

Nutrition Resource Kits

Grade Four – Lesson Plans

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Introduction

This Nutrition Resource Kit is designed for Grade 4. The manual is a curriculum-based tool that is divided into sections that promote healthy living, following the Alberta Education Health and Life Skills Curriculum. Each section includes: Background Information for Teachers, References, and Student Activities. Also included is basic information on Canada's Food Guide, which provides a review of material covered in primary grades, as well as a knowledge base for material to be covered in intermediate grades.

The purpose of this manual is to promote and teach a healthy lifestyle. There are three major components of a healthy lifestyle: eating well, positive body image and being physically active. A combination of these could prevent many adverse health effects and even some diseases. Healthy eating, physical activity and a positive body image should be encouraged early in life to develop lifelong commitments to health. Learning to make and enjoy healthy food selections early in life can greatly impact long-term health.

Alberta Health Services has developed a comprehensive list of provincial resources that have been approved for use in schools across Alberta. To receive this School Nutrition Education Resource List please email the Alberta Health Services Nutrition Education Resource Team at: nutritionresources@albertahealthservices.ca. The Nutrition Education Resource team can also provide more information on the nutrition services available to schools and answer any questions regarding school resources.

Outcome Objectives¹

Students will be able to

- W – 4.1** Explore the connections among physical activity, emotional wellness and social wellness.
- W – 4.4** Examine the various factors that influence body image.
- W – 4.5** Analyze the need for variety and moderation in a balanced diet.
- R – 4.1** Recognize that individuals can have a positive and negative influence on the feelings of others.
- R – 4.6** Identify and describe ways to provide support to others.
- L – 4.3** Demonstrate effective decision making, focusing on careful information gathering.
- L – 4.4** Distinguish among, and set, different kinds of goals.

¹ Alberta Education. (2002). K-9 Health and Life Skills Outcomes.

Background Information for Teachers: Nutrition

Canada's Food Guide

Healthy eating is a very important part of a healthy lifestyle. *Eating Well with Canada's Food Guide* is the tool used to teach healthy eating patterns and practices.

Canada's Food Guide provides an easy framework for healthy eating through the use of a colourful rainbow used to demonstrate the four food groups (Vegetables and Fruit, Grain Products, Milk and Alternatives, and Meat and Alternatives). Just as different colours make up a rainbow, different food groups are the basis for healthy eating. Healthy eating is the overall pattern of foods eaten, and not only one food, one meal or one day's meals.

Canada's Food Guide describes both the **amount** (quantity) and **type** (quality) of food people need as part of a healthy eating pattern. The eating pattern provided by Canada's Food Guide promotes overall health by ensuring that nutrient needs are met each day, and by helping reduce the risk of obesity and other nutrition related diseases.

Amount:

Canada's Food Guide is divided into categories that provide age and gender specific recommendations on the amount of food that should be eaten from each food group each day. Table 1 below provides the recommended number of food guide servings required from each food group for children from 4 years to 13 years of age.

Table 1: Number of Food Guide Servings

	Vegetables and Fruit	Grain Products	Milk and Alternatives	Meat and Alternatives
Age 4-8	5	4	2	1
Age 9-13	6	6	3-4	1-2

Note: Canada's Food Guide provides examples of what counts as one serving size from each food group. The serving size is not intended to necessarily represent what would be eaten in one sitting.

It is also important to include a small amount of unsaturated fat in the diet each day for essential fatty acids. 2-3 Tbsp or 30-45 mL of added oils and fats are part of the eating pattern.

Type:

The food guide also provides statements on the types of foods that should be chosen from the four food groups in order to; meet all nutrient needs (i.e. vitamins, minerals and other nutrients), limit energy intake (i.e. limit excess calorie intake), limit sodium (salt) intake, limit fat intake, and limit sugar intake. The following are the quality tips from each food group:

Vegetables and Fruit

- Eat at least one dark green and one orange vegetable each day
- Choose vegetables and fruit prepared with little or no added fat, sugar or salt
- Have vegetables and fruit more often than juice

Grain Products

- Make at least half of your grain products whole grain each day
- Choose grain products that are low in fat, sugar or salt

Milk and Alternatives

- Drink skim, 1%, or 2% milk each day
- Select lower fat milk alternatives

Meat and Alternatives

- Have meat alternatives such as beans, lentils and tofu often
- Eat at least two Food Guide Servings of fish each week
- Select lean meat and alternatives prepared with little or no added fat or salt

It is important to remember that foods and meals should not be labeled as good and bad. All foods fit to make an overall healthy eating pattern. As educators, we need to teach children how to eat more of the **everyday foods** (foods from the four food groups) and eat the **sometimes foods** (foods that do not fit into any of the food groups) in moderation.

Sometimes foods include a wide range of items such as: butter, margarine, jam, potato chips, popcorn, chocolate bars, candy, soft drinks, sugary fruit drinks, and condiments like salad dressing and mayonnaise. **Sometimes foods** can be part of a healthy diet when eaten in moderation. **Sometimes foods** should not replace **everyday foods**, which provide the essential nutrients our bodies need to stay healthy. More information on the food groups is provided in the section: Discovering the Food Groups.

Healthy eating is not a single choice, but rather a balance of many choices. Two important concepts to keep in mind when talking about a healthy eating pattern are: **variety** and **balance**!

Variety includes not only choosing food from each of the four food groups every day, but also choosing many different foods within each food group.

Balance means choosing foods from more than one food group for meals and snacks. The general rule of thumb is to choose food from at least 2 of the 4 food groups for snacks and food from at least 3 of the 4 food groups for meals.

More information about *Eating Well with Canada's Food Guide* is available at:

http://www.hc-sc.gc.ca/fn-an/food-guide-aliment/index_e.html

Please refer to the *Alberta Nutrition Guidelines for Children and Youth* for more information on creating healthy school environments and promoting healthy food choices and healthy attitudes about food. A copy of the *Alberta Nutrition Guidelines for Children and Youth* can be found at:

<http://www.albertahealthservices.ca/2929.asp>

Discovering the Food Groups

Healthy eating includes eating food from each of the four food groups every day. A good place to start is learning what the four food groups are and what foods fit into each food group.

When discussing the food groups, there will be many foods that do not fit into any of the four food groups. It is important to remember to use terms such as **everyday foods** and **sometimes foods** when discussing these foods. Emphasize that all foods fit into a healthy eating pattern; however some foods should be chosen less often.

1. Vegetables and Fruit

The outside and most prominent arc of the food guide rainbow represents the Vegetables and Fruit food group. Being the largest arc of the rainbow is a visual way to emphasize the importance vegetables and fruits play in a healthy eating pattern. Vegetables and fruit come in many forms (fresh, frozen and canned), which should be emphasized.

Vegetables and fruits are usually low in fat and calories, and are the source of many important nutrients, such as vitamins, minerals and fibre.

There are many products with “vegetable” and “fruit” in their names, or written on their packaging. However, many of these products are actually very high in fat, sugar or salt. Examples include candy, fruit jams, fruit drinks that are not labeled 100% juice, or vegetable chips. These products may come up when discussing vegetables and fruit. It is important to reinforce the idea of **variety** and **sometimes food** when discussing these foods.

What is One Food Guide Serving?

- 125 mL (½ cup) fresh, frozen or canned vegetables
- 125 mL (½ cup) cooked leafy green vegetables
- 250 mL (1 cup) raw leafy green vegetables
- 125 mL (½ cup) fresh, frozen or canned fruit
- 125 mL (½ cup) 100% fruit juice

2. Grain Products

The second most prominent arc in the rainbow represents the Grain Products food group. Relative to some of the other food groups, a large number of servings are recommended from this group. Many different foods fall into the Grain Products category, providing many essential nutrients, therefore **variety** is important to emphasize.

Grain products include all grains, cereals, pasta, rice and products that are made with grain flour (including corn flour)

Choosing more grain products that are whole grain will help increase fiber intake. Whole grain products are made with grains that have not been refined, and therefore contain all nutrients naturally found in the grain, including many essential nutrients needed for health. Grain products that are not whole grain are products that are made with refined grains. This means that they have been processed and are missing parts of the grain, therefore missing some naturally occurring essential nutrients. Choosing half of your grain products as whole grains will help ensure nutrient needs are met!

What is one Food Guide Serving?

- 1 slice of bread
- ½ bagel
- ½ pita or tortilla shell
- 125 mL (½ cup) cooked rice, bulgur or quinoa
- 175 mL (¾ cup) hot cereal
- 30 g cold cereal
- 125 mL (½ cup) cooked pasta or couscous

Hurray For Fibre! – Dietary fibre is found in plant-based foods such as whole grain breads, cereals, vegetables, fruits, legumes (beans, peas, and lentils), nuts and seeds. Fibre cannot be digested and therefore passes through our digestive system. It helps maintain a healthy digestive tract!

3. Milk and Alternatives

The blue arc in the rainbow represents the Milk and Alternatives food group. Although few Food Guide Servings are recommended from this food group each day, this group provides many key nutrients that are important for developing strong bones, helping with proper growth and development, and helping keep our teeth strong. Calcium is a commonly known nutrient, which is provided along with other essential nutrients from the Milk and Alternatives food group.

The Milk and Alternatives food group includes milk, fortified soy beverage (fortified with Vitamin D and Calcium), canned milk, powdered milk, yogurt and cheese.

What is one Food Guide Serving?

- 250 mL (1 cup) milk or fortified soy beverage
- 125 mL (½ cup) canned milk
- 175 mL (¾ cup) yogurt or kefir
- 1 ½ oz (50g) cheese

4. Meat and Alternatives

The smallest arc of the food guide rainbow represents the Meat and Alternatives food group. Like the Milk and Alternatives food group, large numbers of servings per day are not recommended. These foods do however provide many key nutrients that are necessary for proper growth and development.

All foods from this group are high in protein; protein is the building block for cell growth and development and helps our bodies fight infections. Fat is also an important component of Meat and Alternatives; it gives us energy and essential vitamins. Red meats are a high source of iron needed for healthy blood. Legumes are high in carbohydrate and fibre.

Healthy tips to follow when choosing foods from the Meat and Alternatives group: Try removing excess fat from beef, pork and chicken. Eat bacon, sausages, bologna, and breaded and fried meat less often. Enjoy lean cuts of meat and fish. Choose foods like baked beans, split pea soup or lentil casserole.

What is one Food Guide Serving?

- 2 ½ oz (75 g) or ½ cup (125 mL) cooked fish, shellfish, poultry, lean meat
- 175 mL (¾ cup) cooked legumes
- 150 g or 175 mL (¾ cup) tofu
- 2 eggs
- 30 mL (2 Tbsp) peanut butter
- 60 mL (¼ cup) shelled nuts and seeds

Note: Serving sizes recommended by the Food Guide do not necessarily reflect the amount eaten at a meal or a snack. Children may have more than one serving at a time. For example, one cup (250 mL) of spaghetti, one pita or one hamburger bun each count as two servings of Grain Products. One cup (250 mL) of fruit is equivalent to 2 servings of Vegetables and Fruit.

Key Nutrients: Functions and Food Sources

Carbohydrates:

- Supply energy to the body, help with brain function, muscle movement, beating of the heart and breathing through the lungs
- Energy from carbohydrates is easier for your body to use than food energy from protein or fat
- Some carbohydrates are a source of fibre

Examples of food sources:

- Grain products: breads, cereals, pasta, rice
- Starchy vegetables such as potatoes, green beans, corn and lima beans
- Fruits

Proteins:

- Build and repair body tissues
- Build antibodies, the blood components which fight infection

Examples of food sources:

- Meat and Alternatives: meat, poultry, fish, eggs, peanut butter, nuts, dried beans and peas
- Milk and Alternatives

Fats:

- Supply the most concentrated source of energy
- Carry fat-soluble vitamins A, D, E and K
- Supply essential fatty acids
- Provide feeling of fullness and satisfaction since fats take longer to digest

Examples of food sources:

- Vegetable oils, soft margarines, mayonnaise and salad dressings. Fats are also found in other foods including some Milk and Alternatives and Meat and Alternatives and it may be added to foods.

Vitamins

Vitamin A

- Aids normal bone and tooth development
- Helps you see at night
- Keeps the skin and membranes healthy

Examples of food sources:

- Meat and Alternatives: liver
- Vegetables and Fruit: dark green and deep yellow vegetables (such as broccoli, collards, carrots, pumpkin, sweet potatoes, winter squash)
- Milk and Alternatives: milk and soy beverage fortified with Vitamin A

Thiamine (B1)

- Helps the body use the energy from carbohydrates

Examples of food sources:

- Meat and Alternatives: meat, poultry, fish, dried beans and peas, nuts
- Grain Products: enriched and whole-grain breads and cereals

Riboflavin (B2)

- Keeps your skin and eyes healthy
- Keeps your nervous system working correctly
- Helps the body to use the energy from carbohydrates

Examples of food sources:

- Milk and Alternatives
- Meat and Alternatives: liver, meat, poultry, fish, and eggs
- Vegetables and Fruit: green leafy vegetables
- Grain Products: white and whole grain flour and breads

Niacin (B3)

- Aids normal growth and development
- Helps keep your nervous system and digestive system healthy

Examples of food sources:

- Meat and Alternatives: liver, meat, poultry, fish, peanuts, peanut butter, dried beans, and dried peas
- Grain Products: enriched and whole-grain breads and cereals

Vitamin B6

- Aids in production of antibodies and red blood cells

Examples of food sources:

- Meat and Alternatives: liver, beef, ham, egg yolk and fish
- Vegetables and Fruit: bananas, cabbage and spinach
- Grain Products: white grain and enriched cereals

Vitamin B12

- Aids in red blood cell formation
- Keeps nerve and digestive tissues healthy

Examples of food sources:

- Meat and Alternatives: liver, fish, seafood, meat, eggs, chicken.
- Milk Products: milk and milk products.

Vitamin C (Ascorbic Acid)

- Keeps your teeth and gums healthy
- Decreases your chance of infections
- Helps your body use iron

Examples of food sources:

- Vegetables and Fruit: cantaloupe, grapefruit, grapefruit juice, honeydew melon, kiwi fruit, oranges, orange juice, mango, papaya, strawberries, tangerines, asparagus, broccoli, brussel sprouts, cabbage, cauliflower, kale, sweet green and red peppers and sweet potatoes

Vitamin D

- Helps calcium and phosphorus keep bones and teeth healthy

Examples of food sources:

- Milk and Alternatives: milk and soy beverages fortified with Vitamin D
- Meat and Alternatives: organ meat, salmon and tuna canned with bones, eggs
- Vitamin D-fortified margarine

* Exposure to sunlight is another source of Vitamin D. Vitamin D is produced in the skin with stimulus of the sun. Note: Factors such as age, skin colour, use of sunscreen and amount of clothing worn will all affect the amount of vitamin D our bodies make from the sun. Also, during the winter months (October to March) a northern latitude (north of Edmonton) will not allow for adequate vitamin D production in the skin.

Vitamin E

- Protects the fat in body tissues from damage

Examples of food sources:

- Vegetable oils, margarine made from vegetable oils
- Meat and Alternatives: egg yolk

Folate (Folic Acid or Folacin)

- Aids in red blood cell formation

Examples of food sources:

- Grain Products: most enriched breads, flour, cornmeal, pasta, rice and other grains products
- Vegetables and Fruit: vegetables, mustard and turnip greens, citrus and fruit juices
- Meat and Alternatives: liver and legumes

Minerals:

Calcium

- Aids in the formation and maintenance of strong bones and teeth
- Promotes healthy nerve function and normal blood clotting

Examples of food sources:

- Milk and Alternatives
- Vegetables and Fruit: green leafy vegetables such as kale, collards, mustard greens, and turnip greens

- Meat and Alternatives: sardines, salmon with bones, mackerel, oysters, soybeans, tofu processed with calcium sulphate, nuts, and seeds

Phosphorous

- Helps build strong bones and teeth

Examples of food sources:

- Meat and Alternatives: meat, poultry, liver, fish, eggs, lima beans, legumes, nuts and seeds
- Milk and Alternatives
- Grain Products

Magnesium

- Aids in formation and maintenance of strong bones and teeth
- Aids in energy metabolism and tissue formation

Food sources include:

- Vegetables and Fruit: green leafy vegetables
- Meat and Alternatives: nuts, meats, beef liver, salmon, eggs, dried beans and peas

Iron

- Combines with protein in the blood to form hemoglobin. Hemoglobin is the red blood cell constituent that transports oxygen and carbon dioxide in the blood.

Food sources include:

- Meat and Alternatives: organ meat, red meats and legumes
- Grain Products: enriched breads and cereals
- Vegetables and Fruit: dried fruits, leafy green vegetables

Zinc

- Plays an important role in wound healing, blood formation and general growth and maintenance of all tissues

Food sources include:

- Meat and Alternatives: shellfish, organ meats, beef, pork, chicken, turkey, legumes, nuts, soy products and seeds
- Vegetables and Fruit: sprouts
- Grain Products: wheat germ

Iodine

- Aids in function of the thyroid gland.

Food sources include:

- Iodized salt
- Meat and Alternatives: ocean fish
- Vegetables and Fruit: seaweed

Water:

- Is part of every living cell and is essential for life
- Represents two-thirds of our body weight
- Is the medium for all metabolic changes (digestion, absorption and excretion)
- Transports nutrients and all body substances
- Helps maintain body temperature

Food sources include:

- Drinking water, liquid foods and water in foods.

What about vitamin and mineral supplements?

A multivitamin or mineral supplement cannot replace good eating habits. You usually get all the nutrients your body needs by simply eating the recommended number of servings and choosing a variety of foods from Canada's Food Guide.

Whole foods contain not only vitamins and minerals, but also natural chemicals that fight disease. A supplement pill can not give you this entire package of protective ingredients.

Canada's Food Guide is designed to assist people over 2 years of age and at any activity level in choosing foods that will provide them with a healthy diet. Choosing a variety of foods from all four food groups will ensure you get adequate amounts of the varied nutrients from within each food group.

Please note, there are some exceptions and specific conditions that may warrant vitamin and mineral supplementation, for example:

- food allergies;
- exclusion of whole food groups;
- extremely picky eaters;
- vegan diet.

Student Activities: Nutrition

Food Guide Charades	
Objectives of Activity	To challenge students' knowledge of Canada's Food Guide. Concepts of meal planning and combination foods are also addressed.
Teacher Background Information	<ul style="list-style-type: none"> • Eating Well with Canada's Food Guide http://www.hc-sc.gc.ca/fn-an/food-guide-aliment/order-commander/index_e.html • Eating Well with Canada's Food Guide: A Resource for Educators and Communicators http://www.hc-sc.gc.ca/fn-an/food-guide-aliment/educ-comm/index_e.html
Material Required	<ul style="list-style-type: none"> • "Food Guide Charades" activity sheets (4 Team names, 4 Food Lists, and 1 page of Combination Foods) • Four envelopes
Instructions	<ol style="list-style-type: none"> 1. Copy the "Food Guide Charades" activity sheets that list foods from each food group. Cut out the individual foods listed, keeping the foods that belong to each food group together (You may choose to laminate these). 2. Place all foods from each food group together in an envelope labeled with the corresponding team name: Vital Vegetables and Fruit, Go for the Grains, Ride the Milky Way and Meet the Meat. 3. Begin this activity with a review of Canada's Food Guide. Foods are grouped together according to the nutrients they provide. Healthy eating includes variety, moderation and balance in our food choices. 4. Ask students to name the four food groups. As the food groups are named, write the names of the food groups on the board: Vegetables and Fruit, Grain Products, Milk and Alternatives, and Meat and Alternatives. 5. Tell the class they will be doing a food guide challenge with charades. (Rearrange the classroom as needed.) 6. Divide students into four teams representing each of the four food groups. Team names will be: Vital Vegetables and Fruit, Go for the Grains, Ride the Milky Way and Meet the Meat. 7. Have teams gather together and put up their sign with their team's name. 8. Give the corresponding envelope with foods to each team. 9. One at a time, team members take turns pulling out single food names from their envelope. All team members are to have a turn. Remind teams not to

say the name of the foods out loud, as the rest of the class is to guess what food they are.

10. Once a team member has chosen a food, they must act it out. They can pretend to eat it, they can try to outline its shape, or they can do a corresponding action (e.g. chicken laying an egg, picking an apple from a tree, etc.) Tell students they cannot say or write down the name of the food. Teachers can give verbal hints if necessary.
11. Continue the game until all students have had a turn acting out their food item.
12. When all students are done, ask students to come up with some sample meals that include all four food groups. Instruct the student to select classmates (with their food name in hand) to gather together and make a suitable meal. They must have at least one food from each food group. (Individual students from a team could be selected for more than one meal (e.g. milk), providing the rest of the meal is different.)
13. Once all students have had a chance to make a meal, have the class decide if each meal is healthy and balanced.

Part Two:

14. Briefly talk about combination foods. Combination foods are made of foods from more than one food group.
15. Name a combination foods listed on the activity sheet “Food Guide Charade Challenge Combination Foods”.
16. Ask teams to hold up their team’s sign if the combination food named fits into their team’s food group.
17. Continue to name the combination foods listed on the activity sheet, asking teams to hold up their team name as appropriate.

Food Guide Charade Challenge

GO FOR THE GRAINS

WAFFLES	RICE
PASTA	MUFFIN
TOAST	PANCAKES
CEREAL	TORTILLA
CRACKERS	PORRIDGE / OATMEAL
BISCUITS	BAGELS

RIDE THE MILKY WAY

YOGURT	CHEESE SLICES
CHEESE CUBES	CREAM SOUP (MADE WITH MILK)
MILK	SOY MILK
CHEESE STRINGS	COTTAGE CHEESE
SOUR CREAM	POWDERED MILK

VITAL VEGETABLES AND FRUIT

PEAS	WATERMELON
CHERRIES	POTATOES
PEACHES	STRAWBERRIES
LETTUCE	CUCUMBER
APPLE	CARROTS
ORANGE	BANANA

MEET THE MEAT

ROAST BEEF	HAMBURGER
FISH	BROWN BEANS
ALMONDS	PORK CHOP
EGGS	SUNFLOWER SEEDS
TURKEY	PEANUT BUTTER
TOFU	CHICKEN

Food Guide Charade Challenge COMBINATION FOODS

	Vegetables and Fruit	Grain Products	Milk and Alternatives	Meat and Alternatives
Ham and pineapple pizza	✓	✓	✓	✓
Peanut butter and banana sandwich	✓	✓		✓
Strawberry smoothie	✓		✓	
Tuna sandwich		✓		✓
Beef stew with dumplings	✓	✓		✓
Egg and tomato bunwich	✓	✓		✓
Broccoli with cheese sauce	✓		✓	
Turkey and cheese sandwich with tomato	✓	✓	✓	✓
Macaroni and cheese		✓	✓	
Blueberries and yogurt	✓		✓	
Cereal with milk		✓	✓	
Cheese burger with lettuce and tomatoe	✓	✓	✓	✓

My Food Diary

Objectives of Activity	To have students identify how their food intake can be improved so that it meets Canada’s Food Guide. Students will make personal healthy eating goals based on improvements to their usual food intakes.
Teacher Background Information	<ul style="list-style-type: none"> • Eating Well with Canada’s Food Guide http://www.hc-sc.gc.ca/fn-an/food-guide-aliment/order-commander/index_e.html • Eating Well with Canada’s Food Guide: A Resource for Educators and Communicators http://www.hc-sc.gc.ca/fn-an/food-guide-aliment/educ-comm/index_e.html
Material Required	<ul style="list-style-type: none"> • “Food Diary” activity sheets • Yellow, green, blue and red markers or pencil crayons
Instructions	<ol style="list-style-type: none"> 1. Distribute “My Food Diary” activity sheets. 2. Ask students to list all the foods and beverages they ate yesterday. Remind them to include all meals, snacks, drinks and even treats, such as chocolate bar. If some students have a hard time remembering exactly what they ate, ask them to imagine what they would have on a typical day and record those foods on the activity sheet. 3. Next, instruct students to fit the foods they ate into Canada’s Food Guide. Ask them to give a check mark for each serving of a food group; green colour for Vegetables and Fruit, yellow colour for Grain Products, blue colour for Milk and Alternatives, and red colour for Meat and Alternatives. (For example, if they had beef stew with vegetables and meat, they would check green for Vegetables and Fruit and red for Meat and Alternatives.) 4. Acknowledge any individual circumstances that may prevent a student from following Canada’s Food Guide, such as a food allergy to milk. 5. Once food diaries are complete and foods have been categorized into food groups, ask students to total their number of servings from each food group. 6. Ask students to compare their totals to recommended daily servings on Canada’s Food Guide. How did they compare? 7. If improvements are needed, instruct students to think of what changes they can make to their food intake so that they meet the recommendations from Canada’s Food Guide. Remind students that their personal suggestions should be realistic and include foods they enjoy. For example, if they were low in Milk and Alternatives, options could include having a snack of pudding, a chunk of reduced fat cheese, yogurt, etc. 8. Have students write two goals to improve or maintain healthy eating habits. Optional: Repeat this activity in a few weeks to see if students made improvements to their food intakes. This will reinforce the need to check personal progress when setting goals.

My Food Diary

1. Write down everything that you had to eat or drink yesterday.

Breakfast:

Snack:

Lunch:

Snack:

Supper:

Snack:

2. Review the foods listed above. Place a green check mark in front of all foods that fit into Vegetables and Fruits, a yellow checkmark for Grain Products, a blue checkmark for Milk and Alternatives and a red checkmark for Meat and Alternatives. Be sure to check mark for each serving of a food group.

3. Count up your checkmarks:

	Your Intake	Recommended Amount for children 9 – 13 years old
Vegetables and Fruit (green)		6
Grain Products (yellow)		6
Milk and Alternatives (blue)		3 - 4
Meat and Alternatives (red)		1 - 2

4. Does your food intake need improvement(s)?

Yes _____ No _____

5. List two goals that would help you meet the recommended servings from Canada's Food Guide.

For example:

- I will have a fruit for a snack at bedtime.
- I will start bringing a yogurt in my lunch.
- I will have cereal and milk for breakfast.

Goal 1: _____

Goal 2: _____

Five Kinds of Nutrients

Objectives of Activity	To have students learn about the importance of eating a variety of foods from Canada’s Food Guide to get all the nutrients that the body needs.
Teacher Background Information	<ul style="list-style-type: none"> • See Background Information for Teachers: Nutrition • Eating Well with Canada’s Food Guide http://www.hc-sc.gc.ca/fn-an/food-guide-aliment/order-commander/index_e.html • Eating Well with Canada’s Food Guide: A Resource for Educators and Communicators http://www.hc-sc.gc.ca/fn-an/food-guide-aliment/educ-comm/index_e.html
Material Required	<ul style="list-style-type: none"> • “Five Kinds of Nutrients” activity sheet and answer sheet
Instructions	<ol style="list-style-type: none"> 1. Introduce this activity with a class discussion on nutrients. There are many nutrients found in food, however, not one food provides all of the nutrients we need. Nutrients are the parts of foods that supply energy, help our bodies grow and help keep us healthy. Each nutrient is needed for a different function in the body. 2. Generally, foods within a certain food group provide the same set of nutrients. Different foods within a food group may give us different amounts of those nutrients. This is why it is important to eat a variety of foods from all four food groups of Canada’s Food Guide. 3. We know that we need certain amounts of each nutrient for our bodies to function best. This amount is called the Daily Recommended Intake or DRI. 4. Healthy food choices provide us with the nutrients we need to stay healthy. If we eat well by following Canada’s Food Guide, there is generally no need for extra vitamins or minerals. In fact, taking too much of one vitamin or mineral may upset the balance and use of another nutrient. The best way to get all the nutrients you need is by healthy eating. Remember: too little or too much of a nutrient is unhealthy. 5. Distribute the activity sheet “Five Kinds of Nutrients”. Read the information in each box to the class. Have students repeat the name of the nutrient out loud. Instruct students to look at each food pictured in the boxes. Ask them to identify the food groups to which each food belongs by using the abbreviations listed at the top of the sheet. 6. After the activity sheet has been completed, review the answers with the class. Ask students to make corrections if needed.

Five Kinds of Nutrients

Food is made up of nutrients which are needed to help people grow, be active and stay healthy. Below, you see the names of different nutrients. The picture shows foods that contain that nutrient. Decide what food group each food belongs to. Put its abbreviation on the line under the food.

FOOD GROUP **ABBREVIATION**
 Vegetables and Fruit VF
 Grain Products G
 Milk and Alternatives MI
 Meat and Alternatives ME

Carbohydrates: give the body energy.



Vitamins: help the body grow and stay healthy. Also help give us a healthy immune system and healthy skin, eyes and hair.



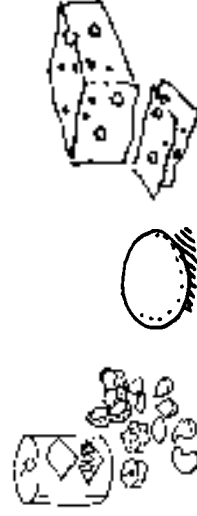
Proteins: help the body build and take care of muscles, bones, nerves, skin and blood. Proteins can also supply energy.



Minerals: help the body in many ways, such as helping to build bones and teeth and helping muscles to work properly.



Fats: supply a lot of energy and carry some vitamins throughout the body.



Remember to eat different foods from all four food groups to get all of the nutrients you need!

Five Kinds of Nutrients Answer Sheet

Carbohydrates

- Bread = **G**
- Banana = **VF**
- Apple = **VF**
- Cereal = **G**

Proteins

- Fish = **ME**
- Milk = **MI**
- Peanut Butter = **ME**
- Eggs = **ME**

Fats

- Nuts and seeds = **ME**
- Eggs = **ME**
- Cheese = **MI**

Vitamins

- Chicken = **ME**
- Cheese = **MI**
- Strawberries = **VF**
- Cereal = **G**

Minerals

- Eggs = **ME**
- Milk = **MI**
- Raisins = **VF**
- Bread = **G**

Vitamins for a Healthy Body

Objectives of Activity	To have students learn basic information about some vitamins provided from foods.
Teacher Background Information	<ul style="list-style-type: none"> • See Background Information for Teachers: Nutrition
Material Required	1. “Vitamins for a Healthy Body” activity sheet
Instructions	<ol style="list-style-type: none"> 1. Explain to students that healthy eating will provide us with the vitamins that our bodies need. (See Background Information for Teachers: Nutrition, for more information on vitamins and minerals). 2. If we get too little of a certain vitamin by not eating enough of certain foods, this is not good for our bodies and we can get sick. Too much of a certain vitamin (e.g. large amounts from vitamin pills) can also make us sick. We do not need to worry about getting too many vitamins through food alone. 3. Balance and moderation are both very important parts of healthy eating. 4. Distribute the “Vitamins for a Healthy Body” activity sheet. Students can complete this activity individually or in small groups. 5. Review the answers with the class. <p>Answers:</p> <ol style="list-style-type: none"> 1. Vitamin D 2. Vitamin A 3. Vitamin C 4. Vitamin E 5. Vitamin B

Vitamins for a Healthy Body

Match each vitamin to the correct description box.
Write the name of the correct vitamin in the empty spaces.

Vitamin A	Vitamin B	Vitamin C
Vitamin E	Vitamin D	

1.

- Helps your body absorb calcium for strong bones.
- Found in milk, margarine, egg yolk, and fish.

2.

- Important for good eye sight.
- Found in yellow and orange vegetables such as carrots, pumpkin, squash and apricots.

3.

- Helps to heal wounds, fractures and burns.
- Found in citrus fruit, berries, tomatoes and peppers.

4.

- Needed for healthy blood and protects the fat in body tissue from damage.
- Found in vegetable oils, whole grains, and eggs.

5.

- Helps you get energy from carbohydrates and helps you grow.
- Found in whole grains, cereals, meat, milk and vegetables and fruit.

Using Your Imagination

Objectives of Activity	To have students practice meal planning for different situations.
Teacher Background Information	<ul style="list-style-type: none"> • Eating Well with Canada’s Food Guide http://www.hc-sc.gc.ca/fn-an/food-guide-aliment/order-commander/index_e.html • Eating Well with Canada’s Food Guide: A Resource for Educators and Communicators http://www.hc-sc.gc.ca/fn-an/food-guide-aliment/educ-comm/index_e.html
Material Required	2. “Using Your Imagination” activity sheet
Instructions	<ol style="list-style-type: none"> 1. Organize students into small groups of two or three. 2. Give each group one of the three situations (there will be more than one group for each situation). 3. Let students work together to come up with the snack or meal ideas. 4. Have a student from each group write one of their ideas on the board and discuss the imaginative ideas. Encourage students to explain why they choose the foods they did.

Using Your Imagination

Situation 1:

You and your younger sister normally get home from school a few hours before supper. After the long bus ride home, both of you are usually very hungry and need a snack.

Think of two different snacks you could make for you and your sister. Try to include at least two of the food groups from Canada's Food Guide.

Snack 1 _____

Snack 2 _____

Situation 2:

Every Saturday morning you have hockey practice at 7:00am. You feel rushed trying to dress, eat breakfast and get ready for 6:30am. There have been times when you have decided to skip breakfast for 10 minutes more of sleep. Skipping breakfast before hockey practice is not a wise decision.

To try and avoid this, think of two quick and nutritious breakfasts. Try to include at least three food groups in each breakfast. Traditional breakfasts are not your only choice!

Breakfast 1

Breakfast 2

Situation 3:

Now that you are in grade 4 your mother has asked you to make your own lunch. She says you can put what you like as long as your choices are healthy ones.

Think of two different well-balanced lunch menus. Make sure to use a variety of foods in a number of creative ways. Try to include foods from all four food groups.

Lunch 1

Lunch 2

Vitamin and Minerals – How they Work

Objectives of Activity	To have students become familiar with the functions and sources of vitamins and minerals.						
Teacher Background Information	See Background Information for Teachers: Nutrition						
Material Required	<ul style="list-style-type: none"> • “Functions and Sources of Key Nutrients” handout • “Vitamins and Mineral and How they Work” activity sheet 						
Instructions	<ol style="list-style-type: none"> 1. Provide the students with “Function and Source of Key Nutrients” handout. 2. Discuss with students the function and sources of vitamins and minerals. (See Background Information for Teachers: Nutrition, for more information on vitamins and minerals). 3. Without using the handout, have students complete the “Vitamins and Minerals and How they Work” activity sheet. <p>Activity Sheet Answers:</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center; padding: 5px;">4 Vitamin C</td> <td style="text-align: center; padding: 5px;">1 Calcium</td> <td style="text-align: center; padding: 5px;">5 Vitamin D</td> </tr> <tr> <td style="text-align: center; padding: 5px;">3 Vitamin A</td> <td style="text-align: center; padding: 5px;">6 B Vitamins</td> <td style="text-align: center; padding: 5px;">2 Iron</td> </tr> </table>	4 Vitamin C	1 Calcium	5 Vitamin D	3 Vitamin A	6 B Vitamins	2 Iron
4 Vitamin C	1 Calcium	5 Vitamin D					
3 Vitamin A	6 B Vitamins	2 Iron					

Functions and Sources of Key Nutrients

Nutrient	Main Function(s)	Examples of Food Sources
Protein	<ul style="list-style-type: none"> • builds and repairs body tissues 	<ul style="list-style-type: none"> • meat, fish, poultry, eggs, cheese, milk, legumes, nuts, seeds
Carbohydrate	<ul style="list-style-type: none"> • supplies energy • helps the body function normally 	<ul style="list-style-type: none"> • bread, cereals, pasta, rice, potatoes, fruit
Fat	<ul style="list-style-type: none"> • supplies energy • aids in the absorption of fat soluble vitamins 	<ul style="list-style-type: none"> • margarine, oils, salad dressing, nuts, cheese, meats
B vitamins: -vitamin B1 -vitamin B2 -vitamin B3	<ul style="list-style-type: none"> • release energy from carbohydrates • aid in normal growth and appetite • maintain a normal nervous and digestive system 	<ul style="list-style-type: none"> • organ meats, pork, beef, poultry, eggs, legumes, whole grain breads and cereals, nuts, seeds, milk
Vitamin B12	<ul style="list-style-type: none"> • aids in red blood cell formation • maintain a normal nervous and digestive system 	<ul style="list-style-type: none"> • organ meat, beef, pork, fish, shellfish, milk, eggs
Folate	<ul style="list-style-type: none"> • aids red blood cell formation 	<ul style="list-style-type: none"> • organ meats, nuts, legumes, eggs, green leafy vegetables, oranges, bananas, mushrooms, cereals enriched with folate
Vitamin C	<ul style="list-style-type: none"> • maintains healthy teeth and gums • decreases chance of infections 	<ul style="list-style-type: none"> • citrus fruits, broccoli, cauliflower, green pepper, strawberries, potatoes, fortified juices
Vitamin A	<ul style="list-style-type: none"> • aids normal bone and tooth development • helps eyes see at night • maintains the health of the skin 	<ul style="list-style-type: none"> • organ meats, egg yolk, dark green leafy vegetables, orange and yellow vegetables, apricots, peaches, tomatoes, milk, cheese
Vitamin D	<ul style="list-style-type: none"> • helps calcium keep bones and teeth healthy 	<ul style="list-style-type: none"> • milk and margarine fortified with vitamin D, organ meats, salmon, tuna, eggs
Calcium	<ul style="list-style-type: none"> • aids in the formation and maintenance of strong bones and teeth • promotes healthy nerve function and normal blood clotting 	<ul style="list-style-type: none"> • Milk and Alternatives, sardines, salmon with bones, mackerel, oysters, soybeans, tofu, nuts, seeds
Iron	<ul style="list-style-type: none"> • helps carry oxygen in blood 	<ul style="list-style-type: none"> • organ meats, red meats, enriched breads and cereals, legumes, dried fruits, leafy green vegetables

Vitamins and Minerals and How They Work

Name: _____

Match the list of nutrients to the correct statement.

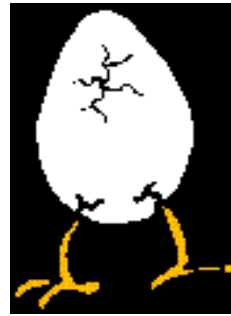
Nutrients		
_____ Vitamin C	_____ Calcium	_____ Vitamin D
_____ Vitamin A	_____ B Vitamins	_____ Iron

1. This mineral works with vitamin D to build bones and teeth and keep them healthy. The best source of this mineral is found in Milk and Alternatives.
2. This mineral is found in foods such as: red meats, legumes and leafy green vegetables. It helps carry oxygen around in your blood.
3. Carrots are good sources for this vitamin. It helps to keep your skin healthy and helps you see at night.
4. This vitamin is found in orange fruit, dark green and orange vegetables. It helps decrease your chance of getting sick and helps your body to use iron.
5. Your body makes this vitamin when sun shines on your skin. It is found in milk and works with calcium to keep your teeth and bones strong.
6. These vitamins help you use the energy from the foods you eat.

Food Riddles

Objectives of Activity	To have students increase their knowledge of certain foods and nutrition.
Teacher Background Information	See Background Information for Teachers: Nutrition
Material Required	<ul style="list-style-type: none">• “Food Riddles” activity sheet and answer sheet
Instructions	<ol style="list-style-type: none">1. Use these food riddles as a fun way to increase students’ knowledge of foods and nutrition.2. Complete this activity in one of two ways. Either have individual students read a riddle out loud for the class to answer, or distribute the activity sheet for all students to complete and then discuss the answers as a class.

Food Riddles



I'm white inside,
I wear a red suit,
My seeds are in the middle
And, yes, I'm a fruit.

Answer: _____

I'm orange and I'm long
I grow in the ground.
If you eat me today
You'll get vitamin A.

Answer: _____

Sometimes I'm a patty
Other times I'm a loaf.
My protein and iron
Will help with your growth.

Answer: _____

I'm round and I'm orange
I grow on a tree.
If you eat me you'll get
Lots of Vitamin C.

Answer: _____

I can rise in the morning
I can rise at noon.
When I'm put in the toaster
I smell up the room.

Answer: _____

I give you calcium
For your bones and your teeth.
I'm white and smooth
And delicious to drink.

Answer: _____

I'm white or I'm brown
You know that's a fact.
I give you protein,
Once I am cracked.

Answer: _____

I'm orange or white
One kind of me is blue.
I taste good on burgers
And give calcium to you.

Answer: _____

Food Riddles Answer Sheet

I'm white inside,
I wear a red suit,
My seeds are in the middle
And, yes, I'm a fruit.

Answer: _____ **apple** _____

I'm orange and I'm long
I grow in the ground.
If you eat me today
You'll get vitamin A.

Answer: _____ **carrot** _____

Sometimes I'm a patty
Other times I'm a loaf.
My protein and iron
Will help with your growth.

Answer: _____ **ground beef** _____

I'm round and I'm orange
I grow on a tree.
If you eat me you'll get
Lots of Vitamin C.

Answer: _____ **orange** _____

I can rise in the morning
I can rise at noon.
When I'm put in the toaster
I smell up the room.

Answer: _____ **bread** _____

I give you calcium
For your bones and your teeth.
I'm white and smooth
And delicious to drink.

Answer: _____ **milk** _____

I'm white or I'm brown
You know that's a fact.
I give you protein,
Once I am cracked.

Answer: _____ **egg** _____

I'm orange or white
One kind of me is blue.
I taste good on burgers
And give calcium to you.

Answer: _____ **cheese** _____

Cinquain Poetry

Objectives of Activity	To have students use their creativity while thinking of a nutritious food.
Teacher Background Information	See Background Information for Teachers: Nutrition
Material Required	<ul style="list-style-type: none"> • Paper and pencil
Instructions	<p>1. Have students write a cinquain poem using the following format:</p> <p style="padding-left: 40px;">Line 1: Name a healthy food choice Line 2: Write two words that describe how the food looks Line 3: Write three words that describe how the food tastes Line 4: Write four words that describes why you like it Line 5: Describe its nutritional content using food group or nutrient descriptions</p> <p>Examples:</p> <p>Rice White and small Plain, moist and yummy Its can provide fibre Carbohydrate</p> <p>Oranges Round and orange Sweet, juicy and sour Gives me vitamin C Fruit</p>

Nutrient Scavenger Hunt	
Objectives of Activity	To have students become familiar with different foods that fit into the different food groups of Canada's Food Guide.
Teacher Background Information	See Background Information for Teachers: Nutrition
Material Required	<ul style="list-style-type: none"> • "Nutrient Scavenger Hunt" activity sheet • Eating Well with Canada's Food Guide
Instructions	<ol style="list-style-type: none"> 1. As homework, have students look for foods from the four food groups. 2. Give students Canada's Food Guide and the "Nutrient Scavenger Hunt" activity sheet as a guide. 3. Have students choose 4 foods that fit in each of the 4 food groups. Encourage students to be unique and to choose foods that are not already listed on Canada's Food Guide. Have the students answer the questions for each food. 4. Have students report back to the class.

Nutrient Scavenger Hunt

Name: _____

Food: _____

- What food group does this food belong to?
- Why the food is important for my body?
- Why I choose this food?

Food: _____

- What food group does this food belong to?
- Why the food is important for my body?
- Why I choose this food?

Food: _____

- What food group does this food belong to?
- Why the food is important for my body?
- Why I choose this food?

Food: _____

- What food group does this food belong to?
- Why the food is important for my body?
- Why I choose this food?

Background Information for Teachers: Physical Activity

Physical activity plays an important role in the health, well-being and quality of life of all Canadians, and it is particularly important for children and youth. Healthy habits formed early can last a lifetime. An active lifestyle with **at least 60 minutes** of physical activity a day brings health benefits now, and helps children grow up to become healthy, active adults. Healthy active living requires a ‘whole day’ lifestyle approach, with parents, caregivers and teachers all as primary role models.

Canadian Physical Activity Guidelines

The Canadian Society for Exercise Physiology (CSEP) released new *Canadian Physical Activity Guidelines* in 2011. The Guidelines describe the amount and types of physical activity that offer substantial health benefits to children, youth, adults and older adults.

How much physical activity do children need?

The *Canadian Physical Activity Guidelines* recommend that children aged 5-11 years should accumulate **at least 60 minutes** of moderate- to vigorous- intensity physical activity daily. This should include:

- Vigorous-intensity activities at least three days per week.
- Activities that strengthen muscle and bone at least three days per week.

More physical activity provides greater health benefits.

What is moderate to vigorous aerobic activity?

On a scale of 0 to 10 (with 0 being completely at rest and 10 being absolute maximum effort), *moderate-intensity aerobic activity* is a 5 or 6. Kids will breathe harder and their hearts will beat faster. They should be able to talk, but not sing.

Examples of *moderate* physical activity include:

- Walking quickly
- Skating
- Bike riding
- Skateboarding.

Vigorous-intensity activity is a 7 or 8. Heart rates will increase even more and children will not be able to say more than a few words without catching a breath.

Examples of *vigorous* activity include:

- Running
- Playing tag
- Jumping rope
- Soccer
- Swimming

What are strengthening activities?

Muscle-strengthening activities build up the muscles. Examples of muscle-strengthening for kids include climbing and swinging on playground equipment, playing tug of war, and doing sit ups or modified push ups.

With *bone-strengthening* activities, muscles push against bones helping make them stronger. Examples of bone-strengthening activities include running, walking, hopscotch, and jumping rope.

Combining aerobic and strengthening activities

To achieve health benefits, children need to do both aerobic and strengthening activities. Aerobic activities result in faster breathing, a warmer feeling and an increased heart rate. Strengthening activities build muscles and bones.

What are some health benefits of physical activity?

- Improved health
- Improved fitness
- Stronger bones and healthier muscles
- Better posture and balance
- Stronger heart
- Healthy growth and development
- Increased concentration
- Better academic scores
- Improved self-esteem
- Lower stress
- Opportunities for socializing
- Learn new skills
- Prevention of chronic diseases later in life. Examples include type 2 diabetes and heart disease.

Canadian Sedentary Behaviour Guidelines

CSEP also developed new *Canadian Sedentary Behavior Guidelines* in 2011. These Guidelines provide recommendations for Canadian children on limiting sedentary behaviour in order to reduce health risks. Sedentary behaviours are characterized by little physical movement and low energy expenditure.

Some examples are:

- sitting for long periods of time
- using computers
- playing passive video games
- motorized transportation
- watching television

The *Canadian Sedentary Behaviour Guidelines* state that for health benefits, children aged 5-11 years should:

- Limit recreational screen time to no more than two hours per day.
- Limit sedentary (motorized) transport, extended sitting, and time spent indoors throughout the day.

Scientific evidence has shown a direct connection between increased sedentary time and decreased fitness, poor self-esteem, weak academic performance, obesity and increased aggression.

The *Canadian Sedentary Behaviour Guidelines* for children aged 5-11 are complementary to the *Canadian Physical Activity Guidelines* for the same age range. The two Guidelines together can be thought of as a recipe for families, teachers and caregivers to give children the best possible chance to gain health and social benefits.

References:

- The Public Health Agency of Canada:
www.phac-aspc.gc.ca
<http://www.phac-aspc.gc.ca/hp-ps/hl-mvs/pa-ap/index-eng.php>
- Canadian Physical Activity Guidelines and Canadian Sedentary Behavior Guidelines (CSEP) www.csep.ca
<http://www.csep.ca/english/view.asp?x=804>

Work Those Muscles

Objectives of Activity	To have students recognize different physical activities that can be done to keep the body healthy.
Teacher Background Information	See Background Information for Teachers: Physical Activity
Material Required	<ul style="list-style-type: none"> • Gym or outside field • “Work Those Muscles” activity Sheet
Instructions	<ol style="list-style-type: none"> 1. Lead the students through each of the the activities for about one minute, although some activities may take a bit longer. 2. After completion of all the activities , discuss with the students how each activity made their bodies feel and which muscles they felt were being used. <p>Adaptations:</p> <ul style="list-style-type: none"> - Include a discussion about the relationship between healthy eating and physical activity. <p>Considerations:</p> <ul style="list-style-type: none"> -Make sure to demonstrate the proper technique for each activity to decrease the chances of injury. - Ensure that a proper warm up and cool down are done before and after the activity. Warm Up and Cool Down Ideas: <ul style="list-style-type: none"> - Tag - Follow the Leader - Light Stretching/Yoga

Work Those Muscles: Activity Sheet

Activity:	Muscle Group:
<p><u>Wall (indoors) or Partner (outdoors) Push Ups:</u></p> <ul style="list-style-type: none"> - Have students face the wall (or their partner) and stand far enough away so that they can place their palms flat on the wall (or on their partner's hands) with elbows slightly bent. The students then bend their elbows and lean toward the wall (or their partner). They then straighten their arms and return to the standing position. 	<ul style="list-style-type: none"> - Arms - Chest - Upper Back
<p><u>Lily pad jump:</u></p> <ul style="list-style-type: none"> - Place hula hoops of different sizes randomly throughout the space. - Students are to either jump like frogs or stretch like caterpillars between lily pads (ie hula hoops). Reinforce the rule that there is to be only one creature (ie student) per lily pad. 	<ul style="list-style-type: none"> - Legs - Hip Flexors - Heart
<p><u>Aerobics:</u></p> <ul style="list-style-type: none"> - Lead the group through a series of jumping jacks, marching, arm circles, shoulder shrugs, squats, etc. 	<ul style="list-style-type: none"> - Overall body workout - Heart
<p><u>Human Wheel:</u></p> <ul style="list-style-type: none"> - Have the students sit on the floor in a large circle with their legs extended in front of them (towards the middle of the circle) and their hands behind them, palms down. Then ask the students to lift their bodies slightly off the floor and use their arm strength to flip their torso over into a push up or plank position. Continue this rotation by encouraging students to again use their arm strength to flip themselves back over into the original position. Students are to keep the rotation motion going as they start traveling around the circle. . This resembles a wheel turning in a circle. 	<ul style="list-style-type: none"> - Upper and lower body strength building - Abdominals

Background Information for Teachers: Body Image

What is body image?

The mental picture you have of your physical appearance and the attitudes you have towards it. These mental pictures may not be similar to your actual body shape. During adolescence, many youth become unhappy with how they look and assume that peers perceive them in the same way.

What is self-esteem?

Self-confidence and self-acceptance are two factors that influence a person's self-esteem. Self-esteem is the individual's image of self-worth; how they feel about themselves and value themselves based on who they feel they are and who they feel they should be.

How do they work together?

Self-esteem and body image usually greatly influence each other. People who have a positive self-esteem are more likely to accept and to have a realistic image of their physical appearance. Others who have a negative self-esteem feel poorly about their inner and outer image, which can lead to distortion of their body image.

Impacts on body image:

Interests: Interests differ from child to child and will affect the things they do to promote a healthy lifestyle.

Activities (especially physical activity): When children are active, they are more likely to feel good about themselves and to recognize when they are hungry and when they are full. This allows them to eat enough to meet their nutritional needs and have the energy they need to be active. Children who are hungry or who do not eat well are less likely to have enough energy to be active and to get involved in activities that will help them feel good about themselves. Accomplishment of more sedentary activities such as sewing, drawing or puzzle making can also help a child's self-confidence, which in turn creates a positive body image.

Abilities: A child's newly developed abilities can also help create a positive body image by increasing their self-esteem. These abilities prove to the child that they are capable of learning new skills that were once impossible. Once students learn to appreciate their own talents and abilities, such as athletic capabilities, musical dexterity and artistic flair, they will increase their chances of creating a more positive body image.

Parents: Parents and guardians are in an important position when it comes to self-esteem and body image of their children. During adolescence, children are unsure of themselves and look for guidance and positive reinforcement from parents and other role models. Parents can have an influence either directly or indirectly. Direct influence is what a parent says to the child. Children take what their parents say very seriously; therefore, it is very important that they get positive and accurate messages from them. Some examples of positive messages that parents can give their children are commenting on a great soccer game or pinning up a good mark on the refrigerator. Indirect influence is how a parent feels about themselves and their attitude on body image, which

can reflect on the attitude of their children. Parents who have a positive body image will usually pass those signals on to their children.

Peers: Peers and friends are another important group that adolescents look to for guidance. During puberty, adolescents are experiencing many changes to their body. This is when differences in physical appearance among peers becomes more apparent. These changes may drive some to struggle with their natural body shape. How others react and talk about an individual can greatly influence how that person feels about himself or herself. It is important to encourage students to help boost self-esteem of their peers by positive reinforcement rather than lowering it through negative comments.

Media: Media is also a strong influence on adolescent behaviour. Constant advertisements of young, thin, and muscular models give the impression that all people should look like them. This is an unrealistic goal for many teenagers because their body shapes are changing and are not genetically made the same way. When they cannot form their body into the “ideal” shape they may feel badly about their image and this could lead to a negative body image and low self-esteem. Also, there are many dieting advertisements on television and in magazines that can make it seem normal and necessary to be on a diet. Dieting can have damaging results on the health of the adolescent.

What are the health risks of trying to alter natural body size/shape to meet media ideal?

The media often gives an **unrealistic impression** that all people should fit into one body shape mould. The truth is the models may not even fit into this “ideal mould” because they are often airbrushed and altered to make the “perfect image”. Sometimes the person in the advertisement is not even a real person, rather a computer-generated model! This media message is harmful to how individuals view themselves and may cause them to adopt unhealthy eating and exercise habits as they strive to fit the mould.

Promote a positive body image

It is important to be critical of the media. Unrealistic and unhealthy images must be identified. Encourage students to **evaluate** what they see in **the media**; this will get them thinking about what is wrong with the images rather than wishing to mimic them.

Promote a **healthy lifestyle** rather than worrying about body shape or weight. It is important to remember that being skinny does not equal being healthy. In truth being too thin can be very unhealthy and result in long term health problems. Every body shape can be healthy if a combination of healthy eating and regular physical activity is maintained.

Help out others by telling them when they have done a good job. Highlight attributes that students have other than physical appearance. Work on developing a positive self-esteem as a foundation for a realistic and positive body image.

What is “normal eating”?

In our fast-paced society filled with distorted media messages, it is sometimes difficult to know what normal eating is. Individual’s who have a healthy relationship with food take pleasure in eating a variety of foods, meet their body’s basic energy and nutrient needs and follow Canada’s Food Guide. They also eat when they are hungry and continue until they feel satisfied. They

listen to their internal signals of hunger and fullness just as they respond to their body's signal for sleep or thirst.

What happens during a diet?

When dieting, the body is not able to differentiate between a deliberately constructed low-calorie diet and an actual famine. The reduction in caloric intake causes the body to seek to protect from starvation by gradually burning fewer and fewer calories, making weight-loss ineffective. Once dieting is terminated, the body will work not only to regain any lost weight, but also to store extra in the event that starvation occurs again. Therefore, diets do not work and in fact can contribute to overweight.

Physical Effects:

- Poor nutrition
- Weight gain
- Decreased strength
- Headaches, dizziness
- Lowered metabolic rates
- Interrupted menstrual cycles
- Body swelling/retaining fluids
- Health problems- chronic fatigue, irritability, hypertension, heart irregularities, anemia, hair loss, gallstones, diarrhea
- Poor motor muscle control

Psychological Effects:

- Negative body image
- Low self-esteem
- Risk of eating disorders
- Desire to eat more after "breaking diet"
- Obsession with food
- Feeling of deprivation
- Reduced self worth and feeling of inadequacy
- Poor concentration
- Begin smoking

How health habits/behaviours influence body image:

Skipping breakfast regularly- This reduces concentration and may affect school performance. People who miss breakfast tend not to meet their daily requirements for essential nutrients, in particular- calcium, iron, thiamin (vitamin B1), and fibre. Breakfast is important in maintaining healthy blood sugar levels. People who regularly skip breakfast experience decreased blood sugar levels, which naturally lead to cravings for foods high in sugar. Eating foods high in sugar on an empty stomach can lead to physical discomfort such as shakiness, dizziness and nausea. Eating frequently throughout the day, beginning with breakfast, regulates metabolism more efficiently and provides a more constant supply of energy.

Dieting- When dieting the body is unable to differentiate between a deliberately constructed low-calorie diet and an actual famine. The reduction in caloric intake causes the body to seek to protect from starvation by gradually burning fewer and fewer calories, making weight-loss ineffective. Once dieting is terminated, the body will work not only to regain any lost weight, but will also store extra in the event that starvation occurs again. Diets therefore do not work as is commonly thought and can actually contribute to overweight.

Not eating regularly- To wait until the body is overly hungry could result in overeating or binge eating because the body is desperate for food. If these behaviours become a habit, it could lead to serious eating problems. Waiting until this point frequently results in lack of energy, mood swings, lack of concentration and fainting. This could interfere with daily functions including school performance and relationships with others. Not eating regularly can also slow down the metabolism, which can lead to fluctuations in weight.

Physical activity- Active living is a way of taking good care of our bodies. The benefits of regular physical activity are many, including improved strength and coordination, improved cardiovascular fitness, reduced tension, increased energy and a sense of well-being.

Physical activity should be seen as an enjoyable part of life. Active living can be achieved by moving a little more often. It can be a simple walk to school, a bicycle ride, raking the leaves, shoveling snow or carrying the groceries

Enjoying a variety of healthy food- Eating from the four food groups provides you with the nutrients you need to be healthy. You need foods from each group because each gives you different nutrients. You also need to choose different foods from within each food group to get all the nutrients your body needs. As well, ensuring a variety of choices helps avoid the boredom that can come from eating the same foods day in and day out. Variety also means trying food from other cultures, which can help children learn about their friends and the world around them.

Sleep- Just as healthy food choices and physical activity are important factors in overall health and well being, adequate sleep is necessary for people to function properly throughout the day. Some can function with less, while others require as many as twelve hours. Students should take into consideration their daily activities and be sure that they are well rested, so they can optimize their health. As always, it is important to listen to internal body cues and rest as needed.

Follow That Star!	
Objectives of Activity	To have students describe and acknowledge their qualities and traits.
Teacher Background Information	See Background Information for Teachers: Body Image
Material Required	<ul style="list-style-type: none"> • “Follow That Star” activity sheet
Instructions	<ol style="list-style-type: none"> 1. Discuss the concept of interests, abilities and activities (as described in the teacher background for this section). 2. Brainstorm with the class a long list of words that could be used to describe qualities or traits that people might possess: For example: <ul style="list-style-type: none"> -Honest -Trustworthy -Gentle -Outgoing -Shy -Dependable -Enthusiastic -Energetic -Hard working -Team Player -Kind -Talkative 3. Have students complete the “Follow That Star” handout 4. Once the activity sheet is completed, have the students share their responses with a partner. 5. Ask students to think of other qualities to add to their partner’s list. 6. Discuss as a class common qualities or traits that appeared in more than a few of the responses. Discuss why these are admirable qualities. ?

Name: _____

FOLLOW THAT STAR!

Write nine words that describe you:

_____	_____	_____
_____	_____	_____
_____	_____	_____

★ Put a star beside the words that are most important to you!

If you could develop a special talent, skill, or other personal quality for yourself, what would it be?

List three of your good qualities (not physical) - things you wouldn't change, even if you could:

1. _____
2. _____
3. _____



Your Secret Formula	
Objectives of Activity	To have students recognize factors that make up a positive body image.
Teacher Background Information	<ul style="list-style-type: none"> • Dietitians of Canada – Positive Body Image http://www.dietitians.ca/Your-Health/Nutrition-A-Z/Body-Image.aspx?categoryID=5
Material Required	<ul style="list-style-type: none"> • “Your Secret Formula” activity sheet
Instructions	<ol style="list-style-type: none"> 1. Distribute the activity sheet. 2. Ask students to make a recipe for success in having a positive or healthy body image. 3. Have a class discussion about what influences body image. <ul style="list-style-type: none"> ○ What can we do to maintain a healthy body image for ourselves? ○ How can we help others maintain a positive body image?

Your Secret Formula

Make a recipe using nouns or adjectives as the ingredients that make up a good body image. Then write a method on how to use these ingredients to make a good body image.



(Name of Recipe)

Ingredients:

Method:

Ads and Us	
Objectives of Activity	To have students recognize the influence that advertising has on our lives.
Teacher Background Information	See Background Information for Teachers: Body Image
Material Required	<ul style="list-style-type: none"> • “Ads and Us” activity sheet
Instructions	<ol style="list-style-type: none"> 1. Have a class discussion about the influence of advertising in our lives. 2. Ask the class how marketing and advertising techniques and strategies affect what we buy, what we eat and how we think we should look 3. Discuss the definitions and uses of the following words that relate to media and body image: <p><u>Body Image</u> = the picture you have of your body and the way you think others see your body</p> <p><u>Brand name</u> = the name of a product; during advertising the brand name is often repeated numerous times throughout the ad</p> <p><u>Air Brushing</u> = a process that removes a person’s physical flaws and imperfections in a photograph</p> <p><u>Models</u> = the people used in advertisements to promote a product or service; these models often make us feel dissatisfied with our own looks</p> <p><u>Computer Imagery</u> = like air brushing, many advertising companies use computer imagery to alter photographs to make everything look “perfect”</p> <p><u>Stars</u> = advertisers often use famous movie stars and celebrities to promote their product</p> <p><u>Values</u> = beliefs of a person or social group in which they have an emotional investment (either for or against something)</p> <p><u>Advertising Method</u> = what advertisers use to persuade you to buy their product – for examples, many advertisers use music and movie stars</p> 4. Distribute the “Ads and Us” activity sheet. Have the students complete the activity sheet. 5. Once the sheet is complete, go over the answers as a class.

Ads and Us: Activity Sheet

Name: _____

Fill in the blanks for the following sentences using the words listed below. Each word is used only once.

body image	repeated	air brushing	models
computer imagery	stars	values	music
dissatisfied			

1. The brand name is often _____ to help us remember it.
2. Sometimes ads use fashion _____ and claim we can be like them too, if we use their product.
3. Your _____ can affect your feelings about a brand.
4. Advertisements can influence our own _____.
5. _____ is one of the advertising methods that companies will use to persuade us to buy their product.
6. Some ads use sports _____ or other celebrities to sell their products.
7. Some photographers use _____ or _____ to make models look “flawless”.
8. Some magazine ads can make us feel _____ about the way we look.

Ads and Us Answer Sheet

1. The brand name is often REPEATED to help us remember it.
2. Sometimes ads use fashion MODELS and claim we can be like them too, if we use their product.
3. Your VALUES can affect your feelings about a brand.
4. Advertisements can influence our own BODY IMAGE.
5. MUSIC is one of the advertising methods that companies will use to persuade us to buy their product.
6. Some ads use sports STARS or other celebrities to sell their products.
7. Some photographers use COMPUTER IMAGERY or AIR BRUSHING to make models look “flawless”.
8. Some magazine ads can make us feel DISSATISFIED about the way we look.

A Closer Look at Magazine Advertising	
Objectives of Activity	To have students recognize the influence that advertising has on our lives.
Teacher Background Information	See Background Information for Teachers: Body Image
Material Required	<ul style="list-style-type: none"> • Magazines (students can be asked to bring in magazines from home) • “A Closer Look at Magazine Advertising” activity sheet
Instructions	<ol style="list-style-type: none"> 1. Choose one or two ads (that have pictures of different people) that the whole class will use for the lesson. 2. Have students, either alone or in pairs, complete the activity sheet: “A Closer Look at Magazine Advertising”. 3. Once completed, have the students pair up with another group to discuss their answers. 4. Review the answers as a class and discuss possible reasons behind the answers.

A Closer Look at Magazine Advertising

Name: _____

Look at a magazine advertisement for the following information:

1. What is being advertised?
2. What parts of the advertisement catch your attention?
3. Who do you think the advertisement is targeting?
4. Describe the advertisement (colours, people, pictures, etc)
5. What do the people in the advertisement look like? (tall, short, big, small)
6. Do you think you should look like the people in the advertisement?
7. Why or why not?

Let's Have a Look	
Objectives of Activity	To have students identify various messages used in advertising.
Teacher Background Information	<ul style="list-style-type: none"> • Media Awareness Network http://www.media-awareness.ca/english/index.cfm
Material Required	<ul style="list-style-type: none"> • A variety of magazines • “Let’s Have a Look” activity sheet
Instructions	<ol style="list-style-type: none"> 1. Remind students that the ultimate goal in advertising is to sell a product. Wise consumers analyze ads for both obvious and hidden messages. 2. Distribute the activity sheet. Brainstorm with the class to give examples of ads that give certain messages. 3. Instruct students to complete the answer sheets by finding ads that give these messages. Students are to find and assess messages portrayed in magazine ads. 4. Discuss with the class that advertisers aim their advertising at different groups of consumers. Can they identify which ads would appeal to certain groups of consumers? What types of ads appeal to them and why? Are some of the ads aimed at children? Parents? Girls? Boys? Certain athletes? etc.

Let's Have a Look

Look through magazines and list the following:

1. Products/Ads that promote healthy living/habits.
2. Products/Ads that portray a healthy body image.
3. Products/Ads that promote unhealthy living/habits.
4. Which ones appeal to you most and why?

Sarah's Choice	
Objectives of Activity	To have students recognize how people's comments can affect one's body image and self esteem
Teacher Background Information	<ul style="list-style-type: none"> • Dietitians of Canada – Positive Body Image http://www.dietitians.ca/Your-Health/Nutrition-A-Z/Body-Image.aspx?categoryID=5
Material Required	<ul style="list-style-type: none"> • "Sarah's Choice" story • "Sarah's Choice" discussion questions
Instructions	<ol style="list-style-type: none"> 1. Distribute copies of "Sarah's Choice" story and discussion questions. 2. Have the students read the story on their own. 3. Break students into small groups and answer the discussion questions. 4. Discussion questions ask students to think about how their comments can be hurtful to others. Students are asked to identify how they can be supportive to others, thus contributing to their self-esteem. 5. Discuss answers with the class.

Sarah's Choice

Sarah walked home after school one day with her two best friends, Michelle and Mark. It was extremely hot that day, so the three of them decided to buy a pop at the convenience store. Sarah was also very hungry because she hardly ate anything for lunch, so she decided to get a chocolate bar also. Sarah noticed Michelle and Mark whispering to each other while they waited for her to pay.

“What’s up?” asked Sarah.

Michelle hesitated but then told Sarah what they were whispering about. “Sarah, do you really think that you should eat that chocolate bar? It will make you gain more weight.”

Sarah blushed. “I know, but I’m really hungry and I love chocolate bars”, she said.

When Sarah got home she burst into tears because she felt so bad. She wasn’t feeling very good about the way her body looked. Her mother and father saw she was upset and asked what was wrong. Sarah told them what Michelle and Mark had said to her at the store and how this made her feel about herself.



“Oh Sarah”, said her mom as she gave her a hug. “You are a growing girl. It’s healthy and natural for you to gain weight. Your body will go through many changes before it’s grown up.”

Sarah was relieved that her mother and father knew how hurt she felt and somehow could always make her feel better. In the back of Sarah’s mind however, she was still wondering if she really was fat. Maybe she needed to go on a diet! Sarah and her mother talked over the possibility of starting a weight loss diet but they decided this was not a wise idea. Sarah’s mother explained that Sarah needs all the energy and nutrients from her food so she will grow up properly. If she doesn’t get the proper foods to eat, her energy level and ability to think and concentrate will be affected. Her skin and hair may also become less healthy. Rather than dieting, Sarah and her family decided to live a healthier way, to keep strong and stay fit.

Together with her mom and dad, Sarah made a plan to increase their physical activity. They planned to swim, rollerblade and walk the dog together each week. On top of that, Sarah’s family was going to keep a record of everything they ate, and would try to follow Canada’s Food Guide. Sarah would also make sure she brought a healthy lunch to school each day, so she wouldn’t get so hungry and tired in the afternoon.

Sarah’s family put a schedule on their fridge. Each time they exercised together as a family and ate healthy foods, following Canada’s Food Guide, a gold star was placed on the schedule. This reminded Sarah and her family of their progress. At the end of each

month, they would count their gold stars. If they reached their goal as a family, they would celebrate by doing something extra special!

After following this routine for a while, Sarah began to feel much better. She seemed to have more energy to play. The best part about it was she wasn't on a "diet". She was eating healthy foods and exercising regularly with her family. This was so easy to do once Sarah got into the habit that she didn't even have to think about exercising or what she would eat. It just came naturally. One thing for sure was that Sarah felt much better about herself and how she looked, and her family was spending more time together!



Her friends Michelle and Mark noticed the difference in her too. They told her that she seemed happier lately. They were curious about what Sarah was doing to make herself feel so much better. Sarah replied that she wasn't doing anything special, she was just being active and eating healthy food! She told them there were more interesting things to do than worry about having a perfect looking body!

Michelle and Mark agreed that if you are healthy then you will feel good, look good and be happy about yourself. The three friends decided that from now on, they would encourage each other to eat healthy foods and be active each day!

Sarah's Choice Discussion Questions

1. Do you think Michelle and Mark should have said anything to Sarah at the store? Why or why not?
2. What do you think Sarah's image of herself was like the day at the convenience store?
3. What do you think Sarah's image of herself is like now? Why did it change?
4. Why shouldn't Sarah go on a weight loss diet?
5. List things that Sarah can do to help stay healthy and feel good about herself.