7. Food Product Labels

VOCABULARY

Best-before date: guidelines about when it is best to use food; most food can be eaten after the date, but may suffer from a loss of nutrients, flavor, texture, or general quality. Foods with a shelf life of less than 90 days must have the date.

Use-by date: date found on meats, dairy, and highly perishable foods; for health reasons, be sure not to eat food past its use-by date. Serving size: amount of food to which nutrition facts on a food package relate; for example, 1 cup of cereal, 4 crackers Fresh: food that has not been preserved by some method such as freezing, canning, salting, or dry-

ing; not stale **Fibre:** roughage, found in whole-grain items; a necessary part of everyone's diet

Food additive: something added to a food to give it specific qualities; for example, vitamins and minerals; less positive additives may be artificial color, flavor, or preservatives.

See "Food Fact Vocabulary," on page 37, for more words pertaining to food and product labels.

Since a lot of information appears here, you may want to spread the lesson over a couple of classes.

The percentage refers to the percent of daily value obtained by eating one serving of a food. For example, the daily calcium requirement for schoolchildren is about 1300 mg. One cup of whole or soya milk provides 300 mg or about 23 percent of the daily With the latest consumer interest in and concern about what people are eating, as well as alarm over the obesity rates among children, it is a good idea to help students learn to demystify food product labels. This lesson is not intended to teach good nutrition practices, but to introduce students to food labels and encourage awareness about this form of real-life literacy.

Suggested Motivational Set

Ask students to complete "Food Products Surprises," a crossword puzzle. The blackline master appears on page 00. Once students have filled in the capitalized words, discuss the answers. Students will likely place the words correctly, but may be surprised at some of the clues and answers.

Alternatively, use the word list given in "Food Products Surprises" and ask students to classify the foods as healthy or not so healthy snacks.

Solut	ion:				
Ac	ross		Down		
5	granola	1	chocolate		
8	icecream	2	Power		
10	carrots	3	Smarties		
12	chips	4	Sunchips		
13	sunflower	6	hamburger		
		7	almonds		
		9	banana		

Preparing

1. Brainstorm to find out what students already know about food nutrients, additives, and product labels. Together, create a chart of information.

11 apple

2. Break the class into groups, assigning each group an area to research or study. Areas of study could include calories, daily values as a percentage (see margin note), fats, sodium, protein, carbohydrates, additives, and best-before dates. The focus is for groups to define the terms in a way they can understand.

Presenting

3. Have the groups present their information to the class. Alternatively, you could provide the information (see "Food Fact Vocabulary" on page 00; the degree to which you share these definitions will depend on student ages and abilities).

4. Display the "Food Labels" blackline master on the overhead and discuss. Encourage students to consider why manufacturers include certain nutrients or daily percentages and omit others. Point out the discrepancies between the labels, and invite students to guess what food products they belong to. Answers: "A"—sports energy bar; "B"—small package of plain potato chips; "C"—shredded whole wheat cereal; "D"—vanilla ice cream



Note: The clues provide comparisons between the items in the list.

ACROSS

- **5** Mostly carbohydrates
- 8 Has the second most fat
- 10 Has the fewest calories
- 12 Has the most fat
- **13** Has as many calories as 2 small apples

DOWN

- 1 About the same calories as 4 or 5 apples
- 2 Contains protein as its first ingredient
- **3** Has more calories than a chocolate bar
- 4 Multigrain, but still high in fats & calories
- 6 Has the most calories
- **7** Contains about the same number of calories as an apple
- 9 Has the most potassium
- 11 A healthy 60 calories

For more information on recognizing the presence of certain ingredients in foods check out Appendix B: The Hidden Ingredients in Product Labels, on page 125.

The class can do any or all of the Practising activities, depending on teacher preference and student interest.

*If you wish to determine daily nutrient requirements for students, check the Canada Food Guide at

http://www.hc-sc.gc.ca/fn-an/ food-guide-aliment/reviewexamen/index_e.html. 5. Brainstorm for general rules when reading food labels. These include the following:

- The first ingredient listed is present in the largest amount; the last listed is in the least amount.
- If an ingredient is mentioned in the name of the product, for example, chicken pie, that must be the main ingredient in the product.
- Serving sizes are listed on containers, and all nutrients apply to single servings.
- Fats and sugar must be listed on labels—pay close attention to these if you are trying to lose weight.
- Be sure to read everything on a label.

6. Discuss as many of the facts on "A Word on Food Claims and Labels," including notes on best-before dates, as you choose. One way to approach the list is to write each fact on an index card and have students, in pairs or trios, randomly select a card. The small groups then spend a few minutes reading the card and discussing the piece of information. The groups then share their facts along with any pertinent thoughts they had during their brief discussions.

Practising

8. Have students, in pairs or small groups, create large posters that organize foods based on the nutrients that are listed first on the food labels.

9. As a class, create a bulletin board display of labels that students collect from a variety of "junk" foods, such as potato chips, as well as from healthier snacks and common daily foods, such as bread. The class can organize the labels in any way students choose.

10. Ask students to choose one of the four labels from the "Food Labels" blackline master. Invite them to write reviews of their chosen food from the point of view of its value to health.

11. Challenge students to collect information from as many home food items as possible. You can chart this information according to any variable you choose, such as sugar content, vitamin content, fibre content, or calories per serving. Having students record the exact serving size of different common foods is also a good idea—often an eye-opener for students.

12. Prompt students to review 10 common foods at home for the best-before or use-by dates. In small groups, they can discuss whether foods could be safely consumed after the date.

Food Fact Vocabulary

Not all calories listed are equal.

Calorie: a unit of energy, often listed on food labels; it refers to how much energy can be obtained from eating a serving of that food. Calories come from fat, protein, or carbohydrate. Anyone who eats more calories than burned will gain weight.

Empty calories: calories obtained from eating such food as donuts, cakes, cookies, and chocolate; these foods provide calories without nutrients.

Check ingredient lists for nutrients.

Nutrients: the substances that provide nourishment to the body and help keep it healthy; found in food, they help maintain life. Examples include vitamins and calcium.

Ingredient list: list of nutrients and non-nutrients (e.g., artificial flavor) within a single serving; in Canada, usually measured in grams (g) or milligrams (mg) for tiny amounts

Daily intake: the amount of a nutrient required daily, based on a 2000 calorie diet*

Percentages: when on a food label, they refer to how much of a daily intake of 2000 calories each nutrient provides

Protein: needed for strength, muscles, and organs, it is a necessary nutrient and is usually measured in grams.

Carbohydrates: the body's primary source of energy, these can be found in whole grains, fruits, vegetables, and sugars.

Know one fat from the other.

Although the word "fat," with its connection to calories, seems to have become nasty, this nutrient is essential for growth and development. What is important to note is the differences between types of fats.

Saturated fat: unhealthy, solid fats, such as those found in animal products

Unsaturated fat: liquid fats, such as oils; these are healthier than saturated fats, but should be eaten in moderation. The higher the percentage of unsaturated fats (monounsaturated and polyunsaturated) versus saturated fats the better.

Trans fat: more dangerous than saturated fats, these can be hidden under the deceiving term *hydrogenated vegetable oil*.

Reduced fat: an ambiguous term used to indicate that there is less fat than in similar products; however, the product may still contain as much as 25 g/100 g.

Low fat: less than 3 g of fat per 100 g

Fat free: less than 0.5 g of fat per 100 g; however, a fat-free food may still be high in calories due to excessive amounts of sugar.

Light: in terms of fat, generally 50 percent less fat than similar products

Food Labels

SAMPLE B

SAMPLE A

Nutrition Facts				Nutrition Facts		
Serving size			63 g	Serving size	75 g	
Energy Protein Fat Carbohydrates Sodium Potassium Calcium Phosphorus Magnesium Iron Vitamins (<i>trace ar</i>	mounts)		222 cal 9.0 g 2.4 g 41 g 100 mg 390 mg 300 mg 350 mg 75 mg 3.5 mg	Calories Fat Saturated Trans Cholesterol Sodium Carbohydrate Fibre Sugars Protein Vit. C Iron	400 25 g 2.5 g 0.3 g 0 mg 750 mg 38 mg 3 g 2 g 4 g	% Daily Value 40% 14% 31% 13% 11% 4% 25% 10%
SAMPLE C				SAMPLE D		
<i>Nutrition Facts</i> Per 3/4 c (30 g)				<i>Nutrition Facts</i> Per 1/2 c (125 m	I)	
Calories Fat Saturated Trans Cholesterol Sodium Carbohydrate Fibre Sugars Protein Vitamin A Vitamin C Calcium Iron Vitamin D Niacin Folate Phosphorus Magnesium Zinc	% E 120 1.5 g 0.3 g 0 g 0 mg 170 mg 24 g 3 g 11 g 3 g	Daily Value Plus 2% 1% 7% 8% 10% 0% 0% 0% 0% 6% 8% 8% 8% 15% 6%	2% milk 180 6% 9% 10% 10% 10% 20% 25% 30% 25% 15% 10% 20% 20% 10%	Calories Fat Saturated & Tr Cholesterol Fibre Sugar Protein Vitamin A Calcium	170 8 g 30 mg 0 g 14 g 2 g	6% daily value 0%

Note: Not all nutrition labels provide the % daily value; on other labels, often some percentages are omitted if they are so small as to be deemed insignificant. Similarly, there are times when *only* the percent daily value is provided.

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A Word on Food Claims and Labels

When reading labels, it is often difficult to distinguish between fact and promotional promises. Learning to read food claims critically will provide you with another real-life literacy tool. It is to your advantage to be familiar with the most common "hooks" or "catchy phrases" used to make products seem perfect. This awareness will help you make healthier choices.

• When you see the word "baked," the product may not be healthier than if fried—it just sounds better.

• If a product claims to be a good source of a nutrient, a serving should contain 10–19 percent of the daily requirements of that nutrient.

• Be cautious of catchy words, such as "Energy Source" and "Nutritious and Healthy," when they appear on packaging—instead, read the label.

• If a product claims to be healthy, it should generally be good for you—low in salt and fat, and having at least 10 percent of the daily vitamin requirements.

• If you see the word "hydrogenated" in the ingredients, avoid buying or using the product.

• You might read the label on your pet's food, too. Watch out for references to preservatives, flavoring agents, and coloring—these are without nutritional value.

• If a food is listed as being 90 percent fat free, know that this is a consumer catch. The food has 10 percent fat—a high amount.

• Check the best-before and use-by dates, especially on perishable, or easy-to-spoil, foods. Remember not to eat food past its use-by date; if you eat food after a best-before date, bear in mind that there is likely a loss in nutrients and quality.

• Sometimes, a product gives a date without the words "best-before." When you see that, assume that it is a best-before date.

• If you don't see a label at all, beware!

When Words Aren't Enough

• Although most foods with best-before dates can be eaten safely after their dates, perishable foods, such as soft cheese, may be unsafe.

• Although eggs have best-before dates, they should never be eaten after those dates. The risk of salmonella poisoning is too high.

• Even when a food has not yet reached its best-before date, use your senses to determine if it is good. Look, smell, and taste a little. Sometimes, food can spoil even before its best-before date.

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