

Nutrition Guideline

Label Reading

For Professional Reference Only

Applicable to: Nurses, Physicians and Other Health Professionals

Recommendations

- Read food labels to assist in making healthy food choices.

Health Benefits

Healthy eating plays an important role in promoting overall health and reducing the risk of chronic disease. Nutrition labelling can assist Canadians to make informed food choices.¹

Key Questions

Where can nutrition information be found on food labels?

Nutrition information is found in three different places.

1. Ingredient list
2. Nutrition Facts table
3. Nutrient content claims and diet-related health claims

Do all food packages have nutrition information?

It is the law that most food labels include nutrition information, to help consumers differentiate between similar foods and brands, and to help consumers make informed food choices.² Some foods that **don't** need a label are:¹

- fresh vegetables and fruit
- raw meat, poultry (ground meat and ground poultry must have labels)
- raw fish and seafood
- pre-packaged meat and poultry that are 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 not for re-sale (including ketchup packets, coffee creamers)

How is the ingredient list on a food label set up?²

The ingredient list provides an overview of every ingredient that is in the food. Ingredients are listed by weight from most to least, as determined before they are combined to make the food. The exceptions are spices, seasonings and herbs (except salt), natural and artificial flavours, flavour enhancers, food additives, and vitamin and mineral nutrients and their derivatives or salts, which may be shown at the end of the ingredient list in any order.

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What information does the Nutrition Facts table provide?

The Nutrition Facts table provides information on serving size, the number of calories in that serving, and the amounts of at least 13 different nutrients in a table.² This information can be used to compare similar foods, allowing individuals to choose foods that are higher in fibre, vitamins, calcium, and iron, and lower in sugar, salt, and fat.

The nutrients that must be listed in the Nutrition Facts table are:

- total fat
- saturated fat
- trans fat
- cholesterol
- sodium
- carbohydrate
- fibre
- sugars
- protein
- vitamin A
- vitamin C
- calcium
- iron

Manufacturers may add more nutrients from a defined list which includes other vitamins and minerals, types of fat, sugar alcohols and starch.

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The information in this table is based on one serving of food as defined by the manufacturer. Look at the **serving size** listed on the Nutrition Facts table. All the information in the table is based on this serving size. If more or less than the listed serving size is consumed, the nutrient content must be adjusted. For example, the Nutrition Facts table for a Blueberry muffin is provided below. If only half of this muffin was eaten, all the nutrient values would need to be divided in half.

Calories are the amount of energy in one serving.

Fat is the total amount of fat in one serving.

Saturated and trans fats are part of the total amount of fat. These fats raise blood cholesterol. Choose foods that are lower in saturated and trans fats.

Cholesterol is the amount of dietary cholesterol in one serving. A food may have no cholesterol but still be high in saturated and trans fat.

Sodium is the amount of sodium in one serving. Salt is made from sodium. Look for foods with less than 200 mg of sodium in individual items.

Carbohydrate is the total amount of fibre, sugar and starch in one serving. Often the amount of starch is not listed, but it always counts as part of the carbohydrate total.

Fibre is the amount of fibre in one serving. Fibre is helpful for bowel health and can lower risk of certain diseases. Choose foods that are higher in fibre.

Sugars may be naturally present or added to food during processing. Read the ingredient list to see if sugar was added. Limit how much added sugar is eaten. See the last page for more information about added sugars.

% Daily Value can be used to see if a food has a little or a lot of a nutrient in one serving of the food.

Quick guide to % Daily Value:

- 5% or less is a little.
- 15% or more is a lot.
- Choose foods with less fat, saturated and trans fat, and sodium.
- Choose foods with more fibre, vitamins, calcium, and iron.

Blueberry Muffin

Nutrition Facts	
Per 1 muffin (71 g)	
Amount Per Serving	% Daily Value
Calories 200	
Fat 10 g	15%
Saturated Fat 3 g	33%
+ Trans 3.6 g	
Cholesterol 20 mg	7%
Sodium 320 mg	13%
Carbohydrate 34 g	11%
Fibre 2 g	8%
Sugars 7 g	
Protein 4 g	
Vitamin A 10%	Vitamin C 2%
Calcium 4%	Iron 6%

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What is % Daily Value?

The % Daily Value tells consumers what percentage of the daily recommended amount of the nutrient is in each serving. The % Daily Value (% DV) provides a quick overview of the nutrients provided by a food. This tool helps consumers determine if a serving of food has a little or a lot of a nutrient.³

In the Nutrition Facts table, there is a % DV for fat, saturated and trans fats (combined), sodium, carbohydrate, fibre, vitamin A, vitamin C, calcium and iron. Protein and sugars do not have a % DV since most Canadians get enough protein, and there is no widely recommended sugar target for healthy people. Listing a % DV for cholesterol is optional.³

The Daily Value is the reference point upon which the % Daily Value is based. The Daily Values for vitamins and minerals are based on the highest recommended intakes for each age and sex group, so they apply to most people aged 2 and over. They do not include extra needs for pregnancy and breastfeeding.³

The % Daily Value of the nutrient in one serving is shown in the Nutrition Facts table. To calculate the % DV, the quantity of each nutrient contained in the serving of food is divided by its Daily Value and then multiplied by 100. For example, the Daily Value for Vitamin C is 60 mg. If a food product has 12 mg of Vitamin C, the % DV for Vitamin C would be 20%. $(12 \text{ mg} \div 60 \text{ mg}) \times 100 = 20\%$.³

Daily Values used for determining % Daily Value³

Nutrient	Daily Value
Fat	65 g*
The sum of saturated and trans fatty acids	20 g*
Cholesterol	300 mg
Sodium	2400 mg
Carbohydrate	300 g*
Fibre	25 g
Sugars	no DV
Protein	no DV
Vitamin A	1000 RE**
Vitamin C	60 mg**
Calcium	1100 mg**
Iron	14 mg**

*The Daily Values for vitamins and minerals are based on the 1983 Recommended Nutrient Intakes for
**Canadians and can be found in the Food and Drug regulations.

Note: The Daily Values for Fat, Carbohydrate and Protein are based on a 2000 calorie reference diet.

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The % DV can be used to compare two different food products to make an informed choice. It's easiest to compare products with similar serving sizes.⁴ For example, when comparing the % DVs of two different cereals, ensure the gram weights in the serving sizes are similar. Products that do not have similar serving sizes may also be compared. For example, you could compare the % DVs of a bagel (90 g) to the % DVs of 2 slices of bread (70 g) because you would probably eat either amount of food at one meal.Error! Bookmark not defined.

As a rule of thumb, 5% DV or less means there is a little of a nutrient in one serving of the food, while 15% DV or more means there is a lot of the nutrient in one serving of the food. This applies to all nutrients. To make healthier choices, choose food with:³

- Less: fat, saturated and trans fat, and sodium
- More: fibre, vitamins, calcium, and iron

Is the amount of food (serving size) stated in the Nutrition Facts table the same as the recommended serving sizes in Canada's Food Guide?

The specific amounts (serving size) used for nutrition labelling are not always the same as the recommended serving sizes in Canada's Food Guide.⁵ The amount of food (serving size) in a Nutrition Facts table is determined by the manufacturer based on criteria from Health Canada.² Health Canada establishes serving sizes for more than 150 categories of packaged food sold in Canada. The regulated amounts (serving sizes) are the quantities usually consumed by an individual at one time.² Calorie and nutrient information for labelling purposes are based on the serving sizes.⁵

Individuals should follow the recommendations in Canada's Food Guide to decide the amount and type of food needed for their age and gender. Individuals should compare the amount they eat to the amount of food listed in the Nutrition Facts table to determine their nutrient intake from a food.⁵

What are nutrient content claims and diet-related health claims?²

Nutrient Content Claims

Nutrient content claims are statements or expressions which describe how much of a nutrient is in a food. Foods must meet government criteria about the level of the nutrient in question, and about related nutrients in the food, before it can display a content claim about a nutrient.

Examples of nutrient content claims:

- "Low in fat"
- "Low in sodium"
- "No trans fat"
- "Source of fibre"

Diet-related Health Claims

A diet-related health claim is a statement on a food label that describes a link between diet and the risk of developing a diet-related disease or condition, such as osteoporosis or stroke. It also highlights the properties of the food in the package that make it a suitable part of the diet. These claims are based on reliable scientific evidence that has established a relationship between certain parts of healthy diets and reduction of risk of certain diseases.

Examples of diet-related health claims:

- “A healthy diet low in saturated and trans fats may reduce the risk of heart disease. (*Naming the food*) is low in saturated and trans fat.”
- “A healthy diet rich in a variety of vegetables and fruit may help reduce the risk of some types of cancer.”

What are Point of Purchase nutrition programs?⁶

Point of Purchase (POP) nutrition programs can be described as non-government or industry-led food information programs that use logos and symbols on food packaging or restaurant menus to indicate the healthier choice. These programs simplify nutrition information to help individuals make an informed choice.

There are no standardized or universal criteria for POP nutrition programs like there is for the labelling of foods for sale in grocery stores. Products that fit the criteria for healthier choices in one POP nutrition program may not fit the criteria of another POP nutrition program. POP nutrition programs may not be consistent with Canada's Food Guide or nutrient content claims proposed by Health Canada. Although a product may meet the criteria of healthier food in POP nutrition program, it may not be the healthiest choice.

What does it mean if a food is labelled organic?

Organic foods produced in Canada include grains, vegetables and fruit, beef, pork, poultry, milk and maple syrup. Organic foods are those produced from a farming system that excludes the use of synthetic pesticides and fertilizers, genetically modified organisms, antibiotics, growth hormones, ionizing radiation for preservation and most uses of sulphates, nitrates and nitrites. Instead, organic farmers rely on crop rotation, cover crops, balanced host/predator relationships, green manures and compost, and organically approved pesticides made of natural material.⁷

Mandatory guidelines exist (Canada's Organic Products Regulations) for organic foods traded inter-provincially or internationally and are designed to protect consumers against false and misleading organic claims. The Canadian Food Inspection Agency (CFIA) works with certification bodies to ensure that Canadian organic food standards are met. Imported foods with organic food claims must meet the Canadian standards.⁸

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The CFIA regulates the use of the Canadian organic product logo. Only organic products that comply with the regulations and have an organic content of 95% or higher may be labeled organic and carry the organic product logo. The use of the organic logo is voluntary.⁸

Purchasing organic food should be a personal choice, based on a food's availability, price, appearance, taste and personal values of the buyer. While some organic products may give consumers a small advantage, for example, in content of phytochemical, it is most important that Canadians choose foods based on Eating Well with Canada's Food Guide.⁹

Is organic food more nutritious?

There is no clear answer to the question of whether or not food grown by certified organic methods are more nutritious than those grown by conventional methods. Studies comparing organic and conventionally-grown food often do not control for factors such as quality of soil, climate, variety of seed, or breed of animal. Therefore, reliable comparisons have not been made.⁹ Some research indicated that vitamin content is similar in organic and conventionally-grown foods, but that organic produce may have higher contents of some phytonutrients (healthy plant substances).⁹

Consumers should choose organic or conventionally-grown food according to their own taste and values. It is most important that consumers follow Canada's Food Guide in their food choices and eating patterns.

Refer to Guideline: General Healthy Eating for Children and Adults

Where can information on monosodium glutamate be found on the label?¹⁰

To determine if a product contains MSG, read the ingredient list on the package label. When MSG is added to prepackaged foods, it must be listed in the ingredient list, even when it is a component of other ingredients, such as a spice mixture. MSG will most likely be found near the bottom of the ingredient list. Individuals who are sensitive to glutamates should also look for the presence of hydrolyzed vegetable protein or hydrolyzed plant protein.

Monosodium glutamate (MSG) is the sodium salt of glutamic acid, a naturally occurring amino acid. MSG is intentionally added to foods to enhance the natural flavour of soups, casseroles, salads, gravies, meat, poultry, seafood, and vegetable dishes. Glutamate is also a natural part of proteins in plant- and animal-based foods. When these proteins are broken down by processing or cooking they release free glutamate and are themselves used as ingredients in prepared meat products, soups, broths and gravy mixes. Added sources of free glutamate include hydrolyzed vegetable protein (HVP), hydrolyzed plant protein (HPP), hydrolyzed soy protein (HSP), soya sauce or autolyzed yeast extracts foods.

In general, the use of MSG is not harmful to health and its safety has been reviewed by regulatory authorities, including Health Canada. However, some individuals may exhibit an allergic-type reaction or hypersensitivity when they consume MSG and therefore should avoid products containing MSG.

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Claims, such as "contains no MSG", "no MSG added" and "no added MSG", which state monosodium glutamate has not been added are considered misleading when other added sources of free glutamate, such as HVP or HPP, are present. Additionally, high levels of naturally occurring free glutamate can be found in foods such as tomatoes and tomato juice, grapes and grape juice, other fruit juices, cheeses such as Parmesan and Roquefort, and mushrooms. There are no labelling requirements for naturally-occurring free glutamates.

Where on the label can information be found about whether a product contains whole grains?

To determine if a product contains whole grain, read the ingredient list and look for the word "whole" or "whole grain" followed by the name of the grain. Choose foods with a whole grain listed as one of the first ingredients.¹¹

Canada's Food Guide recommends that at least half of the grain products you eat each day should be whole grain.¹² Whole grains may increase your fibre intake, and they have other nutrients that can promote good health. Whole grains are sources of carbohydrates, fibre, and protein.¹¹

Grains can be either whole or refined. Whole grains contain all three parts of the kernel: bran, endosperm and germ. Examples include rolled oats and brown rice. Refined grains have had all or part of the germ and the bran removed (examples include white rice, white flour, grits and cream of wheat). Whole grains can be found on their own or as ingredients in products.

Words in the ingredient list such as "multigrain", "organic", "enriched wheat flour", "12-grain" are not necessarily whole grain; the flour or grains in the products may be made with or consist of little or no whole grains.¹¹

Refer to Guideline: Fibre

Where is information on whether a food contains natural or added sugar found on the label?

Sugar intake includes sugar that occurs naturally in food (naturally occurring sugar) and sugar that is added during food processing (added sugar).¹³

Naturally occurring sugars are in a variety of food or beverages found on Canada's Food Guide. For example, lactose is a natural sugar in milk, while fructose is a natural sugar in fruit.¹³ Although these foods contain natural sugar, they are also full of nutrients. They are recommended as part of healthy eating and can contribute to good health

Added sugars are all sugars and syrups added to foods during processing and preparation.¹³ Typical foods and beverages that are a major source of added sugars are regular (non-diet) soft drinks, fruit drinks, sweets, candies and chocolates, cakes, cookies and other baked items, and sweetened breakfast cereals.

Both added sugars and naturally occurring sugars have the same amount of calories; however, foods containing added sugars usually offer little or no vitamins, minerals, or other nutrients. High amounts of added sugars can be associated with lower vitamin and mineral intakes^{14,15} through replacement of more nutritious foods.

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To find out if sugars have been added to the products, look at the ingredient list. Anything that ends in “ose” is a sugar.¹⁶ Added sugars include:¹³

- Table sugar (sucrose)
- High-fructose corn syrup
- Glucose
- Dextrose
- Fructose
- Molasses
- Honey
- Syrup – there are a variety of syrups used in food or beverage drink production.

The Nutrition Facts table on a package indicates the amount of total sugars, which includes both naturally occurring sugar plus added sugars, if any.¹⁷ Use the Nutrition Facts table to compare the amount of total sugars among products. Product packages may list claims such as “no sugar added” or “no added sugar”. These products may still contain natural sugars.

Refer to Guideline: General Healthy Eating for Children and Adults; Foods and Drinks High in Calories, Fat, Sugar and Salt

What is the difference between ‘Made in Canada’ and ‘Product of Canada’?²

Labelling guidelines for “Product of Canada” and “Made in Canada” claims came into effect in 2008. The criteria are published in the Canadian Food Inspection Agency’s (CFIA) Guide to Food Labelling and Advertising. CFIA monitors industry’s compliance with the new policy. The use of these claims is voluntary; however, when applied they are assessed based on the criteria below.

If **Product of Canada** appears on the label, all major ingredients, and labour used to make the food product must come from Canada. If ingredients are present in very small amounts that are not produced in Canada, such as spices, food additives, vitamins, minerals, and flavouring preparations, the label can still include the Product of Canada claim. Also, ingredients not grown in Canada, such as oranges, cane sugar or coffee, when present at very low levels, may be considered minor ingredients.

Made in Canada can be used on the label when a food product is manufactured or processed in Canada whether or not the ingredients are imported or domestic or both. The regulations state that the last substantial transformation of the product must have happened in Canada, even if some ingredients come from other countries. The claim may be made more specific, stating “Made in Canada from imported ingredients,” or “Made in Canada from domestic and imported ingredients”.

Are there any handouts on label reading I can use with my clients?

Refer to approved provincial Alberta Health Services label reading nutrition handouts to support patient education. For more information, contact Nutrition.Resources@albertahealthservices.ca

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