## Learning Goal(s)

- Students will identify the difference between the ingredients list and the nutrition facts table.
- Students will read and demonstrate an understanding of the meanings of descriptors on the nutrition facts table (e.g. "suggested serving, "cholesterol free" and "low fat").
- Students will identify what nutrients are in different products by reading the food labels.
- Students will create a menu for a meal that contains all the necessary nutrients.


## Curriculum Expectations

## Health and Physical Education, Grade 5

## Healthy Living

Oral Communication
By the end of Grade 5, students will:

- demonstrate the ability to apply health knowledge and living skills to make reasoned decisions and take appropriate actions relation to their personal health and well being.


## Language, Grade 5

Reading
By the end of Grade 5 students will:

- read and demonstrate an understanding of a variety of literary, graphic, and informational texts, using a range of strategies to construct meaning.
Media Literacy
- create a variety of media texts for different purposes and audiences, using appropriate forms, conventions and techniques.


## Teaching and Learning Strategies

Note: Students use Appendix A and Appendix B throughout this lesson.

- Provide each student with a copy of Appendix A - Student Resource Sheet\#1 and Appendix B - Student Resource Sheet \#2
- Discuss as a class what information is included in the Nutrition Facts table. Read the definitions provided in Appendix A - Student Resource Sheet \#1. Share with students that there are 13 nutrients always listed in the same order on each label. These are: fat (saturated and trans), cholesterol, sodium, carbohydrates (fibre, sugars) protein, Vitamin A, Vitamin C, calcium and iron.


## Materials and Resources

- Computer, internet access, projector, speakers, and screen
- Several food products or copies of food labels
- A box of cereal or other food product
- Measuring cups
- Bowls
- Appendix A - Student Resource Sheet\#1
- Appendix B - Student Resource Sheet \#2
- Appendix C-Planning a Balanced Meal
- Paper
- Pencils/pens
- Make a list of words students do not know and create a list of definitions in student friendly language.
- Discuss the term "suggested serving". Prepare a product as directed on the package and measure out the stated serving size. Does the serving seem reasonable for an average student? Why or why not?
- Discuss the implications of eating more or less than the stated serving size. Ask students how the Nutrition Facts table information changes if the product has added ingredients in the preparation stage (e.g., adding milk to cereal)? What role do the \% Daily Value descriptors play? What happens if someone gets too much or not enough of the various nutrients?
- Introduce students to the concept that 5 per cent of a daily value is "a little" and more than 15 per cent is "a lot". Ask students to consider which nutrients they need less of (fat, saturated fat, trans fat, sodium) and which they need more of (fibre, vitamin A, calcium, iron).
- Divide students into groups. Students read a variety of food labels and identify products that are considered healthy based on their \% Daily Values.
- Discuss as a class why some foods like vegetables and fruit do not have a Nutrition Facts Table. Research the nutrition facts of a few examples of whole foods (apple, potato, strawberries).
- Provide each student with Appendix C - Planning a Balanced Meal. Instruct students to create a menu for a meal that contains all the necessary nutrients and balances the \% Daily Values of different nutrients. Refer to food labels as your information source.


## Assessment

- Assess student work Appendix C - Planning a Balanced Meal. Consider student ability to demonstrate understanding of nutrients, Nutrition Fact tables and \% Daily Value. Provide feedback to students.


## Extensions

- Invite a local nutritionist or dietitian to be a guest speaker.
- Prepare a nutritional information dictionary. Use the words that are found on the food label in the Nutrition Facts table as well as the Ingredient List. Add pictures and/or drawings to your definition.
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| Nutrition Facts |  |
| :---: | :---: |
| Valeur nutritive |  |
| Per 1 pouch ( 30 g )/pour 1 sachet ( 30 g ) |  |
| Amount \% Da <br> Teneur \% valeur quo | \% Daily Value \% valeur quotidienne |
| Calories / Calories 130 |  |
| Fat / Lipides 6 g | $9 \%$ |
| Saturated / saturés 1.5 g <br> + Trans / trans 0 g | $1.5 \mathrm{~g} \quad 7 \%$ |
| Cholesterol / Cholestérol 5 mg | térol $5 \mathrm{mg} \quad 2 \%$ |
| Sodium / Sodium 85 mg | $\mathrm{mg} \quad 4 \%$ |
| Carbohydrate / Glucides 20 g | ides $20 \mathrm{~g} \quad 7 \%$ |
| Fibre / Fibres 4 g | 16 \% |
| Sugars / Sucres 8 g |  |
| Protein / Protéines 2 g |  |
| Vitamin A / Vitamine A | A $0 \%$ |
| Vitamin C / Vitamine C | C 0 \% |
| Calcium / Calcium | $2 \%$ |
| Iron / Fer | 10 \% |
| Thiamin / Thiamine | 15 \% |
| Vitamin $\mathrm{B}_{6} /$ Vitamine $\mathrm{B}_{6}$ | $\mathrm{B}_{6} \quad 2 \%$ |
| Folate / Folate | 6 \% |
| Pantothenate / Pantothénate | hénate $2 \%$ |

## Student Resource Sheet \#1 <br> Nutrition Information on Labels

Serving Size indicates the size of serving for which the nutrition information is given. Calories, fat and sodium intake will increase if the serving size is exceeded.

Percentage Recommended Daily Intake is a category which indicates the vitamins and minerals associated with the product.

Energy provides data about the number of Calories per serving. The amount of energy may also be given in kilojoules (kJ).

The total amount of Fat is also shown. Some products also give the content of various kinds of fat: polyunsaturates, monounsaturates, saturates and cholesterol. The most useful information is the indicator of grams of total fat.

Sodium is a measure of the amount of salt in a food.
Carbohydrates include the content of sugars, starch and fibre. Depending on the label, you may find information on only one type of carbohydrate.

## Nutrition Facts

Per 2 cookies ( 30 g )

| Amount | $\%$ Daily Value |
| :--- | ---: |
| Calories 140 |  |
| Fat 7 g | $11 \%$ |
| Saturated 3.0 g <br> + Trans 0 g | $15 \%$ |
| Cholesterol 5 mg | $2 \%$ |
| Sodium 170 mg | $7 \%$ |
| Carbohydrate 20 g | $7 \%$ |
| Fibre 1 g | $4 \%$ |
| Sugars 10 g |  |
| Protein 2 g |  |
| Vitamin A $\quad 0 \%$ | Vitamin C |
| Calcium $\quad 0 \%$ | Iron |

## Student Resource Sheet \#2

Summary of Nutritional Information on Labels

| Nutrient | Unit of measure | Food sources of this nutrient | Function |
| :---: | :---: | :---: | :---: |
| Fat | grams (g) | butter, margarine, oils baked goods (cookies, donuts, pastries) <br> milk and milk products <br> meats, nuts | - provides Calories or energy <br> - carries and stores Vitamins A, D, E, K <br> - insulates the body against cold <br> - cushions the skin, bones and internal organs |
| Saturated Fat | grams (g) | butter, cheese, whole milk sour cream, ice cream, lard, shortening, red meat | - provides Calories or energy <br> - carries and stores Vitamins A, D, E, K <br> - insulates the body against cold <br> - cushions the skin, bones and internal organs |
| Trans Fat | grams (g) | hydrogenated fats, oils, deep-fried foods and baked goods | - provides Calories or energy <br> - carries and stores Vitamins A, D, E, K <br> - insulates the body against cold cushions the skin, bones and internal organs |
| Cholesterol | milligrams(mg) | milk and milk products <br> egg yolks <br> meat <br> organ meats | Helps to make: <br> - some hormones <br> - Vitamin D <br> - cell membranes <br> - bile salts used to digest food |
| Sodium | milligrams(mg) | sodium or salt occurs naturally in many foods but it is also added to some processed foods such as bacon, soups, and potato chips | - balances body fluids <br> - helps transmit electrical signals through nerves |
| Carbohydrate | grams (g) | grains, vegetables and fruit, honey | provides Calories or energy ready for your muscles and your brain to use |
| Fibre | grams (g) | whole grains vegetables and fruit legumes | aids in bowel regularity <br> - reduces risk of colon cancer <br> - lowers blood cholesterol |
| Protein | grams (g) | milk and milk products, eggs meat, poultry, fish, baked beans nuts, peanut butter | builds and repairs body tissues builds antibodies (the blood components that fight infection) |
| Vitamin A | \% daily value | carrots, squash dark green, leafy vegetables | - maintains healthy skin <br> - provides good night vision |
| Vitamin C | \% daily value | citrus fruits strawberries | - builds and maintains connective tissues, heals wounds, fights infections |
| Calcium | \% daily value | milk and milk products | builds and maintains healthy bones and teeth, promotes healthy nerve function and normal blood clotting |
| Iron | \% daily value | red meat <br> whole-grain breads and cereals raisins | combines with protein to form hemoglobin (red blood cells that carry oxygen throughout the body) |

1. After you have made your menu plan for your meal, look at the Nutrition Fact tables and record how much of each of the nutrients listed you have included in your meal. Ensure that you take the serving size into consideration.

What Nutrients Does My Meal Contain?

| Nutrient | Amount | None |
| :--- | :--- | :--- |
| Carbohydrates <br> Total <br> fibre <br> sugars |  |  |
| Protein |  |  |
| Fats <br> Total <br> saturated <br> trans |  |  |
| Vitamins |  |  |
| Minerals |  |  |
| Sodium |  |  |

2. After you have looked at the Nutrition Facts table, consider how well your meal did when compared to Eating Well with Canada's Food Guide. Complete the following chart.

| Menu Item | Vegetables and Fruit <br> Recommended <br> servings for my age <br> and gender _- | Grains <br> Recommended <br> servings for my age <br> and gender _- | Milk and Alternatives <br> Recommended <br> servings for my age <br> and gender _- | Meat and Alternatives <br> Recommended <br> servings for my age <br> and gender |
| :--- | :--- | :--- | :--- | :--- |
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