

MODULE 2 - Healthy Baking and Desserts

The purpose of this module is to introduce participants to the basic skills required for the preparation of baked goods and desserts. Participants will discover ways to modify recipes to make them healthier.

The focus of the module is on hands-on preparation to provide participants with the opportunity to practice baking skills and techniques.

Learning objectives

By the end of the session participants will be able to:

- Discuss the health benefits of lower fat, lower sugar and higher fibre choices.
- Modify a recipe to make it lower in fat, lower in sugar and/or higher in fibre.
- Demonstrate measuring techniques.
- Use a variety of techniques to prepare baked goods and desserts (e.g. fruit crisps, muffins, cookies, whipped cream).
- Demonstrate safe use of knives and appliances.

Suggested outline

Healthy Baking and Desserts	Approximate Time
• Welcome and Introduction	5 min
• Using lower fat, lower sugar, higher fibre ingredients - health and nutrition benefits	10 min
• Modifying recipes to reduce fat and sugar and increase fibre	10 min
• Review of Recipes and techniques	10 min
• Hands-on cooking <ul style="list-style-type: none">○ kitchen safety○ baking techniques	60 min
• Tasting	10-15 min
• Clean up	10-15 min
	2 hours

Organizing the hands-on cooking

The modules are designed to provide hands-on cooking experience for participants. Each cooking session will require planning and preparation. Begin by reviewing the background information provided at the beginning of the module.

The optimal group size is 6-12 participants. Divide participants into three small groups. Each group will be responsible for the preparation of **one** recipe. For smaller groups or if your budget is limited, you may choose to divide participants into two groups. In this case, you will choose only two recipes for the groups to prepare.

Since participants will be preparing the recipes, there is no need to prepare anything in advance. However, you will want to make sure that certain ingredients are properly thawed or chilled.

You will need to prepare “stations” for each group. At each station, include the supplies, ingredients and equipment that will be needed for the preparation of the assigned recipe.

Ask groups to work together to prepare their assigned recipe. Encourage them to carefully read and follow the steps on the recipe. Check-in with each group throughout the session to provide guidance and demonstrate techniques as required.

A minimum of two facilitators is recommended. However, the overall skill level of participants will determine how many facilitators will be required to deliver this module. Groups with more advanced skills can work independently with less guidance from the facilitator(s).

Participants within the group will likely have varied skill levels. Try to include participants with fewer skills with a group of participants with more advanced skills.

Preparation checklist

Handouts

- Recipe Makeover for Healthier Baking and Desserts*

Recipes

- Apple Oatmeal Crisp
- Banana Blueberry Muffins
- Strawberry Oatmeal Shortbreads

Equipment and Supplies

Apple Oatmeal Crisp:

- sharp knives
- cutting board
- measuring cups and spoons
- medium mixing bowl
- mixing spoon
- pastry blender or 2 knives
- 8-inch (2 L) square baking dish

Banana Blueberry Muffins:

- measuring cups and spoons
- 2 large mixing bowls
- mixing spoon
- 2 muffin tins
- cooling rack
- coffee or spice grinder for grinding flaxseed (optional)

Strawberry Oatmeal Shortbreads:

- measuring cups and spoons
- 2 medium mixing bowls
- large mixing bowl
- electric mixer
- mixing spoons
- fork
- baking sheet
- spatula
- cooling rack
- sharp knife
- cutting board
- small saucepan

Other items required:

- serving and eating utensils
- plates
- napkins
- dish soap, dish cloths, and dish towels
- paper towel
- oven mitts
- containers for leftovers

Ingredients

- cooking spray

Apple Oatmeal Crisp:

- 1 cup quick-cooking rolled oats
- 1/3 cup whole wheat flour
- 1/2 cup brown sugar
- cinnamon
- salt
- 1/3 cup apple juice
- 3 tbsp non-hydrogenated margarine
- 5-6 apples
- lemon

Banana Blueberry Muffins:

- 3 cups whole wheat flour
- 3 cups ground flaxseed (or whole flaxseeds if supplying a coffee or spice grinder)
- 2 cups lightly brown sugar
- 1 Tbsp baking powder
- 1 Tbsp baking soda
- salt
- 3 eggs
- 3 ripe bananas
- 2/3 cup vegetable oil
- 2 tsp vanilla
- 2 cups fresh or frozen blueberries

Strawberry Oatmeal Shortbreads:

- 4 cups strawberries (fresh or frozen)
- 3/4 cup sugar
- 2 tbsp cornstarch
- 2 cups quick-cooking rolled oats
- 2 cups cake and pastry flour
- salt

- ½ cup butter
- ½ cup non-hydrogenated margarine
- 1 cup brown sugar
- 1 tsp baking soda
- 1 tsp vanilla
- whipping cream

Background information for the leader

One of the benefits of homemade baked goods is their simple list of ingredients. By making your own muffins, cakes, cookies and other desserts, whole ingredients can be used and most or all processed ingredients can be avoided. In addition, lower fat, lower sugar and higher fibre ingredients can be substituted.

Lower Fat Choices

- Fat is an important part of a healthy diet. Fat is considered an essential nutrient, it provides energy, and adds flavour and texture to foods. However, fats are high in calories and some harmful types of fat can increase the risk of heart attack or stroke.

Healthy versus Harmful Fats

- Not all fats are created equal. Unsaturated fats are healthier fats. These are fats such as vegetable oils and non-hydrogenated margarine. Canada's Food Guide recommends including a small amount (2 to 3 tablespoons) of unsaturated fat each day. This may include healthy fats used in desserts and baked goods.
- Saturated fats are harmful fats. These are fats that are solid such as lard and butter. Desserts like ice cream and buttery baked goods are also high in saturated fats.
- Trans fat is considered the most harmful type of fat. Trans fats are formed through the process of hydrogenation – where liquid oils are made into solid fats such as hard margarine or shortenings. Pastries and many store-bought desserts and baked goods are also high in trans fat. Look for ingredients such as shortening or hydrogenated vegetable oil.

Reducing Fat in Baking

Reducing the fat in baking does not mean reducing the flavour. In most recipes a low-fat or healthier fat version of the ingredient can be substituted. Some fat is needed for taste and texture, so it is important that all the fat is not removed.

Here are some suggestions for reducing fat in baking:

Tip 1: Substitute harmful fats with healthy fats

Swap out some of the butter, hard margarine or shortening for healthy oils, such as canola oil or olive oil, non-hydrogenated margarine or ground flaxseeds.

To replace fats with oil: Keep in mind that when you reduce the butter in a recipe you may lose some of its tenderizing and moisture-retaining properties. Start by replacing no more than 50% of the butter in a recipe with oil or non-

hydrogenated margarine.

To replace fats or eggs with ground flaxseed:

Fat Substitution: Use a 3:1 ratio when substituting flax for oil in a recipe. For example, 3 tablespoons of ground flax can replace 1 tablespoon of butter, margarine, shortening or vegetable oil.

Egg Substitution: For every egg being replaced, mix 1 tablespoon ground flax with 3 tablespoons water in a small bowl and let sit for one or two minutes. The mixture will become gel-like. Add to your recipe as you would an egg.

Tip 2: Replace fats with healthy ingredients.

Consider replacing some of the fat in a recipe with ingredients such as pureed fruits or vegetables, fruit juices, low fat plain yogurt or low fat buttermilk.

To replace fats with pureed fruit or vegetables: Try using pureed fruit or even vegetables in place of some of the butter, margarine or shortening. Options include applesauce, prune puree, mashed banana or even pureed pumpkin, squash or sweet potato.

Just like replacing some of the butter with oil, it's best to start with a small amount and experiment. Depending on the recipe, it may be possible to replace up to half the butter with a fruit or vegetable fat-replacer.

Here are some examples:

	How Much	Best Used in
Applesauce	Replace half the butter, oil or shortening called for with an equal amount of applesauce	Any baked goods, especially cakes
Prune puree	Replace half the butter, oil or shortening with an equal amount of purée (jarred baby food prunes or make your own purée by mixing 6 Tbsp of hot water with 8 oz of prunes in a blender)	Chocolate baked goods, brownies, gingerbread and spice cakes
Mashed banana	1/2 mashed or puréed banana for every cup of oil	Quick breads, coffee cakes and pancakes
Pureed pumpkin, squash, sweet potato	Replace half the butter, oil or shortening called for with an equal amount of purée	Spiced breads, cakes or muffins; quick breads, pancakes and brownies

To replace fats with liquid ingredients: When you reduce overall fat in a recipe, the result can be a dry baked good. Try adding a liquid ingredient such as fruit juice, low fat plain yogurt or low fat buttermilk to keep the product moist. Try 1 to 4

tablespoons of a liquid ingredient in place of up to 4 tablespoons butter.

Tip 3: Use lower fat dairy ingredients

Some recipes call for high fat dairy ingredients such as full fat milk, sour cream or cream cheese. Try the following substitutions to reduce fat:

Instead of	Use
Full fat cream cheese	Fat-free or low-fat cream cheese, cottage cheese or partly-skimmed ricotta cheese pureed until smooth.
Full-fat sour cream	Fat-free or low-fat sour cream, part-skim ricotta or fat-free plain yogurt.
Full fat milks	2% M.F. milk or less. Substitute with unsweetened soy and rice beverages, 100% fruit juices or water.

Adapted from materials produced by www.eatrightontario.ca

Tip 4: Prepare baking pan in a lower fat way

Instead of using butter or margarine to grease baking pans or sheets try these ideas:

- Line the baking pan or sheet with parchment paper or a silicon baking mat
- Use silicon baking pans
- Use a non-stick cooking spray. Spray a small amount on a paper towel then rub it over the pan.

Lower Sugar Choices

- There are many forms of sugar. White sugar, brown sugar, honey and syrups are examples of added sugars. Sugar is also naturally found in fruit.
- Much of the sugar that Canadians consume comes from processed and pre-packaged products, including cakes, cereals, yogurts and sweetened beverages. Too much sugar can add too many calories, which may lead to weight gain.
- Small amounts of sugar can be added to healthy foods but higher sugar foods with little or no nutritional value should be enjoyed in moderation. Canada's Food Guide recommends limiting added sugars. This includes the sugars in baked goods and desserts.

Reducing Sugar in Baking

Sugar is necessary in baked goods because it prevents the flours from creating gluten, which would yield tough and chewy baked goods. However, the calories from sugar quickly add up – about 775 calories per cup.

There are many ways to reduce sugar in baked goods. Try these ideas:

- Experiment with reducing the amount of sugar the recipe calls for. Up to 1/3 of the sugar in most recipes can be taken out without a noticeable difference. Do not eliminate all the sugar in a recipe, as it is still needed for taste and texture. Note: Do not reduce sugar in yeast breads as the sugar is needed to activate the yeast.
- Use fruit such as raisins, dried apricots, dates or bananas instead of sugar, which naturally add sweetness.
- Use vanilla, almond, maple, orange or lemon extracts for their natural sweet flavour. If a recipe calls for one of these extracts, try doubling the amount for added sweet taste.
- Sweet-tasting, calorie-free spices like cinnamon, nutmeg, cloves and ginger are a great way of adding flavour.
- Substitute up to ¼ of the granulated sugar in baking recipes with powdered milk. For example, if a recipe calls for 1 cup of sugar, use ¾ cup of sugar and ¼ cup powdered milk.
- Use dried fruit puree, applesauce, or mashed bananas to replace some of the sugar and fat in cookies and muffins.
- If a recipe calls for canned fruits, look for those packed in water instead of sugar.
- Replace sugar with the artificial sweetener, sucralose (Splenda). One cup (250mL) of Splenda is equal to one cup (250mL) of sugar. Only ½ a cup (125mL) of brown sugar Splenda is equal to one cup (250mL) of brown sugar. Note: Other artificial sweeteners should not be used for baking.

Adapted from materials produced by www.eatrightontario.ca

Higher Fibre Choices

- Canada's Food Guide encourages a higher fibre pattern of eating by emphasizing fibre-rich foods such as vegetables and fruit and whole grains. Fibre is an important nutrient that has many health benefits.

Fibre can help to:

- promote bowel regularity
- lower blood cholesterol
- control blood sugar

Research shows that fibre may also help you maintain a healthy body weight and lower your risk of heart disease and some cancers like colon cancer.

- Fibre is found in vegetables and fruit, whole grains, legumes like beans, peas and lentils and nuts and seeds. Desserts and baked goods made with these ingredients can provide a good source of fibre.

Increasing Fibre in Baking

- In many recipes, whole grain ingredients can be added or substituted without a drastic change in quality or taste.

Here are some suggestions for adding fibre to baked goods:

Tip 1: Substitute whole grain flour in place of white flour

- Use whole grain wheat flour in place of white, all-purpose flour. You can also try other whole grain flours such as teff or sorghum flour.
- Muffins, cookies, pancakes, waffles and scones do very well with part or complete substitutions of whole wheat flour for white flour. Pie crust, bread and delicate baked goods need extra care when substituting whole wheat flour.

Tip 2: Use high fibre ingredients

- There are high fiber ingredients that can be added without much change in taste or texture. Experiment with adding small amounts of rolled oats, wheat bran, oat bran, or whole or ground flaxseed to recipes. Crush bran cereal and add it to pancakes, cookies, muffins and breads.

Tip 3: Add high fibre goodies

- Add great tasting ingredients like nuts, dried fruits, cut up fruit or berries to muffin, cookie, and pancake recipes.

- Fruit purees and vegetables can also be added, but it can be a little trickier. Use applesauce or fruit purees as a substitute for some or all of the oil in recipes. Vegetables like potatoes, sweet potatoes and carrots work nicely in baked goods, but it's difficult to simply add these ingredients to an existing recipe. For best results, choose recipes that use these ingredients.

Preparation and Baking Techniques

There are many varieties of baked goods: cakes, pies, pastries, muffins, breads and cookies just to name a few. The preparation and baking techniques for the recipes presented in this module are reviewed below.

Measuring Techniques

Dry Ingredients

- Nested measuring cups are best used for measuring dry ingredients and solid fats. They usually range in size from 1/4 cup to 1 cup measures.
- Measuring spoons are used for very small quantities. Measuring spoon sets include 1/4 teaspoon, 1/2 teaspoon, 1 teaspoon, and 1 tablespoon.

Follow these basic principles for measuring common ingredients:

Flour

Using a large spoon, lightly spoon flour from the container into the measuring cup. Do not shake the cup and do not pack the flour. Using the back of a knife, level off the flour even with the top edge of the measuring cup.

Baking powder and Baking Soda

Using the measuring spoon, lightly scoop out of the container. Use the back of a knife to level off even with the top edge of the measuring spoon.

Sugar

Scoop the cup or measuring spoon into the container or bag until it is overflowing, then leveling off with the back of a knife.

Brown Sugar

Brown sugar is usually packed into the measuring cup. The sugar should retain the shape of the cup when it is dropped into the other ingredients.

Powdered Sugar

Powdered sugar usually needs to be sifted to remove small lumps. It is measured by spooning the sugar into the measuring cup from the container, then leveling off with the back of a knife.

Liquid Ingredients

- Glass measuring cups are used for measuring liquids and are most often available in 1 cup , 2 cup, 4 cup and 8 cup sizes.
- For an accurate measurement place the measuring cup on a flat surface. Pour the liquid into the cup. Then bend over so you are on the same level with the measuring marks. The liquid should be right at the mark, not above or below.

For accuracy use nested measuring cups for dry ingredients and glass measuring cup for liquids.

Semi-Liquid Ingredients

- Semi-Liquid Ingredients like margarine, sour cream, peanut butter, and yogurt are measured using dry measuring cups because they are too thick to be accurately measured in the liquid cups. Level off with the back of a knife.
- For butter, use the marks on the sides of the wrapping to measure the required amount.

Dry Ingredient Equivalents		
1 tablespoon	3 teaspoons	15 ml
1/8 cup	2 tablespoons	30 ml
1/4 cup	4 tablespoons	50 ml
1/3 cup	5-1/3 tablespoons	75 ml
1/2 cup	8 tablespoons	125 ml
2/3 cup	10-2/3 tablespoons	150 ml
3/4 cup	12 tablespoons	175 ml
1 cup	16 tablespoons	250 ml
Liquid Ingredient Equivalents		
1 cup	8 fluid ounces	250 ml
2 cups	16 fluid ounces	500 ml
4 cups	32 fluid ounces	1 L
8 cups	64 fluid ounces	2 L

Baking Techniques

Fruit Crisps

Perhaps no other baked dessert is as easy as this. A crisp is a baked fruit dessert with some sweet crumbs baked on top. Any fruit filling can be used.

How to “cut-in” the fat ingredient

There are a few ways to “cut” the margarine or butter into the flour and oats to make the fruit crisp topping.

1) Use a pastry blender

A pastry blender is made of narrow metal strips or wires attached to a handle. A pastry blender is used to mix ingredients together and break fats (margarine, butter, shortening) into smaller pieces (“cutting in”). To use a pastry blender, press down on the handle to cut or mix in the ingredients.

2) Hold two table knives together in one hand

Put your pointer finger between the two knives and use a cutting motion to mix in the ingredients.

3) Use your fingertips to work the ingredients in

Use just the tips of your fingers to work the fat into the mixture without melting it.

Tips for making fruit crisps:

- Use any fruit filling that would normally be use for fruit pie.
- Fresh fruit should be peel
- Since the crumb topping cooks quickly and burns easily, it is best to keep the fruit layer shallow so that it will cook in 30 minutes or so.
- For variety, you add chopped nuts, grated zest, or additional spices to the crumb topping. You can also add spices to the fruit, or try a mixture of fruits.

Muffins

- The secret to making perfect muffins is not to overmix the batter. If batter is overmixed, the muffins will be heavy, dense and tunneled.

Follow these steps for perfectly mixed muffins:

1. Mix the dry ingredients together (flour, baking soda/powder, salt, sugar, grains, etc.). If there are nuts or dried fruit in the recipe, add them to this mixture.
2. Blend the wet ingredients together in a separate bowl (milk, water, honey, eggs, oil, purees, etc.).
3. Form a well in the center of the dry ingredients and pour the wet mixture into it.
4. Gently fold the dry ingredients into the moist ones just until moistened. Batter is usually lumpy. If there are berries in the recipe, fold them in last.
5. Scoop batter into prepared muffin tins. Fill muffin cups about 2/3 full. Add any toppings. Bake right away.

Tips:

- Grease muffin tins by spraying each cup with non-stick cooking spray or use a paper towel dipped in non-hydrogenated margarine or butter to grease each cup.
- Use paper liners in muffin cups for easy clean-up.
- If some muffin cups will remain empty during baking, put 2 to 3 tablespoons water in the unused muffin cups to keep the pan from warping or scorching.
- For mini-muffins, reduce the cooking time by 5-7 minutes.
- Let the muffins sit in the tin for 5 minutes. Turn out the muffins onto a cooling rack to finish cooling.
- If baked muffins stick to the bottom of the muffin cup, place hot muffin pan on a wet towel for about two minutes.

Cookies

- There are many factors involved in baking a successful cookie. For best results, use the correct ingredients, mix carefully, bake at the recommended temperature and use the right baking sheet.

Ingredients

- Follow the recipe closely and measure ingredients carefully.

Fats

Cookies are made with butter, margarine or shortening. Calorie-reduced margarines are not suitable for baking. Shortening and margarine result in a cookie that is closer to the original unbaked shape. Cookies made with butter tend to spread out. Butter is essential in certain cookies, such as shortbreads.

Flour

Most cookie recipes call for all-purpose or pastry flour. Higher flour-to-liquid ratios are needed in shortbread and crumbly-textured cookies.

Baking Powder and Baking Soda

Baking powder and baking soda are the two most common leavening agents used in cookies. Baking soda neutralizes the acidity of the dough, allowing the cookies to brown in the oven. Since baking powder already contains its own acid, it will not reduce the acidity in the dough. Cookies will be puffier and lighter in color.

Sugars White sugar makes a crisper cookie than brown sugar or honey. Cookies made from brown sugar will absorb moisture after baking, helping to ensure that they stay chewy. If you lower the amount of sugar called for in a cookie recipe, the final baked cookie will be puffier.

Eggs and Liquids Eggs are a binding agent. Liquids can either cause cookies to puff up or spread. If egg is the liquid, it will create a puffy, cake-like texture. Just a tablespoon or two of water or other liquid will help your cookies spread into flatter and crisper rounds.

Mixing

- Proper mixing is important. Some recipes require a creaming step in which the fat and sugars are beaten together. Other cookies require fat to be cut into the flour. Over-mixing can incorporate too much air into the dough, resulting in flat, overly spread-out cookies. Follow the recipe instructions.

Equipment and Baking

- Different baking sheets and ovens produce different results. Thin baking or shiny metal sheets might allow the bottoms to brown too fast.
- Follow the recipe's instructions for baking. Use an oven thermometer to check that the oven temperature is correct. Generally, cookies are baked in a moderate oven--350 degrees F (175 degrees C)--for 8 to 12 minutes, depending on the size of the cookie.
- For chewy cookies, allow them to cool on the pan for 3 to 5 minutes before transferring to a cooling rack. For crispier cookies, let cool for one minute on the baking sheet before transferring to a cooling rack.

Whipped Cream

- Whipped cream is easy to make and is a finishing touch to many favourite desserts.

Follow these tips for preparing perfect whipped cream:

- Begin with thoroughly chilled whipping cream. Chill mixing bowl and beaters.
- Put the cream in a mixing bowl. With an electric mixer, beat cream on medium speed to start. As the cream thickens, turn the speed to high. As it gets foamier, start checking for soft peaks. **Do not overbeat.** Overbeating will cause the whipped cream to lose volume, then clump and separate.
- Add sugar and any flavorings while whipping cream.

Per cup of cream:

- 2 Tbsp to $\frac{1}{4}$ cup sugar
- 1 to 2 Tbsp artificial sweeteners (e.g. Splenda or Equal/Nutrasweet)
- 1 to tsp vanilla extract

Related CFA Presentation Kits

Eating Well with Canada's Food Guide (2008)

Low Fat Cooking

Vegetables and Fruit, Everyday (2010)

LESSON

Each cooking session will require planning and preparation. Begin by reviewing the background information provided at the beginning of the module. Depending on group size, organize participants into two or three small groups. Each group will be responsible for the preparation of **one** recipe. Choose the recipes and prepare “stations” for each group. At each station, include the supplies, ingredients and equipment that will be needed for the preparation of the assigned recipe(s).

Welcome and Introduction

5 minutes

- Begin this lesson by welcoming participants back. Ask if they tried any of the recipes or practiced any of the skills discussed in the previous module.

Review the objectives of this module:

“This module will introduce easy, tasty and healthy baked goods and desserts. You will learn how to substitute ingredients to make baked goods lower in fat, lower in sugar and/or higher in fibre. We will also discuss the health benefits of these choices. You will have the opportunity to practice baking techniques as we prepare recipes together.”

- Warm-Up

Ask participants to answer the following question:

- What is your most memorable dessert experience?

Encourage participants to talk about their favourite desserts, associated memories and experiences making desserts.

Lower Fat, Lower Sugar and Higher Fibre Ingredients

10 minutes

- Ask participants to identify some of the ingredients in their favourite desserts discussed in the warm-up activity.
 - Which ingredients contribute to the fat, sugar and fibre content?
- Ask participants to identify some healthy baked goods and dessert ideas.

For example:

- fruit and yogurt parfaits
- whole grain muffins
- cookies made with oats, whole grain flours
- fruit crisps

Discuss the health benefits of making healthier choices:

- Lower fat choices help keep calories in check. Choosing healthy fats (e.g. vegetable oils, non-hydrogenated margarine) may help reduce the risk of heart attack or stroke.
- Baked goods made with less sugar are lower in calories. For added nutrition, choose desserts and baked goods that use fruit to add sweetness.
- Fibre-rich baked goods that use whole grains and fruit and vegetable ingredients can help promote bowel regularity and lower blood cholesterol levels. Fibre can also help control blood sugar levels.

Modifying recipes to reduce fat and sugar and increase fibre 10 minutes

- Distribute the handout: Recipe Makeover for Healthier Baking and Desserts to help you review substitutions for fat, sugar and refined white flour in baked goods.

Review of Recipes and Techniques 10 minutes

- Review safe food handling practices (e.g. frequent handwashing, sanitizing surfaces)
- Demonstrate correct measuring techniques for dry and liquid ingredients.

Dry Ingredients

- Nested measuring cups or measuring spoons are used for dry ingredients. Fill measuring cup or spoon with the ingredient. Use the back of a knife to level off the flour even with the top edge of the measuring cup or measuring spoon. Remind participants not to level off into the mixing bowl!

Liquid Ingredients

- Glass measuring cups are used for liquid ingredients. Place the measuring cup on a flat surface. Pour the liquid into the cup. Then bend over so you are on the same level with the measuring marks. The liquid should be right at the mark, not above or below.

Semi-Liquid Ingredients

- Margarine, sour cream, peanut butter, and yogurt are measured using dry measuring cups. Level off with the back of a knife.

Remind participants to use the right measuring tool for the job. If not, ingredients may be measured incorrectly.

- Discuss the preparation and baking techniques that will be used for making:
- fruit crisps
 - muffins

- cookies
- whipped cream

- Introduce the recipes and review the following:
 - ingredients (explain anything unfamiliar)
 - steps involved in the recipes
 - alternate ingredients and/or cooking methods
 - helpful tips

Hands-on Cooking

60 minutes

- If you have not already done so, organize participants into two or three small groups. Each group will be responsible for the preparation of **one** recipe.
- Review kitchen safety such as preventing cuts, burns, fires, electrical shocks and falls.
- Encourage participants to clean as they go to minimize clean-up at the end of the session.
- Visit each group throughout the hands-on cooking portion of this module. Help each group with the correct and safe preparation of the assigned recipes. Demonstrate skills and provide guidance as necessary. Some of the skills that you may need to review or demonstrate include:

- safe handling of knives for slicing fruit
- safe use of hand mixers
- safe food handling practices
- cutting-in butter/margarine
- mixing muffin batter – safe handling of mixer
- grinding flaxseed in a coffee or spice grinder
- preparing cookie dough
- kneading dough
- whipping cream
- checking for doneness

Safe use of hand mixers

- Do not immerse the mixer, power cord or plug in liquid.
- Never put hands or utensils into the beaters while they are moving.
- Turn off the mixer and unplug from the wall before adding or removing the beaters, scraping food off the beaters, and before cleaning.

Tasting

10-15 minutes

- Encourage participants to taste the recipes that were prepared. Ask participants to share their experiences. What worked well? What were the challenges? Will they try the recipe at home?

Clean Up**10-15 minutes**

- Ensure that all participants help with washing dishes, cleaning the work surfaces and storing food in the proper locations.

RECIPES

Recipe #1: Apple Oatmeal Crisp

Recipe #2: Banana Blueberry Muffins

Recipe #3: Strawberry Oatmeal Shortbreads

RECIPE #1: Apple Oatmeal Crisp

Topping:

1 cup	quick-cooking oats	250 mL
1/3 cup	whole wheat flour	75 mL
1/3 cup	packed brown sugar	75 mL
1/2 tsp	cinnamon	2 mL
1/4 tsp	salt	1 mL
2 Tbsp	apple juice	30 mL
3 Tbsp	non-hydrogenated margarine	45 mL

Fruit:

5 or 6	apples	5 or 6
1 tbsp	fresh lemon juice	15 mL
3 Tbsp	apple juice	45 mL
1/4 cup	packed brown sugar	50 mL
1/2 tsp	cinnamon	2 mL

1. Preheat oven to 350 F.
2. In a bowl prepare the topping: combine oats, flour, brown sugar, cinnamon and the salt. Stir in apple juice and all the margarine. Use a pastry cutter or hold two knives together in one hand to “cut in” the margarine. The mixture should be moist and crumbly. Set aside.
3. Peel and core apples. Cut into thin slices.
4. Grease an 8-inch (2 L) square baking dish. In the baking dish, combine apples, lemon juice, apple juice, brown sugar and cinnamon. Sprinkle oatmeal mixture evenly over apples.
5. Bake until apples are tender and topping is golden brown, about 30 minutes.

Makes 8 servings.

RECIPE #1: Helpful Tips

Making Fruit Crisp Topping

How to “cut-in”

There are a few ways to “cut” the margarine or butter into the flour and oats to make the fruit crisp topping.

1) Use a pastry blender

A pastry blender is made of narrow metal strips or wires attached to a handle. A pastry blender is used to mix ingredients together and break fats (margarine, butter, shortening) into smaller pieces (“cutting in”). To use a pastry blender, press down on the handle to cut or mix in the ingredients.

2) Hold two table knives together in one hand

Put your pointer finger between the two knives and use a cutting motion to mix in the ingredients.

3) Use your fingertips to work the ingredients in

Use just the tips of your fingers to work the fat into the mixture without melting it.

Other Ideas for Fruit Crisps

Peach and Raspberry Crisp

Combine: 1 (28 oz, 796 mL) can of sliced peaches, drained
or 4 cups fresh sliced peaches
1 cup (250 mL) fresh or frozen raspberries
1 Tbsp flour

Strawberry-Rhubarb Crisp

Combine: 3 cups (750 mL) strawberries, sliced
2 cups (500 mL) frozen or fresh diced rhubarb
½ cup (125 mL) sugar
3 Tbsp (45 mL) flour

Lemon-Blueberry Crisp

Combine: 4 cups (1 L) fresh or frozen blueberries
¼ cup (50 mL) sugar
1 Tbsp (15 mL) flour
1 tsp (5 mL) grated lemon rind
1 Tbsp (15 mL) fresh lemon juice

RECIPE #2: Banana Blueberry Muffins

3 cups	whole wheat flour	750 mL
3 cups	ground flaxseed	750 mL
2 cups	brown sugar, lightly packed	500 mL
1 Tbsp	baking powder	15 mL
1 Tbsp	baking soda	15 mL
¼ tsp	salt	1 mL
3	eggs	3
3	ripe bananas, mashed	3
½ cup	applesauce	125 mL
2/3 cup	vegetable oil	150 mL
2 tsp	vanilla	10 mL
2 cups	fresh or frozen blueberries	500 mL

1. Preheat oven to 350 F.
2. In a large bowl, combine flour, flaxseed, brown sugar, baking powder, baking soda and salt.
3. In a separate large bowl combine eggs, bananas, applesauce, oil and vanilla. Add the wet mixture to the dry mixture. Stir just until moistened. Do not overmix. Fold in blueberries.
4. Spoon batter into greased muffin tins. Bake for 20 minutes. Let cool in tin for 10 minutes, then remove to a wire rack to cool completely.

Makes 24 muffins.

Ground flaxseed

You can buy ground flax seed in a vacuum package, or you can prepare it yourself in a coffee or spice grinder.

To keep flax seed fresh, grind it as you need it. You can keep ground flax seed refrigerated in an airtight, opaque container for up to 30 days.

RECIPE #2: Helpful Tips

Making Muffins

- The secret of delicious, light muffins is not to over mix the batter. Don't worry about a few lumps in the mix. If batter is over mixed, the muffins will have a heavy, dense texture.
- The perfect muffin has a thin brown crust and a slightly rounded top. The inside should be moist. There should be no peaks, no tunnels which are usually caused by excessive mixing and too much liquid.

Tips:

- Grease muffin tins by spraying each cup with non-stick cooking spray or use a paper towel dipped in non-hydrogenated margarine or butter to grease each cup.
- Use paper liners in muffin cups for easy clean-up.
- If some muffin cups will remain empty during baking, put 2 to 3 tablespoons water in the unused muffin cups to keep the pan from warping or scorching.
- For mini-muffins, reduce the cooking time by 5-7 minutes.
- Let the muffins sit in the tin for 5 minutes. Turn out the muffins onto a cooling rack to finish cooling.
- If baked muffins stick to the bottom of the muffin cup, place hot muffin pan on a wet towel for about two minutes.

RECIPE #3: Strawberry Oatmeal Shortbreads

Oatmeal Shortbread:

2 cups	quick-cooking rolled oat	500 mL
2 cups	all purpose flour	500 mL
½ tsp	salt	2 mL
½ cup	soft butter	125 mL
½ cup	non-hydrogenated margarine	125 mL
1 cup	packed brown sugar	250 mL
2 Tbsp	hot water	25 mL
1 tsp	baking soda	5 mL
1 tsp	vanilla	5 mL

Strawberry Preserve Sauce:

4 cups	strawberries (fresh or frozen)	1 L
¾ cup	granulated sugar	175 mL
2 Tbsp	cornstarch	25 mL
1 cup	whipping cream	250 mL

Oatmeal Shortbread:

1. Preheat oven to 350 F.
2. In a medium bowl, stir together oats, flour and salt. In a large mixing bowl beat butter, margarine and brown sugar with an electric mixer until fluffy.
3. In a measuring cup, stir together hot water and baking soda. Beat into sugar mixture along with vanilla. Gradually blend in oat mixture until well combined. Knead dough with hands until it forms into a ball.
4. Using 1 tbsp (15 mL) dough for each cookie, roll dough into balls and placed on greased baking sheet. Flatten with tines of fork. Bake for 12 to 15 minutes or until golden brown on bottom. Cool on racks.

Strawberry Preserve Sauce:

1. Wash and hull strawberries. Cut into thin slices.
2. In a saucepan, combine strawberries, sugar and cornstarch. Cook over medium heat, stirring frequently, for 5 to 8 minutes or until thickened and clear. Remove from heat. Cool.

Whipped Cream:

1. Whip cream with an electric mixer on medium speed until soft peaks form. If desired, gradually add 2 Tbsp sugar while whipping.

To assemble: Add a generous dollop of whipped cream to each shortbread cookie. Top with a spoonful of strawberry preserve sauce.

To keep calories and fat down, top shortbread cookies with low-fat vanilla yogurt instead of whipped cream.

Makes 20 servings (2 cookies each).

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Tips for Perfect Whipped Cream

- Begin with thoroughly chilled whipping cream. Chill mixing bowl and beaters.
- Put the cream in a mixing bowl. With an electric mixer, beat cream on medium speed to start. As the cream thickens, turn the speed to high. As it gets foamier, start checking for soft peaks. **Do not overbeat.** Overbeating will cause the whipped cream to lose volume, then clump and separate.
- Add sugar and any flavorings while whipping cream.

Per cup of cream:

- 2 Tbsp to ¼ cup sugar
- 1 to 2 Tbsp artificial sweeteners (e.g. Splenda or Equal/Nutrasweet)
- 1 to tsp vanilla extract

HANDOUTS

Recipe Makeover for Healthier Baking and Desserts

When a recipe calls for...	Try this instead...
Butter, margarine, shortening or oil	<ul style="list-style-type: none"> • Replace up to ½ the fat with mashed fruit or vegetables, like unsweetened applesauce, pureed pumpkin, squash, sweet potato, pureed prunes or mashed bananas. • Replace 1 tablespoon fat with 3 tablespoons ground flaxseed.
Eggs	<ul style="list-style-type: none"> • For every egg being replaced, mix 1 tablespoon ground flaxseed with 3 tablespoons water in a small bowl and let sit for one or two minutes. The mixture will become gel-like. Add to your recipe as you would an egg.
Butter a baking dish or pan to prevent sticking	<ul style="list-style-type: none"> • If you use a cooking spray, use a small amount on a paper towel to grease the pan. • Use parchment paper or silicon baking mats or pans.
Full fat cream cheese	<ul style="list-style-type: none"> • Use fat-free or low-fat cream cheese, cottage cheese or partly-skimmed ricotta cheese pureed until smooth.
Full-fat sour cream	<ul style="list-style-type: none"> • Use fat-free or low-fat sour cream, part-skim ricotta or fat-free plain yogurt.
Full fat milks	<ul style="list-style-type: none"> • Choose 2% M.F. or less. • Substitute with unsweetened soy and rice beverages, 100% fruit juices or water.
Sugar	<ul style="list-style-type: none"> • Reduce up to 1/3 of the sugar in most recipes. • Replace some of the sugar with fruit such as raisins, dried apricots, dates, applesauce, mashed bananas or fruit purees. • Substitute up to ¼ of the sugar with powdered milk. • Replace sugar with the artificial sweetener, sucralose (Splenda). Other artificial sweeteners should not be used for baking.
White flour	<ul style="list-style-type: none"> • Replace all or part of the white flour with whole grain wheat flour. Try other whole grain flours like teff or sorghum. • Add small amounts of rolled oats, wheat bran, oat bran, or whole or ground flaxseed to recipes

Sources: EatRight Ontario www.eatrightontario.ca, Flax Council of Canada www.flaxcouncil.ca

ADDITIONAL RESOURCES

Eating Well with Canada's Food Guide

www.healthcanada.gc.ca/foodguide

Foodland Ontario

www.foodland.gov.on.ca

EatRight Ontario

www.eatrightontario.ca

or call toll-free to speak to a Registered Dietitian 1-877-510-510-2

Flax Council of Canada

www.flaxcouncil.ca

Whole Grains Council

www.wholegrainscouncil.org