

Session 3

Focus on the Four Food Groups

Training Objectives

At the end of this training session, participants will be able to:

- Identify Food Guide Serving sizes and recommended number of servings from each of the four food groups for adults
- Select, prepare and store foods from the four food groups
- Discuss the nutritional value and health benefits of certain foods from the four food groups (e.g., whole grains, orange and green vegetables, milk, fish, eggs)

Training Outline

Topic/Activity	Suggested Time
1. Check in and Review	10 minutes
2. Warm up: Grain Identification	10 minutes
3. All About Vegetables and Fruit	40 minutes
4. All About Grain Products	30 minutes
5. Break	15 minutes
6. All About Milk and Alternatives	20 minutes
7. All About Meat and Alternatives	20 minutes
8. Wrap up	5 minutes

Advance Preparation

- Photocopy and gather workbook materials for this session.
- Obtain samples of packages and labels from of fresh, frozen, canned and dried vegetables and fruit.
- Obtain samples of various grains and rice: (e.g., brown rice, Minute rice, converted rice, wild rice, bulgur, farina, rolled oats, quinoa, couscous, cornmeal, wheat bran, oat bran, flaxseed, barley) for Grain Identification activity.
- Collect samples of several different types of breakfast cereal packages, including some with fibre claims on the box.
- Purchase samples of several milk and milk alternative products (e.g., kefir, yogurt, milks, cheeses).
- Purchase samples of meat alternative products (e.g., firm tofu, silken tofu, TVP, dried legumes, canned legumes, nuts, seeds).
- Prepare snack for the break (use sample Milk and Alternatives and Meat and Alternatives for snacks).

Supplies and Equipment

- Name tags
- Data projector with computer
- Flip chart, paper and markers
- Extra pens, pencils, paper, masking tape
- Small plates and toothpicks for sampling cheese
- Small sampling cups for milk
- Extra copies of handouts and worksheets included in the workbooks
- Copies of *Presentation Feedback Checklist*

Background Information

- Flax Council of Canada www.flaxcouncil.ca
- EatRight Ontario – Budget-friendly information sheets and recipes
www.eatrightontario.ca/en/Articles/Budget/Food-choices-when-money-is-tight---Budget-friendly
- Foodland Ontario <http://www.foodland.gov.on.ca/english/index.html>
- Foodland Ontario Produce Availability Guide
<http://www.foodland.gov.on.ca/english/availability.html>
- Canadian Produce Marketing Association - fruit and vegetable information, food safety, recipes: www.cpma.ca
- Mix It Up – meal planning and preparation, recipes www.fruitsandveggies.ca
- Dairy Farmers of Canada – recipes, consumer education: www.dairygoodness.ca

- Dairy Farmers of Canada - health professionals: www.dairynutrition.ca
- Egg Farmers of Ontario – nutrition information, recipes, education & literature www.getcracking.ca
- Egg Farmers of Canada – recipes, nutrition and food safety information: www.eggs.ca
- Canadian Beef – recipes, food safety information: www.beefinfo.org/
- Ontario Pork – recipes, nutrition information: www.putporkonyourfork.ca
- Ontario Turkey – recipes, nutrition information: www.turkeyrecipes.ca/main.cfm
- Chicken Farmers of Ontario – recipes, cooking, nutrition and food safety information: www.chickenlover.ca
- Chicken Farmers of Canada – recipes, cooking and nutrition information: www.chicken.ca/recipes
- Ontario Meat and Poultry – information on where to buy local meat and poultry, recipes: www.ontariomeatandpoultry.ca
- Ontario White Bean Producers – nutrition and health information, recipes, resources www.ontariobeans.on.ca
- Pulses Canada - recipes, nutrition information <http://www.pulsecanada.com/recipes>
- Soy For Life – recipes, products, nutrition information <http://www.soyforlife.ca/>

Resource Binder Reference

Section 3 – Focus on the Food Groups

Section 6 – Food Storage and Preservation

Section 7 – Food Preparation

Section 9 – Recipes

Detailed Outline of Training Session

1. Check in and Review (10 minutes)

- Welcome the participants and remind them to use their name tag.
- Review the Home Activity from Session 2.

Home Activity from Session 2

- Ask a few participants to share the meals/snacks they ate and recorded on their One Day Food and Activity Record (from the Home Activity). Using these meals/snacks, create a complete day's food intake on a flip chart.
- Ask participants to count how many Food Guide Servings from each food group this sample menu provides.

- Distribute workbook materials for this session.
- Review Session Three learning objectives (Focus on the Four Food Groups Presentation, slide 2)

2. Warm up: Grain Identification (10 minutes)

- Set out 12 samples of whole grains and rice for identification. Some suggestions:
 - brown rice
 - Minute rice
 - converted rice
 - wild rice
 - bulgur
 - farina (Cream of Wheat)
 - rolled oats
 - couscous
 - cornmeal
 - wheat bran
 - oat bran
 - flaxseed
 - barley
 - quinoa
- Place samples in a small dish or clear cup. Number the samples 1 to 12 (do not label what they are).
- Ask the participants to try to identify each sample. Encourage them to smell and touch the grains. Ask them to record their answers on the *Identify the Grain* activity sheet in the workbook.
- Review the answers with the participants. Have participants discuss which grains would be the highest sources of fibre.

3. All About Vegetables and Fruit (40 minutes)

- Use the Focus on the Four Food Groups presentation (slides 3-16) to discuss the key points about Vegetables and Fruit.
- Emphasize messages about health benefits, Food Guide Serving sizes, recommended numbers of servings for age and gender groups, barriers to increasing intake, and selection, storage and preparation techniques.
- Use food models, food samples, food labels, cooking equipment and teaching aids for demonstration. Examples:
 - Use food models to illustrate Food Guide Serving sizes.
 - Use food labels/packages to discuss nutritional differences between fresh, frozen, canned and dried vegetables and fruit
 - Show storage containers, and equipment such as coffee grinders (for grinding flaxseed).
- Encourage participants to become involved in the discussion by asking them questions:
 - What are the health benefits of eating at least 7 servings of vegetables and fruit each day?
 - What makes it difficult to eat at least 7 servings a day?
 - What are your suggestions for including more vegetables and fruit into your eating plan?
 - What are your ideas for selecting/storing/preparing vegetables and fruit?
- Encourage participants to review relevant websites included on the Reading List in the Workbook Materials (i.e., Foodland Ontario and Canadian Produce Marketing Association).

4. All About Grain Products (30 minutes)

- Continue the Focus on the Four Food Groups presentation (slides 18 to 26) to discuss the key points about Grain Products. Emphasize messages about nutritional value, fibre, varieties of grains, label reading, serving sizes, and selection, storage and preparation techniques.
- Use food models, food samples, food labels, cooking equipment and teaching aids for demonstration. Examples:
 - Use food models to illustrate Food Guide Serving sizes.
 - Distribute breakfast cereal food labels to participants. Ask participants to identify any fibre claims and the amount of fibre per serving. Rank the cereal according to the fibre content listed on the box.
 - Show storage containers, and equipment such as coffee grinders (for grinding flaxseed).
- Encourage participants to review relevant information websites included on the Reading List in the Workbook Materials.

5. Break (15 minutes)

6. All About Milk and Alternatives (20 minutes)

- Continue the Focus on the Four Food Groups presentation (slides 27-33) to summarize the key points about Milk and Alternatives. Emphasize messages about serving sizes, label reading, food safety, preparation techniques, selection, and storage and nutritional value.
- Use food models, food labels, cooking equipment and teaching aids for demonstration, for example:
 - Use food models to illustrate Food Guide Serving sizes.
 - Use food labels to show nutrition information and claims, and to introduce special products (e.g., lactose-reduced milk, UHT milk,).
- Encourage participants to review relevant information websites included on the Reading List in the Workbook Materials.

7. All About Meat and Alternatives (20 minutes)

- Continue the Focus on the Four Food Groups presentation (slides 34-47) to summarize the key points about meat, poultry and fish, eggs and other meat alternatives. Emphasize messages about serving sizes, label reading, food safety, preparation techniques, selection, and storage and nutrition value.
- Use food models, food labels, cooking equipment and teaching aids for demonstration, for example:
 - Use food models to illustrate Food Guide Serving sizes.
 - Use the Beef Consumer Guide brochure to discuss cuts of meat or use the diagram included in section 3 of the Resource Binder.
 - Use food labels to show nutrition information and claims, and to introduce special products (i.e. omega 3 eggs, canned fish packed in water, soy products).
 - Show meat thermometer, egg separator, and other cooking equipment.
- Encourage participants to review relevant information websites included on the Reading List in the Workbook Materials.

8. Wrap-up (5 minutes)

- Recap the objectives covered in this session.
- Assign Home Activities.
- Identify the focus for the next session. Encourage participants to read the appropriate sections in the Resource Binder

Home Activity

- Ask participants to complete the four activity sheets: Milk and Alternatives, Eggs, Meat and Poultry, Fish, and Meat Alternatives using the Resource Binder and in the Reading List as references
- Ask participants to complete the **Planning Meatless Meal Cooking Classes** home activity. The instructions for this activity are included on the activity sheet in the workbook.

Workbook

Session 3

Community Food Advisor Program

**Focus on the
Four Food Groups**

Workbook Materials

- Focus on the Four Food Groups Presentation Notes
- Identify the Grain Activity Sheet
- Additional Activities and Resource List
- Vegetables and Fruit: Frequently Asked Questions
- Milk and Alternatives Activity Sheet
- Eggs Activity Sheet
- Meat and Poultry Activity Sheet
- Fish Activity Sheet
- Meat Alternatives Activity Sheet
- Planning Meatless Meals Cooking Classes Activity Sheet

Identify the Grain

Look at and touch the samples of grains. Record your observations and make a guess as to what the grain may be.

Sample #	Your Observations	What Grain is It?
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		

Session 3

Focus on the Four Food Groups

Additional Activities and Resources

Additional Activities

- Milk and Alternatives Activity Sheet
- Eggs Activity Sheet
- Meat and Poultry Activity Sheet
- Fish Activity Sheet
- Meat Alternatives Activity Sheet
- Planning Meatless Meal Cooking Classes Activity Sheet

On-line Resources

- Flax Council of Canada www.flaxcouncil.ca
- EatRight Ontario – Budget-friendly information sheets and recipes
www.eatrightontario.ca/en/Articles/Budget/Food-choices-when-money-is-tight---Budget-friendly
- Foodland Ontario <http://www.foodland.gov.on.ca/english/index.html>
- Foodland Ontario Produce Availability Guide <http://www.foodland.gov.on.ca/english/availability.html>
- Canadian Produce Marketing Association - fruit and vegetable information, food safety, and recipes:
www.cpma.ca
- Mix It Up – meal planning and preparation and recipes www.fruitsandveggies.ca
- Dairy Farmers of Canada – recipes and consumer education: www.dairygoodness.ca
- Dairy Farmers of Canada - health professionals: www.dairynutrition.ca
- Egg Farmers of Ontario – nutrition information, recipes, education and literature www.getcracking.ca
- Egg Farmers of Canada – recipes, nutrition and food safety information: www.eggs.ca
- Canadian Beef – recipes and food safety information: www.beefinfo.org
- Ontario Pork – recipes and nutrition information: www.putporkonyourfork.ca
- Ontario Turkey – recipes and nutrition information: www.turkeyrecipes.ca/main.cfm
- Chicken Farmers of Ontario – recipes, cooking, nutrition and food safety information:
www.chickenlover.ca
- Chicken Farmers of Canada – recipes, cooking and nutrition information: www.chicken.ca/recipes
- Ontario Meat and Poultry – information on where to buy local meat and poultry, recipes:
www.ontariomeatandpoultry.ca
- Ontario White Bean Producers – nutrition and health information, recipes, and resources
www.ontariobeans.on.ca
- Pulses Canada – recipes and nutrition information <http://www.pulsecanada.com/recipes>

Readings

- Resource Binder:
 - Section 3: Focus on the Food Groups
 - Section 6: Food Storage and Preservation
 - Section 7: Food Preparation
 - Section 9: Recipes
- Vegetables and Fruit: Frequently Asked Questions
- Whole Grains – Get the Facts
<http://www.hc-sc.gc.ca/fn-an/nutrition/whole-grain-entiers-eng.php>



Vegetables and Fruit

Frequently Asked Questions



Q: Are pesticides used on vegetable and fruit crops safe?

A: Yes. Research has been done to make sure that pesticides are safe to use on food crops. The Canadian Food Inspection Agency monitors the amount of pesticides on foods that are produced in Canada and those that are imported. This is done regularly to make sure that only foods with safe levels of pesticides are available.

The maximum amount of pesticides that are allowed to remain on food (the Maximum Residue Limit or MRL) is set by Health Canada to make sure the foods are safe.

While we may not know for sure which foods have been sprayed with pesticides and how much residue is left on what we eat, we do know that regulatory agencies in Canada aim to provide safe food for Canadians and encourage the protection of our environment.

Q: How should you wash vegetables and fruit?

A: Most fresh vegetables and fruit have a natural protective coating; wash them under water just before you are ready to eat or cook them. If you wash them ahead of time, it will speed up how fast they spoil. Leafy greens can be washed and stored a few days before you use them.

The best way to wash vegetables and fruit is under running water. You do not need special products, soaps or vinegar. These can leave an aftertaste and don't kill bacteria or mould.

Check out [EatRight Ontario's website](http://www.eatrightontario.ca/en/Articles/Cooking/Food-Preparation/Everyday-tips-for-washing-vegetables-and-fruit.aspx) for more information and to view the video, "Everyday tips for washing vegetables and fruit."

www.eatrightontario.ca/en/Articles/Cooking/Food-Preparation/Everyday-tips-for-washing-vegetables-and-fruit.aspx

Q: Is organic produce safer and healthier than conventionally grown produce?

A: A comprehensive analysis conducted in 2012 of existing studies comparing organic and conventional foods could not identify specific vegetables or fruit for which organic appeared to be the consistently healthier choice. The analysis found little evidence that conventional foods posed greater health risks than organic products. While researchers found that organic products have a 30% lower risk of pesticide contamination than conventional vegetables and fruit, organic foods are

not necessarily 100% free of pesticides. The researchers found that pesticide levels of all foods were generally within the allowable safety limits.

According to the Canadian Cancer Society, pesticide residues on fresh vegetables and fruit can be reduced or even eliminated by:

- Washing all fresh vegetables and fruit thoroughly with lots of running water
- Using a small scrub brush to clean the skin of vegetables and fruit if the skin will be eaten (e.g., apples, potatoes and cucumbers)
- Peeling off the outer skin of vegetables and fruit and trim the outer leaves of leafy vegetables, and then wash thoroughly

Cancer experts say cancer risk from pesticides is relatively low compared to the cancer risks associated with smoking, physical inactivity, eating an unhealthy diet and sun exposure.

Q: I often hear that vegetables and fruit lack nutrition because they are grown in depleted soils. Are vegetables and fruit as nutritious as they used to be?

A: Extensive nutrient data on most vegetables and fruit clearly shows that these foods are significant sources of beta-carotene, folate, vitamin C, potassium, as well as fibre and other nutrients. It may be that some produce is even more nutritious than it once was.

You need only look as far as your local supermarket to know that the soils growing our produce are not nutrient deficient. Depleted soils produce stunted crops with poor yields, not the bounty of beautiful vegetables and fruit we buy today. The very existence of beautiful produce is proof that they come from fertile soils supplying the basic elements needed by plants to grow to maturity and bear large, good quality produce. If anything, our croplands are healthier because of improved farming practices.

Q: Are fresh vegetables and fruit the best?

A: You can't beat fresh produce for taste, texture and even colour, but the notion that fresh is always more nutritious than frozen or canned vegetables and fruit isn't true. Studies comparing fresh cooked vegetables with canned and frozen products show very few significant differences in most nutrients.

Choose plain frozen vegetables without added seasonings and sauces. They cost less and have less salt, sugar and fat. Frozen vegetables keep well and are always ready to be added to other menu items, such as soups, stews or casseroles.

When choosing canned vegetables, look for those canned with less salt/sodium. You can rinse canned vegetables to remove some of the added salt/sodium.

Choose plain frozen fruit rather than those with added sugar. Choose fruit canned in water or light syrup (less sugar) rather than those canned in heavy syrup (high in sugar).

Milk and Alternatives

Use the Resource Binder and on-line resources on the 'Additional Activities and Resources' list to answer the following questions about milk and alternatives.



1. Identify the foods from the following list that fit into the Milk and Alternatives group in Canada's Food Guide. For the foods you have identified, list Canada's Food Guide serving sizes.

Milk

Cream cheese

Yogurt

Ice Cream

Whipping cream

Cheese

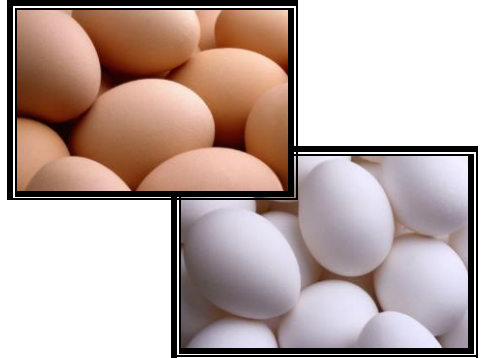
Sour Cream

Evaporated Milk

2. What is pasteurization?
3. Where can you look on the food label of milk products to determine the % fat in the product?
4. Describe the best way to heat milk to prevent scorching, off-flavours and skin from forming.
5. Give examples of fresh unripened cheese, soft ripened cheese and hard ripened cheeses. How should each be stored?
6. Milk products are a rich source of many important nutrients for health. Which nutrients are linked with bone health? Consuming milk products throughout life can help reduce the risk of which disease?
7. What milk alternative beverage is suggested on Canada's Food Guide as a suitable alternative to cow's milk?

Eggs

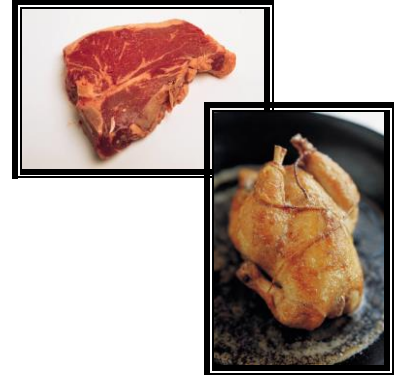
Use the Resource Binder and on-line resources on the 'Additional Activities and Resources' list to answer the following questions about eggs.



1. What does Canada's Food Guide indicate as a serving size for eggs?
2. What are the signs of a fresh egg?
3. What should you look for when buying eggs?
4. How should eggs be stored?
5. How can you prevent yolks from exploding during microwave cooking of eggs?
6. How can you prevent a green ring from forming around hard-cooked eggs?
7. What nutrients are eggs a good source of? Which part of the egg contains more nutrients?

Meat and Poultry

Use the Resource Binder and on-line resources on the 'Additional Activities and Resources' list to answer the following questions about meat and poultry.



1. List Canada's Food Guide serving sizes for the following foods:

Hamburger Patty _____

Chicken _____

Pork Chop _____

Black Forest Ham _____

2. What makes some cuts of meat more tender than others? List tender cuts and less tender cuts of meat.

3. Discuss preparation methods to improve tenderness of meat.

4. What is the best way to check for doneness of meat and poultry?

5. What are the most economical ways to buy chicken?

6. Discuss general food safety principles for handling meat and poultry.

7. What nutrients are found in rich supply in meat and poultry?

Fish



Use the Resource Binder and on-line resources on the 'Additional Activities and Resources' list to answer the following questions about fish.

1. What does Canada's Food Guide indicate as a serving size for fish?
2. What does Canada's Food Guide recommend in terms of the frequency of fish consumption?
3. What should you look for when purchasing fresh fish?
4. What should you look for when purchasing frozen fish?
5. Describe the best way to cook fish to ensure a healthy, flavourful and quality meal.
6. How long can various types of fish be stored in the freezer?
7. Why are fattier types of fish considered healthy choices?

Meat Alternatives

Use the Resource Binder and on-line resources on the 'Additional Activities and Resources' list to answer the following questions about meat alternatives:



1. List Canada's Food Guide serving sizes for the following foods:

Kidney Beans _____

Tofu _____

Veggie Soy Burger _____

Almonds _____

Peanut Butter _____

Lentils _____

2. Discuss the advantages and disadvantages of canned beans versus dried beans.

3. Describe the correct method to cook dry beans and whole peas.

4. What is tofu? What are the different types of tofu available? How should tofu be stored?

5. List some of the soy products that are commonly available at the grocery store.

6. Discuss the benefits of including meatless meals more often.

Planning Meatless Meals Cooking Classes

Your Task:

You have been asked to lead a cooking class focusing on meatless meals for several different small groups. For each of the groups below, suggest at least one meatless meal that would suit their taste preferences, cooking skills, knowledge, cooking equipment and other resources each group would have available to prepare these meals in their own homes.

Be sure that your meals include meat alternatives (e.g., tofu or other soy products, legumes, nuts and seeds, peanut butter, eggs). Find recipes that you would have the groups prepare in the class and list five or more key points you would share with them about meat alternatives and meatless meals.

Instructions:

For each group below:

1. Suggest at least one meatless meal that would meet their needs.
2. Find a recipe that you would make with the group.
3. List five or more key points you would share with the group about meat alternatives and meatless meals.

Groups:

- a) Senior men and women living alone
- b) Single students with limited cooking equipment and cooking skills
- c) Children 10-12 years of age who like to cook
- d) Mothers on a limited income with small children
- e) Women who work outside the home and prepare meals for their families

