SEASONING (WHEAT STARCH, YEAST EXTRACT, SALT, NATURAL FLAVOUR, SAFFLOWER OIL, DEXTROSE, CITRIC ACID, ROSEMARY), SPICES, CANOLA OIL, SODIUM ALUMINUM PHOSPHATE, DEXTROSE, WHEAT STARCH, CORN STARCH.

CONTAINS WHEAT.

Ready-Bake Frozen Pepperoni Pizza

Nutrition Facts	
Per 1/6 pizza (88 g)	
Amount	% Daily Value
Calories 220	
Fat 9 g	14 %
Saturated 3.5 g + Trans 0 g	18 %
Cholesterol 20 mg	
Sodium 550 mg	23 %
Carbohydrate 26 g	9 %
Fibre 1 g	4 %
Sugars 2 g	
Protein 9 g	
Vitamin A 2 %	Vitamin C 0 %
Calcium 10 %	Iron 15 %



INGREDIENTS

CRUST:

WHEAT FLOUR, WATER, EXTRA-VIRGIN OLIVE OIL, SALT, SUGAR, YEAST, MALTED BARLEY FLOUR).

TOPPING:

MOZZARELLA CHEESE (MILK, BACTERIAL CULTURES, SALT, MICROBIAL ENZYMES, CELLULOSE), SAUCE (WATER, TOMATO PASTE, BASIL, EXTRA-VIRGIN OLIVE OIL, GARLIC PURÉE, SALT, SUGAR, OREGANO, VINEGAR, THYME, SPICES, SOY OIL), PEPPERONI (PORK, SALT, SPICES, [MUSTARD], DEXTROSE, LACTIC ACID STARTER CULTURE, FLAVOURS, SODIUM ASCORBATE, GARLIC POWDER, SODIUM NITRITE, PORK STOCK, CITRIC ACID), EXTRA-VIRGIN OLIVE OIL, DEHYDRATED PARSLEY.

Glazed Cinnamon Bun

Nutrition Facts	
Per 1 bun (105 g)	
Amount	% Daily Value
Calories 410	
Fat 22 g	34 %
Saturated 11 g + Trans 0 g	55 %
Cholesterol 0 mg	
Sodium 340 mg	14 %
Carbohydrate 49 g	16 %
Fibre 2 g	8 %
Sugars 14 g	
Protein 4 g	
Vitamin A 0 %	Vitamin C 0 %
Calcium 0 %	Iron 0 %



INGREDIENTS

CINNAMON ROLL:

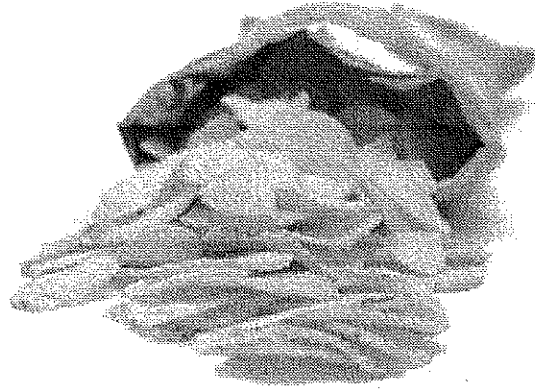
ENRICHED WHEAT FLOUR, WATER, SHORTENING (PALM OIL, MODIFIED PALM OIL, WITH TBHQ AS PRESERVATIVE), YEAST, CORN STARCH, SUGAR, CINNAMON, WHEY POWDER (MILK), WHEAT GLUTEN, LEAVENING (SODIUM ACID PYROPHOSPHATE, SODIUM BICARBONATE), SKIM MILK POWDER, EMULSIFIERS [MONO AND DIGLYCERIDES (WITH BHT AND CITRIC ACID AS PRESERVATIVES), SODIUM STEAROYL-2-LACTYLATE, DIACETYL TARTARIC ACID ESTER OF MONO AND DIGLYCERIDES], POTATO FLOUR, SALT, CORN FLOUR, SOYBEAN FLOUR, DEXTROSE, VEGETABLE OIL (CANOLA OIL AND/OR SOYBEAN OIL, WITH TBHQ AS PRESERVATIVE), SILICON DIOXIDE (FREE FLOW AGENT), ASCORBIC ACID, ARTIFICIAL FLAVOUR, COLOUR (YELLOW #5 AND #6), L-CYSTEINE HYDROCHLORIDE, TRICALCIUM PHOSPHATE, GUAR GUM, ENZYMES (AMYLASE, XYLANASE, WHEAT FLOUR, SALT, DEXTRIN), SUNFLOWER OIL.

GLAZE:

SUGAR, WATER, GUAR GUM, MODIFIED POTATO STARCH, POTASSIUM SORBATE (PRESERVATIVE), CITRIC ACID (PH CONTROL) AGAR, XANTHAN GUM.

The Original Potato Chips

Nutrition Facts	
Per 36 chips (50 g)	
Amount	% Daily Value
Calories 280	
Fat 18 g	28 %
Saturated 2 g + Trans 0 g	10 %
Cholesterol 0 mg	
Sodium 330 mg	14 %
Carbohydrate 26 g	9 %
Fibre 1 g	4 %
Sugars 0 g	
Protein 3 g	
Vitamin A 0 %	Vitamin C 20 %
Calcium 0 %	Iron 4 %



INGREDIENTS

SPECIALLY SELECTED POTATOES, VEGETABLE OIL, SALT.

Which granola bar would you choose?



A

Nutrition Facts	
Per 1 bar (35 g)	
Amount	% Daily Value
Calories 160	
Fat 7 g	10 %
Saturated 2 g + Trans 0 g	10 %
Cholesterol 0 mg	
Sodium 140 mg	6 %
Carbohydrate 22 g	7 %
Fibre 1 g	6 %
Sugars 8 g	
Protein 3 g	
Vitamin A 0 %	Vitamin C 0 %
Calcium 2 %	Iron 2 %

B

Nutrition Facts	
Per 1 bar (35 g)	
Amount	% Daily Value
Calories 150	
Fat 5 g	8 %
Saturated 0.5 g + Trans 0 g	3 %
Cholesterol 0 mg	
Sodium 115 mg	5 %
Carbohydrate 19 g	6 %
Fibre 4 g	16 %
Sugars 5 g	
Protein 7 g	
Vitamin A 0 %	Vitamin C 0 %
Calcium 4 %	Iron 10 %

INGREDIENTS

ALMONDS, CORN SYRUP, WHOLE GRAIN OATS, SUGAR, RICE FLOUR, PALM KERNEL OIL, WHOLE GRAIN WHEAT, VEGETABLE GLYCERIN, HONEY ROASTED ALMOND BUTTER (ALMONDS, HONEY, MALTODEXTRIN, PALM OIL, MIXED TOCOPHEROLS), FRUCTOSE, CANOLA OIL, SALT, SOY LECITHIN, CORN STARCH, REDUCED MINERALS WHEY, NONFAT MILK, BARLEY MALT EXTRACT, BAKING SODA, NATURAL FLAVOUR, MIXED TOCOPHEROLS.

INGREDIENTS

ROLLED WHOLE GRAIN BLEND (HARD RED WHEAT, OATS, RYE, BARLEY, TRITICALE), ROASTED ALMONDS (ALMONDS, VEGETABLE OIL), BROWN RICE SYRUP, SOY FLOUR, TAPIOCA STARCH, DRIED CANE SYRUP, WHOLE FLAXSEED, ACACIA GUM, EXPELLER PRESSED CANOLA OIL, GLYCERIN, OAT HULL FIBRE, SOY FIBRE, SEA SALT, NATURAL FLAVOUR, CORN STARCH, MOLASSES, SOY LECITHIN, SKIM MILK POWDER, XANTHAN GUM, PEANUT FLOUR.

Station 6: Ingredient Investigation Fact Sheet

Ingredient list

The ingredient list shows all the ingredients in a packaged food. Ingredients are listed in order of weight, beginning with the ingredient that weighs the most and ending with the ingredient that weighs the least. This means that a food contains *more* of the ingredients found at the beginning of the list, and *less* of the ingredients at the end of the list.

Ingredients with many names

Sometimes ingredients like sodium and sugar appear on ingredient lists under many different names. Here's a list of commonly used terms:

Commonly Used Terms for Sodium (Salt) and Sugar	
Nutrient	Other Names
Sodium	<ul style="list-style-type: none"> • Baking powder • Baking soda • Brine • Celery salt • Disodium phosphate • Garlic salt • Monosodium glutamate (MSG) • Onion Salt • Salt • Sodium alginate • Sodium benzoate • Sodium bicarbonate • Sodium bisulfate • Sodium propionate • Soy sauce
Sugar	<ul style="list-style-type: none"> • Brown sugar • Cane juice extract • Corn syrup • Demerara or Turbinado sugar • Dextrose • Evaporated cane juice • Fructose • Galactose • Glucose • Glucose-fructose • High-fructose corn syrup • Honey • Invert sugar • Lactose • Liquid sugar • Maltose • Molasses • Sucrose • Syrup • Treacle • White sugar • Caramel <p>Tip: Words ending in "ose" usually mean sugar. Sugars are also found naturally in foods such as fruit, fruit juices, milk and vegetables.</p>

Information adapted from Health Canada's [Ingredient list](#) and Alberta Health Services' [Label Reading the Healthy Way](#).

Station 6: Ingredient Investigation – Worksheet

1. In what order are ingredients listed?
2. List all the names which mean sodium that you can find in the ingredient lists:
3. List all the names which mean sugar that you can find in the ingredient lists:
4. Without using the ingredient list, where else on a food package can you find nutrition information to help you make healthier choices?
5. How do you tell if there is a little or a lot of a nutrient in a food?
6. You are trying to make the healthiest choice between granola bar A and B.
Which granola bar do you choose and why?

Station 6: Ingredient Investigation Fact Sheet

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Sugar	<ul style="list-style-type: none"> • Brown sugar • Cane juice extract • Corn syrup • Demerara or Turbinado sugar • Dextrose • Evaporated cane juice • Fructose • Galactose • Glucose • Glucose-fructose • High-fructose corn syrup • Honey • Invert sugar • Lactose • Liquid sugar • Maltose • Molasses • Sucrose • Syrup • Treacle • White sugar <p>Tip: Words ending in "ose" usually mean sugar. Sugars are also found naturally in foods such as fruit, fruit juices, milk and vegetables.</p>

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Label Reading the Healthy Way

Using food labels

Food labels give you information to help you make healthier food choices and compare similar foods.

Nutrition information is found in 3 different places on food labels:

- Ingredient list
- Nutrition Facts table
- Nutrient content claims and health claims

You can use food labels to make healthier food choices. Healthy food choices will help to improve your overall health.

What about foods without a label?

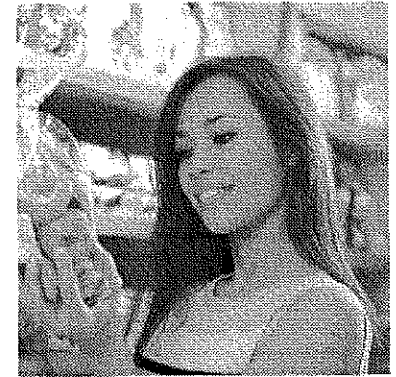
It is the law in Canada that most foods have a label.

Foods that **don't** need a label are:

- fresh vegetables and fruit
- raw meat and poultry (ground meat and ground poultry must have labels)
- raw fish and seafood
- pre-packaged meat and poultry barbecued, roasted, or broiled in the store
- baked goods made in the store
- alcoholic drinks
- bulk foods
- foods sold at farmers markets and craft shows, when sold by the person who made them
- individual portions of food or condiments not for re-sale, such as ketchup packets and coffee creamers

Ingredient list

Reading ingredient lists is important for people with food allergies. It's also useful for anyone who needs to limit or avoid certain ingredients.



The ingredient list on food packages tells you what's in the food.

- Ingredients are listed by weight from most to least.
- The first few ingredients are those in the highest amounts.
- If one of the first 3 ingredients is salt, sodium, sugar, oil, or fat, use that food in small amounts or choose a different food.

Example:

Breakfast cereal—ingredient list

Ingredients: Whole Grain Oats, Whole Grain Wheat Flour, Bran, Brown Sugar, Corn Maltodextrin, Barley Malt Extract, Salt, Sodium Bicarbonate, Caramel Colour Blend, BHT (Preservative).

In this ingredient list, whole grain oats, whole grain wheat flour, and bran are listed as the first 3 ingredients. This means that the cereal has more of these ingredients than the rest of the ingredients listed.

Nutrition Facts table

The Nutrition Facts table on the food label gives you information on serving size, calories, and at least 13 different nutrients. Use the Nutrition Facts table to compare similar foods.

Check Serving Size

The serving size is listed at the top of the Nutrition Facts table. All the information in the table is based on this amount of food. If you eat more or less than the listed serving size, you will be getting more or less of the nutrient amounts listed.

Compare the serving size to the amount you eat. For example, if the serving size of a cereal is $\frac{3}{4}$ cup (175 mL/45 g) and you ate 1 $\frac{1}{2}$ cups (350 mL/90 g), you would get double of all the nutrients listed on the label.

The serving size listed on the Nutrition Facts table is not a suggested amount of food to eat. It may not always be the same as the serving size on Canada's Food Guide.

For serving size guidelines see www.healthcanada.gc.ca/foodguide.

Breakfast cereal

Read Nutrition Facts

Compare similar foods

Choose foods with:

Less than 2 g saturated fat per serving

Little or no trans fat per serving

2 g fibre or more per serving

Nutrition Facts

Per $\frac{3}{4}$ cup/175 mL/45 g

Amount	% Daily Value
Calories 180	
Fat 2 g	3 %
Saturated 0.4 g + Trans 0 g	2 %
Cholesterol 0 mg	
Sodium 120 mg	5 %
Carbohydrate 35 g	12 %
Fibre 4 g	15 %
Sugars 7 g	
Protein 5 g	
Vitamin A	0 %
Vitamin C	0 %
Calcium	2 %
Iron	45 %

Check % Daily Value

The % Daily Value shows the amount of nutrients in 1 serving

Choose foods with:

5 % or less Daily Value for saturated fat, trans fat and sodium

15 % or more Daily Value for fibre, vitamins, calcium and iron

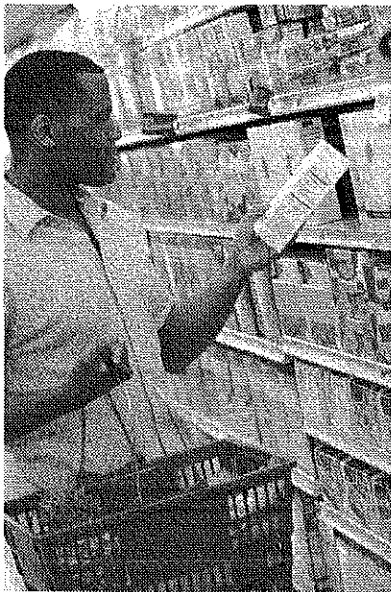
Nutrient content and health claims

Always check the Nutrition Facts table when there is a claim on the package. A food may be lower in 1 nutrient, but higher in another. For example, the Nutrition Facts table can show you if a food marked “low saturated fat” is still high in calories.

Nutrient content claims are statements made on a food package about a nutrient such as fat, salt, sodium, or fibre. For example, “A very high source of fibre”. See (www.healthycanadians.gc.ca) and search for Nutrient content claims.

Health claims describe a link between what you eat and certain diseases. For example, “A healthy diet low in saturated and trans fats may reduce the risk of heart disease”. See (www.healthycanadians.gc.ca) and search for Health claims.

A food must meet the nutrient content standards of the Canadian government before a nutrient content claim can be made on the package.



What do nutrient content claims mean?

Free, No, Zero, Without: The amount of the nutrient in the food is so small that it is not counted. Some examples include calorie-free, sugar-free, fat-free or sodium-free. Cholesterol-free, saturated fat-free and trans fat-free **don't** mean low in total fat.

Low, Little, Few: Product has a very small amount of the nutrient. Some examples include low calorie, low saturated fat, low cholesterol, low sodium/salt and low protein. Low saturated fat or low cholesterol **don't** mean low in total fat.

Reduced, Less, Lower, Fewer: Product has at least 25% less of the nutrient compared to a similar product. May be used for products that are reduced in calories, fat, saturated fat, trans fat, cholesterol, sodium/salt or sugar. (Not the same as the “low” nutrient claim).

Lightly: Product has at least 50% less of the added nutrient compared to a similar product. May be used for products that are reduced in sodium/salt.

Light: Product has at least 25% less of the nutrient compared with a similar product. May be used for products that are reduced in calories or fat.

No added, Without added: Product has none of the added nutrients such as fat, sugar, and sodium/salt.

More, Higher, Higher in: Product has 25% more of the nutrient (may be used for products with more calories, fibre, and protein) compared to a similar product.

Source contains: Product has a large amount of the nutrient: For example a source of fibre where the claim describes the amount.

Fibre claims	Amount of fibre per serving
Very high source	6 grams or more
High source	4 grams or more
Source	2 grams or more

Making healthier choices

Whole grains

Whole grains provide fibre, B vitamins, iron, zinc, magnesium, and plant compounds called phytonutrients. These nutrients work together to promote good health.



To increase your fibre intake:

- Choose grain products with whole grains listed as the first ingredient.
- Look for **whole** or **whole grain** in front of the grain (for example: whole grain barley or whole rye).

Some whole grains don't need the words **whole** or **whole grain** in front of the name, as they're used only as whole grains (for example: oats, oatmeal, bulgur, millet and cornmeal).

Salt (sodium)

Sodium is found in salt. Most of the sodium we eat comes from processed food containing salt or sodium.

To reduce your intake:

- Choose fewer processed and packaged foods.
- Look for unsalted, low salt, and no-added salt foods.
- Read ingredient lists on packages. Limit foods with salt, sodium, or soda as one of the first 3 ingredients.
- Compare brands. Choose foods with 5% or less Daily Value for sodium or less than 200 mg of sodium per serving.



Fats

Fats found in food can be unsaturated, saturated or trans fats. Choose healthier unsaturated fats, limit saturated fats, and avoid trans fats, where possible.

- Look for healthy fats in the ingredients list: canola oil, olive oil, peanut oil, sunflower oil, soft non-hydrogenated margarine, or nuts and seeds.
- Limit or avoid foods that have shortening, hard margarine, partially hydrogenated oils or lard.



Sugars

Sugar comes in many forms. It can be found naturally in fruit, fruit juices, milk and some vegetables, or added to foods such as baked goods, candy, and soft drinks.

Compare brands and choose foods with less sugar. Sugar in foods can be listed under different names on the ingredient list. Some examples include:

- cane juice/extract
- corn syrup/solids
- dextrose
- fructose
- fruit juice, purées and concentrates
- glucose
- honey
- liquid sugar
- maltose
- molasses
- sucrose
- syrup

For more information

[Label Reading at HealthyEatingStartsHere.ca](http://HealthyEatingStartsHere.ca), see ([Steps to a Healthier You](#)) and click on Label Reading.

[Food Labelling at Health Canada](http://www.hc-sc.gc.ca), see (www.hc-sc.gc.ca) and search for Food Labelling.