



WELCOME

Welcome to the 4-H Food and You - Fruit & Vegetables Project! Please read through this guide carefully, as it contains information and suggestions that are important for your project. 4-H leaders can obtain a Leader Project Guide and other resources from the PEI 4-H Office. Hopefully you, as a member, will "Learn to do by Doing" through hands-on activities that will encourage learning and enjoyment. If you have any questions, contact your District 4-H Officer or your 4-H project leader.

4-H YEAR COMPLETION

You complete a project by:

- completing the project Achievement Day requirements
- completing a communication project
- completing a community project
- completing an agriculture awareness project
- taking part in Achievement Day

You must complete all of the listed aspects in order to show at Fairs and Exhibitions.



ACHIEVEMENT DAY REQUIREMENTS	
One Quarter of a Carrot Cake (made in tube pan & not iced)	50
Recipe File (containing at least 4 fruit and 4 vegetable recipes plus a picture of the member showing at least one prepared recipe.	20
1 Potted Herb Plant	10
Leader test on one of either:	<u>20</u>
Cutting Techniques or Blanching, steaming, frying boiling, sautéing, freezing, preserving, etc.	100

EXHIBITION REQUIREMENT

One Quarter Carrot Cake (not iced)

Starting with the 2011 Exhibition season, the only exhibition item for the Foods Projects will be the food item for each specific project.

Recipe File and picture - Prepare one of the recipes from your recipe file have someone take a picture of you with the prepared recipe. Add this to your recipe file.

Members, take advantage of your freezer when baking. You can freeze a portion of your item(s) so that you will have some ready for each exhibition. Be sure to repackage items as some moisture tends to accumulate when the items thaw.

Please Note:
To finish this project, 6 to 8 project meetings/lessons must be completed with a minimum of 8 recipes tested during the project.

Ages for 4-H members as of January 1st of the 4-H year:
 Junior: 9-11 years
 Intermediate: 12-14 years
 Senior: 15-21 years

BE A GOOD SPORT!
 In the spirit of learn to do by doing, all those involved in 4-H are encouraged to practice good sportsmanship, use common sense at all 4-H activities, and the work in any 4-H project should be the member's own work.

Check out the PEI 4-H Web Site
www.pei4h.pe.ca

FOOD SAFETY AND PREPARATION TIPS

- * Always have a clean work area and wash hands with hot soapy water before you begin food preparation and cooking.
- * Always read through the whole recipe before you start.
- * Always gather all the ingredients, measuring cups and spoons, utensils and pots or bowls you will need before you start.
- * Always tidy as you cook and clean up the kitchen when you are finished.
- * Always wear oven mitts to handle hot dishes.
- * Always keep food safe by keeping hot food hot and cold food cold.
- * Always use hot soapy water to wash utensils and surfaces after handling raw foods and before handling cooked or ready-to-serve foods.



STANDARDS FOR JUDGING MUFFINS

General Score Card for Foods

30	Appearance
30	Crumb
40	Flavor



HELPFUL RESOURCES!

- www.healthyeatingpei.ca
- www.dairygoodness.ca
- www.dairyfarmers.org
- www.milk.org
- www.healthyeatingisinstore.ca
- www.kidnetic.com
- www.recipebox.cdktichen.com/games
- www.kidshealth.org/kid/closet/
- www.nutritionexplorations.org/kids
- www.freggietales.com
- www.nms.on.ca
- www.dietitians.ca



A variety of books and videos are available at the PEI 4-H Office which can be borrowed for a two week loan period. To book these, call 368-4833 or drop by the PEI 4-H Office at 40 Enman Crescent, Charlottetown.

JUDGES WILL BE LOOKING FOR...

- Shape - symmetrical, rounded top, free from peaks and knobs
- Crust - tender, thin with rough surface, uniform browning
- Volume - light in weight in proportion to size
- Texture - medium, fine, moist, tender crumb
- Grain - round, even cells, free from tunnels
- Color - characteristic of the kind of muffin
- Blended flavor of well-baked ingredients
- Free from acid flavor or excess baking powder or excess saltiness

Food Safety-It's up to you!

- Wash your hands frequently and carefully.
- Wear clean clothing and aprons, and keep hair confined at all times.
- Keep work areas clean.
- Wear gloves if you have a bandaged cut, sore or blister. Gloves should be changed as often as you should wash your hands.

How to Wash Your Hands

To wash your hands properly, you must wash them for at least 20 seconds. Singing the Happy Birthday song twice takes 20 seconds.

1. **WET** your hands with warm water.
2. Apply liquid **SOAP**.
3. **SCRUB** hands together for at least 20 seconds, washing the front and back of the hands, and in between the fingers.
4. **RINSE** hands with warm water.
5. **DRY** hands with paper towel.
6. Turn water off with the paper towel.



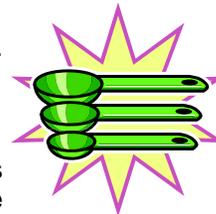
Be Food Safe

- ◆ Keep hands and surfaces clean!
- ◆ Keep hot foods hot!
- ◆ Keep cold foods cold!
- ◆ Separate ready to eat and cooked food from raw products (like raw meats)!
- ◆ To help reduce the risk of foodborne illness, wash hands before and after handling raw eat and seafood, after using the washroom, after changing diapers, after touching pets and after blowing your nose, coughing or sneezing.
- ◆ It's not safe to defrost food at room temperature. The best way to defrost is to thaw food in a covered container on the bottom shelf of the refrigerator.
- ◆ Refrigerate or freeze perishables, prepared foods and leftovers within two hours or less of cooking. Keeping cold food (at or below 4°C/40°F) slows down bacterial growth.
- ◆ The best way to cool leftovers, such as chili or soup, is to divide the leftovers into shallow containers for quicker cooling.

MOST IMPORTANT- You can't tell if a food is contaminated with harmful organisms by looking at it, smelling it or tasting it. When in doubt-throw it out!

HOW DO YOU MEASURE UP?

Too little of one ingredient or too much of another will change the result of what you are making. For best results, measure carefully and accurately.



Metric vs. Imperial

Some recipes are written in metric—mL and some are written in Imperial—teaspoons, tablespoons and cups. Some recipes are written in both. Follow the Metric recipe or follow the Imperial recipe but do not use some of each in the one recipe.

MEASURING SMALL AMOUNTS

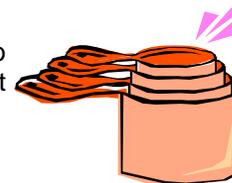
Small amounts of liquid or dry ingredients require small measuring tools. For this, you use measuring spoons. To measure dry ingredients like salt, fill the required measuring spoon and level the top with the straight edge of a kitchen knife.

Liquids

Use a clear glass or plastic measuring cup to measure liquids like water, milk or oil. To measure accurately, set the measuring cup on the table or counter and fill to the desired level, looking at it from eye level.

Dry Ingredients

To measure larger amounts of dry ingredients like flour and sugar, you will use dry measures. To measure accurately, select the size you need, fill to overflowing and level the top with the straight edge of a kitchen knife.



Careful measuring makes for better results.

Potted Herb - Achievement Day Requirement

Each member will plant and care for a herb of his/her choice. This could be any herb that you choose.

Choose a pot, either clay or plastic. Tin cans can be used if one to three drainage holes are punched in the bottom. A “too large” pot is as harmful as a “too small” one. Start seeds in a small pot and repot when necessary.

Mix approximate soil mixture or use prepared potting soil.

Place some gravel, stones or broken pot pieces over the drainage holes to prevent them from becoming packed with soil.

Put soil over the drainage materials then fill so the soil level is 1 cm below the top of the pot. Firm the soil.

Place the pot in a sink or deep saucer and water thoroughly.

Scatter the seeds over the surface evenly. Cover with soil to a depth twice the diameter of the seed. Moisten with a fine spray taking care not to disturb either the covering or the seeds.

After seeding, the pots are covered with a pane of glass or placed in a plastic bag to create a small damp air space over the seed. This will reduce evaporation. These pans should also be set in a shaded area. Once the seeds start to grow, the glass should be wedged up or the plastic bag partially opened to give ventilation. As soon as the growth starts, the shade and glass or plastic should be moved and the pot moved to a sunny window.

Light - all plants require some light. Sunlight from a sunny window in your house is usually enough, although artificial light is sometimes used.

Soil - a good potting soil for most plants contains two parts top soil (garden soil), one part sand, and one part peat moss. It will be easier for you to use prepared potting soil from a store than to mix your own.

Heat - indoor plants prefer a day temperature of between 20 - 22°C and night temperatures of 15° C.

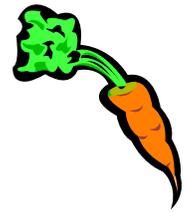
Water - how often and how much water you give depends on many factors. For example, violets need more water than cacti, plants in a humid room require less than those in a dry room, and plants in clay pots require more water than those in tine or plastic pots.

Humidity is the measure of the amount of water in the air. In the home, air is usually drier than plants like. Sprinkling plants with a fine spray of water benefits the plant by raising the humidity around it.

To tell if a plant needs water, push your finger into the soil. If it is dry beneath the top thin crust, it needs watering. do not use cold water as it shocks the plants. You can water by pouring enough water on top of the soil to thoroughly wet the soil. You should do this in the sink so excess water can drain away. You can also set the pot in a tray of water until the water is absorbed up into the pot.



FOOD & YOU - FRUITS & VEGETABLES RECIPE



CARROT CAKE

Ingredients

500 mL	all purpose flour	2 cups
500 mL	white sugar	2 cups
5 mL	salt	1 tsp
10 mL	baking soda	2 tsp
10 mL	cinnamon	2 tsp
5 mL	nutmeg	1 tsp
250 mL	vegetable oil	1 cup
4	eggs well beaten	4
750 mL	grated carrot	3 cups ca

Method

1. Heat oven to 180°C (350°F)
2. Grease and flour tube pan.
3. Mix together dry ingredients.
4. Add oil and eggs. Fold just to mix.
5. Fold in carrots.
6. Pour into tube pan.
7. Bake for 1 hour, or until tester comes out clean.

Healthier choice: Substitute 1/2 cup (125 mL) of applesauce and 1/2 cup (125 mL) of vegetable oil for the 1 cup of vegetable oil.

REMEMBER: For Achievement Day and Exhibitions, the requirement is 1/4 of the cake, not iced.

TIPS FOR CHOPPING FRUITS AND VEGETABLES

- Always wash and scrub the vegetables and fruit before chopping them.
- Chop with safety in mind.
- Use a chef's knife.
- Use a cutting board.
- Cut down with a knife at set intervals.
- Avoid cutting too fast.

For the Knife hand:

See how the thumb and finger grip the blade just beyond the handle. This helps make the knife an extension of your arm and gives you better control and precision in cutting.

When finely chopping or mincing some foods, such as small bunches of herbs or garlic, the handle may be held in one hand while the other hand rests on top of the blade. The tip of the blade is kept in contact with the cutting board. The blade is rocked up and down until the food is chopped to the desired size.

To prevent vegetables and fruits from slipping on your cutting board, cut them in half before slicing or chopping further. This helps anchor them firmly on your cutting board and helps protect against cutting yourself.

Always make sure the cutting board is secured to the counter with a wet cloth or paper towel - it is dangerous to have a cutting board that moves around while you are trying to cut.

For the Non-Knife hand:

- The fingers are curled under to protect the fingertips.
- The thumb and little finger behind the other fingers.
- The side of the blade (but not the edge) rests against the middle knuckles of your Non-Knife hand. This helps you keep the knife from coming down on your fingers. It also helps you measure the size of the cuts, moving your hand backward on the food after each cut in preparation for the next cut.
- Cuts are made downward with a rocking motion from the tip to the end of the blade. The knife is not sawed back and forth through foods.



CANNING/BOTTLING BASICS

Whether you're a seasoned preserve-maker or a first-timer, summer is the time to take advantage of the wonderful fruit available at farmer's markets, roadside stands, or pick-your-own farms.

Prepare fruits first

For all recipes, prepare the fruits or vegetables before measuring. Wash, drain well, remove stems, tops, tails or pits or hull, depending on the fruit or vegetable.

If your summer schedule doesn't give you time to boil up the harvest, freeze the fruit for these creations to make another time. Just measure and label them before freezing so you're set to preserve when convenient. To cook up frozen fruits, just measure the frozen fruit and thaw before proceeding, including all juices unless otherwise directed.

Canning Basics

Fill boiling water canner two-thirds full of hot water. About 30 minutes before filling jars, start to heat.

Use only new lids and canning jars that are free of nicks and cracks. Just before filling jars, heat lids in small saucepan of hot but not boiling (180°F/82°C) water until sealing compound is softened.

Wash, rinse and air-dry jars. Ten minutes before filling, place jars, metal funnel and 1/2 cup (125 mL) metal measure in canner rack; heat to hot but not boiling (180°F/82°C). Fill hot jars using funnel and measure and leaving recommended headspace. If necessary, wipe rims with damp paper towel.

Centre lids on jars; screw on bands until fingertip tight.

Return jars to canner. Add boiling water to cover by at least 1 inch (2.5 cm). Cover and return to boil; boil for specified time.

Turn off heat. Let water stop boiling before removing jars. (Removing jars too early may cause leakage due to change in pressure.) Lift up rack with jars. With canning tongs, transfer jars to flat rack to cool and set, about 25 hours.

Check that lids curve downward. Refrigerate any that do not and use within three weeks.

Label and store jars in cool, dry place for up to one year.

BLUEBERRY RASPBERRY JAM

Ingredients:

4 cups (1 L) blueberries
2 cups (500 mL) raspberries
1 pkg (49 g) light fruit pectin crystals
3 1/2 cups (875 mL) granulated sugar

Your food group may want to try making jam. You can use this recipe, or try a family favourite that you or your leader may have.

Preparation:

- In large Dutch oven, crush blueberries with raspberries. Mix pectin crystals with 1/4 cup (50 mL) of the sugar; stir into berry mixture. Bring to full rolling boil over high heat, stirring constantly with long wooden spoon. Stir in remaining sugar; return to full rolling boil. Boil hard for 1 minute, stirring constantly.
- Remove from heat. Let cool for 5 minutes, stirring to distribute fruit and skimming off any foam.
- Using sterilized metal funnel and 1/2 cup (125 mL) measure, pour into hot sterilized 1 cup (250 mL) canning jars, leaving 1/4 inch (5 mm) headspace. If necessary, wipe rims. Cover with prepared lids; screw on bands fingertip tight.
- Process in boiling water canner for 10 minutes. Transfer jars to rack; let cool, undisturbed, for 24 hours. Check for seal, ensuring that lids curve downward. If not, refrigerate and use within 3 weeks. Store in cool, dry, dark place for up to 1 year.

New Canada's Food Guide

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

Recommended Servings

	9-13 years males & females	14-18 years females	14-18 years males
Vegetables & Fruit	6	7	8
Grain Products	6	6	7
Milk and Alternatives	3 - 4	3 - 4	3 - 4
Meat and Alternatives	1 - 2	2	3

Serving Sizes

Vegetables & Fruit

- 125 mL (1/2 cup) fresh, frozen or canned vegetable or fruit or 100% juice
- 250 mL (1 cup) leafy raw vegetables or salad
- 1 piece of fruit

Grain Products

- 1 slice (35 g) bread or 1/2 bagel (45 g)
- 1/2 pita (35 g) or 1/2 tortilla (35 g)
- 125 mL (1/2 cup) cooked rice, pasta or couscous
- 30 g cold cereal or 175 mL (3/4 cup) hot cereal

Milk and Alternatives

- 250 mL (1 cup) milk or fortified soy beverage
- 175 g (3/4 cup) yogurt
- 50 g (1 1/2 oz) cheese

Meat and Alternatives

- 75 g (2 1/2 oz), 125 mL (1/2 cup) cooked fish, shellfish, poultry or lean meat
- 175 mL (3/4 cup) cooked beans
- 2 eggs
- 30 mL (2Tbsp) peanut butter

Oils & Fats -

- Include a small amount (30 to 45 mL or 2 to 3 Tbsp) of unsaturated fat each day. This includes oil used for cooking, salad dressings, margarine and mayonnaise.
- Use vegetable oils such as canola, olive and soybean.
- Choose soft margarines that are low in saturated and trans fats.
- Limit butter, hard margarine, lard and shortening.

Steps towards better health and a healthy body weight include:

- Enjoy a VARIETY of foods.
- Eat the recommended amount and types of food each day.
- Limit foods and beverages high in calories, fat, sugar and salt (sodium).
- Be active every day.

The benefits of eating well and being active include:

- better overall health . Feeling and looking better
- Lower risk of disease More energy
- A healthy body weight Stronger muscles and bones.

Make Wise Food Choices

Vegetables and Fruit - Eat at least one dark green and one orange vegetable each day. Go for dark green vegetables such as broccoli, romaine lettuce and spinach. Go for orange vegetables such as carrots, sweet potatoes and winter squash. Enjoy vegetables and fruit prepared with little or no added fat, sugar or salt. Have vegetables steamed, baked or stir-fried instead of deep fried. Have vegetables and fruit more often than juice.

Grain Products - Make at least half of your grain products whole grain each day. Eat a variety of whole grains such as barley, brown rice, oats, quinoa and wild rice. Enjoy whole grain brads, oatmeal or whole wheat pasta. Choose grain products that are low in fat, sugar and salt. Compare the Nutrition Facts table on labels to make wise choices. Enjoy the true taste of grain products. When adding sauces or spreads, use small amounts.

Milk and Alternatives - Drink skim, 1% or 2% milk each day. Have 500 mL (2 cups) of milk everyday for adequate vitamin D. Drink fortified soy beverages if you do not drink milk. Select lower fat milk alternatives. Compare the Nutrition Facts table on yogurts or cheeses to make wise choices.

Meat and Alternatives - Have meat alternatives such as beans, lentils and tofu often. Eat at least two Food Guide Servings of fish each week. Choose fish such as char, herring, mackerel, salmon, sardines and trout. Select lean meat and alternatives prepared with little or no added fat or salt. Trim visible fat from meats. Remove skin from poultry. Use cooking methods such as roasting, baking or poaching that require little or no added fat. When selecting luncheon meats, sausages or prepackaged meats, choose those lower in salt and fat.

Community and Agriculture Awareness Projects

COMMUNITY PROJECT

Each year you are encouraged to provide a service to your community as a 4-H member. This introduces you to the responsibilities of citizenship. You must participate in your club's plan for a community project and you should have a role to play. Describe your involvement with your club's community project this year.



Our Community Project was _____

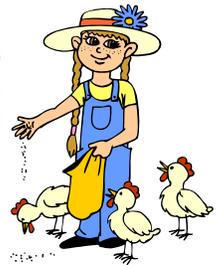
I helped by _____

It was beneficial because _____

I learned _____

AGRICULTURE AWARENESS PROJECT

Agriculture is one of PEI's main industries. You are expected to participate with your club to complete a project (or provide a service) which helps your club or others become aware of the importance of agriculture in our lives. As in the community project, you should actively participate.



Our Agricultural Awareness Project was _____

I helped by _____

It was beneficial because _____

I learned _____