Welcome 4-H Leaders!

Welcome to the “Discovering Pizza” project. This project covers the basics of a pizza - from the crust, to the sauce and cheese, to the toppings. Variations of pizzas and their history are covered too and members will use their pizza making skills to plan a community builder. This guide provides you with project meeting plans (Skill Builders) that include, a skills list, background information, activity suggestions, and ways to know if your members have learned the skills identified. The 4-H Foods Series was developed collaboratively with the Canadian 4-H Council National Resource Network (2008) and the Manitoba ‘Kids in the Kitchen’ resource (2009). For information on these resources, see the back page for contact information.

The Leader Guide is written with the expectation that the project leader(s) will have a working knowledge about food. If not, you may need to do some pre-work / research on the activities, or recruit assistance for certain sections.

Be sure to try out activities, demonstrations or hands on work ahead of time to ensure you have an understanding of each Skill Builder - this also allows for any adjustments should an activity not work for you or if any equipment or supplies are unavailable.

The 3D’s of Learning - Each Skill Builder has three sections of learning called “Dream it!”, “Do it!” and “Dig it!”. Below is a description of each.

Dream it! Plan for Success - this gives members a chance to help plan their activities. A skills checklist, background information, important words, and activating questions are included in the Member Manual so they will be able to think about the topic and activity and decide how they will approach it. The Leader Guide contains in depth background information on the topics, material lists, suggestions, and time requirements for activities. Activating, acquiring, and applying questions are incorporated to engage members’ thinking through each step of the learning process.

Do it! Hands on learning - this is where members are engaged in the activity planned / discussed in the Dream it! Section. Here members are doing the activities and leaders are observing, recording, and providing feedback on how well they are doing. Allow as much individual practice as required; you are assessing the progress and understanding of individual members.

Dig it! What did you learn? - this simply means that members and leaders need to ‘dig into their learning’. For the learning cycle to be completed, both need to reflect on how things went and how well they did. For members, this involves self-assessment, giving feedback, creating meaning from their experiences, and thinking about what they would do differently next time. Once this is done they will be in a good position to apply what they have learned to the next experience.

The sequence of project meetings and specific skill building outcomes for members in this project are on the chart on the following page.
**What Skills Will The Member Learn?**

Each section, Skill Builder (or Builder) in this project has activities that will help your project group learn to do by doing while learning new skills and having fun!

**To complete this project, members must:**
- Complete the activities in each Builder OR a similar activity that focuses on the same skills as you and your members may plan other activities
- Plan and complete the Showcase Challenge
- Complete the Portfolio Page
- Participate in your club’s Achievement (See the inside back cover for more information about 4-H Achievements).

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<tr>
<th>Members will be able to...</th>
<th>Activities</th>
<th>Page</th>
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<td><strong>Skill Builder 1</strong></td>
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<td></td>
<td>• Describe the food groups in a pizza</td>
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<td>• Make pizza dough from scratch</td>
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<td>Frozen Pizza</td>
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<td>Bread in a Bag</td>
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<td><strong>Skill Builder 2</strong></td>
<td>Pizza Styles</td>
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<td></td>
<td>• Explain the history and varieties of pizza</td>
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<td>• Know how to flavour using herbs</td>
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<td>• Create a new style of pizza</td>
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<td>Theme &amp; Variations</td>
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<td>Around the World</td>
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<td>Personal Pan Pizza</td>
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<td>Herb Garden</td>
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<td><strong>Skill Builder 3</strong></td>
<td>Crust</td>
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<td>• Make a pizza from scratch</td>
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<td>• Identify healthy choices for dough recipes</td>
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<td>Dough Pro</td>
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<td>Recipe See</td>
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<td><strong>Skill Builder 4</strong></td>
<td>Spice of Life</td>
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<td></td>
<td>• Make nutritious choices for pizzas</td>
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<td></td>
<td>Herbed Crust</td>
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<td></td>
<td>• Fat Finder</td>
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<td>• Spice it Up</td>
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<td>• Company Comparison</td>
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<td><strong>Skill Builder 5</strong></td>
<td>Putting It All Together</td>
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<td>• Design a complete pizza meal</td>
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<td>• Create a vegetarian pizza option</td>
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<td>Vegetarian</td>
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<td>The Big Dipper</td>
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<td>Whole Grain Products</td>
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<td><strong>Skill Builder 6</strong></td>
<td>Charity Pie</td>
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<td></td>
<td>• Understand the route of pizza to the plate</td>
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<td></td>
<td>• Use pizza as community building</td>
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<td>My Hands to Larger Service</td>
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<td>Pizza Path</td>
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<td>Thank a Farmer</td>
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When you successfully complete your builders, you will showcase what you have learned.

| Showcase & Portfolio | • Explain success, using the skills listed above |
|                      | • Showcase Challenge |
|                      | • My Portfolio Page |
|                      | 50 |

When you successfully complete your builders, you will showcase what you have learned.
Showcase Challenge and My Portfolio Page

At the end of the members’ section are the “Showcase Challenge” and “My Portfolio Page”. The Showcase Challenge page gets members to think about their accomplishments and explain or demonstrate how they were successful. There are a number of suggestions along with planning information to help them decide how they will best “showcase” their learning to friends, family, community members and/or fellow 4-H members.

Record keeping is an important part of every 4-H project. “My Portfolio Page” is a graphic organizer used to keep track of members’ 4-H experiences. As each member learns skills, the evidence of learning (through participation and completion of the various activities) is recorded on the page. When the Portfolio Page has been completed and confirmed by the leader, then it becomes a record of the member’s completion of the project and participation in other 4-H activities beyond the project.

4-H leader assessment of members will happen throughout the project as you assess the progress and understanding of individual members. You need to observe the members doing the skill and record what you see and hear. Your feedback should be positive and descriptive (not just “well done”). Share that feedback with members frequently so they can put your suggestions into action. How you choose to observe and record is up to you. Some methods are to create checklists, videos and notes while encouraging discussions, peer observations and questions. Recognize that members may improve over the course of a builder and that records should be updated to reflect when they demonstrated their best learning. You are discussing how well members are meeting the skills checklists that are at the beginning of each of the project books, in each Builder and on the Portfolio Page.

Projects promote technical, communication, meeting management, and leadership skills, as well as community involvement and real-world experiences. In addition to the specific skills members are to learn in each builder, the following general learning goals for members are important:
- Following instructions
- Working with others
- Using supplies safely
- Using the key words
- Improving with practice
- Respecting timelines

4-H Project Series Skill Development Levels

Each project topic series contains three levels of skill development: explore, discover, and master.

*Explore* - each project series has one project outlining the fundamentals. All members will be expected to complete the Explore level project before moving into the Discover level of projects. It introduces the basic skills and terms needed by members for subsequent projects in that series.

*Discover* - each project series has several project options and members are encouraged to take as many as they would like. At this level, members practice topic specific techniques and gain theme related skills through specialized builders.

*Master* - multiple project options encourage members to specialize in a topic. They may branch out and take advantage of community options such as cooking for a canteen or participating in a food drive. The Leader’s role is look for opportunities for their members to have more authentic experiences by: working with other mentors, partnering with outside agencies, participating in exchanges, entering competitions, etc. Projects at this level may include the “Partner-a-Project” whereby pre-approved courses will allow members to advance their skills, while applying their learning to the 4-H program.
4-H LEADER TIPS FOR SUCCESS!

♦ To complete, members must complete all the activities referred to on the “Project Completion Requirements” page OR alternate idea for an activity that would teach the same skill or an age appropriate variation. If activity substitutions are used, be sure to have the member make note in their manuals.

♦ Dependent on time available at each meeting, group size and abilities of group members, you may wish to break the Builders into more than one project meeting.

♦ The internet has lots of interesting websites and educational activities. You may choose to use a search engine to explore the options available. We do not endorse any website or the safety or functionality of any products they may sell. Information/products will be used at your own discretion.

♦ Safety is a number one priority. Care has been taken to create safe, age appropriate activities throughout this manual. As leaders, it is important for you to emphasize safety rules and manage or adapt activities in a manner that will safely match your members abilities. Ensure members have a good understanding of safe working and handling practices when using tools, that they use the appropriate safety equipment when necessary, and that appropriate supervision is provided. A quality experience needs to be a safe experience.

♦ The multiple intelligences theory teaches us that people learn in at least 8 different ways. All individuals will be stronger in some ways of “intelligences” and weaker in others. It follows that the more ways we teach, the more members we will reach. Throughout this project, you will find a mix of writing, reading, hands-on work, artwork, self-evaluation, group discussion and performance. Teaching projects using a broad blend will help increase the learning potential of all members.

♦ Projects are designed to teach many skills. However, the 4-H member is always more important than the subject matter. Stress cooperation in the activities where possible to develop teamwork and cooperation skills – valuable skills that will assist them in a number of settings. Ensure the work is completed in a manner that members feel good about themselves and their efforts. This can be done by assigning appropriate tasks or roles based on member’s individual abilities. Modelling and expecting supportive behaviour - that is, no “put-downs” – amongst members, or by other adults, also contributes to a positive experience.

♦ There will be opportunity for experimentation and applying skills that members have learnt throughout this project. Experimenting can be frustrating, but learning through trial and error is an important life skill. Explain to members that it is alright to either go onto the next builder or do the builder again if they need the practice. Help the members work through their challenges until they are satisfied with the quality of their work. Creating inventive 4-H members will be very rewarding.

♦ Celebrating success is an important but sometimes overlooked part of our lives. We encourage you to use the final section to empower the members by celebrating all they have learned in a fun manner. Anything that you do to add to the spirit of fun and the sense of accomplishment of each member will likely be remembered as the high-light of their 4-H year.

Have fun and thanks for your belief in young people!
Before We Get Started...
Food is an integral part of our lifestyle. We eat whether we're hungry or not, tired, bored, happy, sad, sick, or healthy. Food is consumed sitting, standing, or lying down. We eat alone, in groups, inside, outside, anytime of the day or night.

Today, we forage in supermarkets for food with the world as our marketplace. We demand freshness, quality, quantity, convenience, and healthy safe food from farmers and food processors. With all the choices in the supermarket it is more important than ever to learn to prepare and cook simple, inexpensive, tasty healthy meals and snacks.

We are constantly being challenged by the media to purchase instant, high fat, high sugar, low nutrition fast food. Preparing your own food isn't just better for your body, it's easier on your budget and it provides you with the opportunity to socialize by sharing food with friends and family.

And just like learning to ride a bike or speak another language, learning to cook is more effective if we can start early in life and have fun at it!

Guidelines for Food Safety
Because we eat most of our food at home we learn most of our food preparation habits at home including the guidelines for food storage, meal preparation and cooking food. If improper food safety techniques are learned and practised, people can get sick. As a leader, it is important to teach the proper methods of keeping food safe before, after and during meal preparation to young people to ensure they are kept safe from potentially dangerous food borne illnesses. Smart food safety begins at home!

Food safety at the grocery store!
Thinking about food safety begins at the grocery store. It is important – to keep cold food cold and hot food hot while transporting it to your house. Arrange your shopping trip to get food home quickly and into the refrigerator. For transporting food use: coolers, ice packs and thermos containers. Don’t allow raw meat juices to come in contact with other foods, raw or cooked.

What about The Danger Zone?
The most important factor for safe handling of foods and preventing food borne illnesses are the result of poor temperature control. Following the simple rule “Keep hot foods hot and cold foods cold” and out of The Danger Zone (4°C to 60°C or 40°F to 140°F) can prevent many food borne illnesses. Foods that could give you food poisoning should be kept below 4 degrees Celsius or, for hot food, above 60 degrees Celsius (140°F). Low temperatures prevent food poisoning bacteria, which may be present in the food, from multiplying to dangerous levels. High temperatures will kill bacteria and viruses. Because bacteria can grow to unsafe levels between 4 degrees Celsius and 60 degrees Celsius (40°F -140°F) we call it the Temperature Danger Zone. When you get foods home refrigerate and freeze foods immediately. Keep foods in the refrigerator at the temperature of 4°C (40°F) or below. Don’t overload the refrigerator; allow space for the air to circulate. If necessary, remove foods such as soft drinks to make room for potentially hazardous foods.

Is it safe to eat foods, which have been in the Danger Zone?
Less than 2 hours - Refrigerate immediately
Between 2 hours and 4 hours - Use immediately
More than 4 hours - Throw out
When in doubt throw out!!!!

What are the four simple rules for food safety?
Clean - Clean hands, utensils and surfaces often to keep everything clean and free bacteria
Separate - Keeps foods separate to avoid cross contamination
Cook - Cook foods to proper temperatures
Chill - Refrigerate and freeze perishable foods promptly
Tips for Food Safety

Attention to food safety guidelines can add to the educational benefits of the 4-H Foods Project while aiding in the prevention of food borne illness. Hand-washing is one of the best ways to prevent the spread of food borne illness.

- Have the members wash their hands for at least 20 seconds with soap and warm water before, during and after food preparation.
- Members with long hair should keep it tied back.
- Members with wounds or cuts should be covered properly – rubber gloves food preparation.
- Tasting is an important part of the cooking experience, but can potentially spread germs.
- Have members use spoons, wooden sticks or tongue depressors for tasting but stress that they should only be use once.
- Do not let the members use their fingers.
- Practice safe food handling: cook, chill, separate and clean all the time.
- Talk about the importance of not coughing or sneezing near food.
- Teach members to cough or sneeze into their sleeves or into a tissue followed by proper hand-washing before returning to the food.

Guidelines for Kitchen Safety

- Demonstrate safe cutting techniques (peel away from your hand, keep fingers away from sharp blades, etc) and proper handling of other potentially dangerous blades
- Practice safe handling techniques of all utensils and appliances (hot stoves, blenders, knives, etc)
- Talk about the importance of preventing choking, by chewing foods well, sitting straight and not talking with food in their mouth
- Have a First Aid kit available at all times

Rules for the Kitchen

- Establish a list of rules for staying safe in the kitchen. Some examples might be:
  - No running or horseplay in the kitchen
  - Wash hands
  - Keep fingers out of the food
  - Read recipes all the way through before starting
  - Be patient
- Have the members agree to and take ownership of the rules by adding their own rules to the list as appropriate.
- Make a poster with the rules on it so the members can read them at all times.
- Review the rules once the members arrive to each session – have members take turns reading the rules out loud.

Tips for preparing for recipes:

- Purchase non-perishable ingredients in bulk at the beginning of your 4-H project.
- Purchase perishable items in quantities as listed in activities/recipes before each cooking session.
- Review the recipe with the members and introduce any new cooking terms, foods and utensils they will be using. Give each member and group a copy of the recipe, if using one other than printed in the manuals.
- Have the members or yourself assemble the equipment and ingredients required on trays or on the table.

Feel free to use your own recipes if you think they are appropriate. Also contact commodity groups for recipes using their food products; Flax Council of Canada, Pulse Canada, Manitoba Pork Council, Canola Council or Canada, etc.
FOOD ALLERGIES:

What is a food allergy?
A food allergy is an immune system response to a food ingredient that the body mistakenly believes to be harmful. Once the immune system decides that a particular food is harmful, it creates antibodies to it. The next time the individual eats that food, the immune system releases massive amounts of chemicals, including histamine, in order to protect the body. These chemicals trigger different allergic reactions.

What are common signs of an allergic reaction?
- Tingling sensation in the mouth
- Swelling of the tongue and throat
- Difficulty breathing
- Hives (small or large red itchy welts)
- Vomiting and diarrhea
- Abdominal cramps


What is anaphylaxis?
Anaphylaxis is a severe reaction to a food that has rapid onset and may cause death without emergency treatment.
Common signs of anaphylaxis
- Sudden development of hives
- Swelling of mouth and throat
- Runny eyes and nose
- Dizziness
- Drop in blood pressure

Anaphylaxis is an emergency and must be treated immediately. Each member should have a specific emergency plan with the doses of medication to be given, and the telephone numbers of the ambulance and medical services to be called. Leaders should be trained to recognize symptoms and to administer an injection of the epinephrine and immediately call for an emergency service for transport to the nearest emergency facility.

What is the best way to avoid food allergy reactions?
Strict avoidance of the allergy causing food ingredient is the only way to avoid a reaction.
Read ingredient labels for all foods is the key to maintaining control.
If a product does not contain an ingredient list, allergic individuals should not eat the food.
If unfamiliar with the terms or ingredients contact the food manufactures.

What are the most common food allergens?
- Peanuts
- Eggs
- Milk
- Tree nuts
- Wheat
- Sesame seeds
- Seafood
- Sulphites

Have members identify and clarify any allergies they may have. If serious food allergies are reported, ensure that these foods are avoided at all meetings. Make certain that all members, leaders, and parent helpers know the treatment for allergic reactions.
**What is food intolerance?**

Many people think the terms “food allergy” and “food intolerance” mean the same thing; however, they do not.

Food intolerance or food sensitivities occur when the body cannot properly digest a certain component of the food – often because there is not enough of a particular digestive enzyme. Common types of food intolerances or sensitivities include lactose (the sugar in milk), gluten (wheat protein), sulphites (used in food preservatives), monosodium glutamate and artificial food dyes.

**What are symptoms of food intolerance?**

- Gas
- Bloating
- Abdominal pains/cramps

- Nausea
- Diarrhea
- Slight itching or redness

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<thead>
<tr>
<th>Member Names</th>
<th>Allergy/Intolerance</th>
<th>Symptoms</th>
<th>Treatment</th>
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Skill Builder 1: Pizza Please!

Skills Checklist

- Describe the food groups in a pizza
- Make pizza dough from scratch

Dream it!

Background for Leaders

Pizza (pronounced /pi : tse/ in Italian: ['pit.tsa]) is an oven-baked, flat, generally round bread that is usually covered with tomatoes or a tomato-based sauce and often mozzarella cheese, with other toppings added according to region, culture or personal preference. While originating as a part of Neapolitan cuisine, the dish has become popular in many different parts of the world. A shop or restaurant where pizzas are made and sold is called a "pizzeria". The phrase "pizza parlor" is also used in the United States. The term pizza pie is dialectal, and pie is used for simplicity in some contexts, such as among pizzeria staff.

Pizza is a baked pie of Italian origin consisting of a shallow bread-like crust covered with seasoned tomato sauce, cheese, and often other toppings such as sausage or olive. The word pizza is believed to be from an Old Italian word meaning "a point," which in turn became the Italian word "pizzicare," which means "to pinch" or "pluck."

Pizza could have been invented by the Phoenicians, the Greeks, Romans, or anyone who learned the secret of mixing flour with water and heating it on a hot stone.

Pizza has been a basic part of the Italian diet since the Stone Age. This earliest form of pizza was a crude bread that was baked beneath the stones of the fire. After cooking, it was seasoned with a variety of different toppings and used instead of plates and utensils to sop up broth or gravies. It is said that the idea of using bread as a plate came from the Greeks who ate flat round bread (plankuntos) baked with an assortment of toppings. It was eaten by the working man and his family because it was a thrifty and convenient food.

There are four main components of a basic pizza pie: crust, sauce, cheese, and toppings. These four basic pizza components should be in balance; contrary to popular belief, too much cheese does not make a better pizza. Besides good quality cheese in the right proportion, a good crust is also crucial. Imperfections with the sauce or cheese will be overlooked if the crust is exceptional.

The pizza market has exploded in the food industry with hundreds of combinations to meet every desired taste! It can be a fast or not so fast food with many options:

- Order and take out/delivery
- Buy it by the slice
- Order and eat at a restaurant
- Buy frozen and bake at home
- Buy a combination of ingredients to prepare and put together at home
- Buy all ingredients and prepare from scratch at home
**Important Words**

- Help members define the following words and listen for them using these words in their discussions. To increase the members’ understanding, provide a synonym members know or personalized examples.

<table>
<thead>
<tr>
<th>Word</th>
<th>Definition</th>
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<tbody>
<tr>
<td>Yeast</td>
<td>Any unicellular fungi of the genus <em>Saccharomyces</em>, capable of fermenting carbohydrates</td>
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<tr>
<td>Kneading</td>
<td>To work into a uniform mixture by pressing, folding, and stretching.</td>
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<tr>
<td>Proofing</td>
<td>Yeast is proofed in warm water and a small amount of sugar to determine whether it is active before using. Proofing also refers to a stage in the rising of the dough. The dough is shaped into its final form and left to sit for a few minutes for its final rise, which is known as proofing.</td>
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<tr>
<td>Dough</td>
<td>Flour or meal combined with water or milk in a mass for baking into bread, cake, etc.</td>
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<tr>
<td>Crust</td>
<td>The baked dough base of a pizza</td>
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**Thinking Ahead**

- What will you discuss with members? Gather observations and think of examples that will help support your discussion.

**Preparing for Success**

- Linking back to the Skills Checklist, help members identify how they will know they have been successful in learning from this builder. Discuss what success in these activities might look like, sound like, or feel like.

**Activating Strategies**

- Discuss the parts of a pizza and have members sort them into the correct food groups. A flip chart can be used to brainstorm. Websites to use are 4hgarden.msu.edu/kidstour/kids/pizza/pizza.html or gov.mb.ca/agriculture/food/pizzapizzaz.html Discuss what the members think makes a good pizza.

- One answer to the bubbles in the member’s manual might be:

**Meats & Alternatives**
- Hamburger
- Fish
- Tofu
- Anchovies
- Eggs
- Sardines
- Peanuts
- Pepperoni
- Ham
- Chicken
- Turkey
- Bacon

**Fruits & Vegetables**
- Tomatoes
- Potatoes
- Garlic
- Onions
- Broccoli
- Carrots
- Cauliflower
- Peppers
- Pineapple
- Pickles
- Yams
- Peas
- Corn
- Apples
- Cherry
- Herbs

**Dairy**
- Cheese: Mozzarella, Feta, Cheddar, Parmesan, Brie, Gouda, Cottage Cheese, Sour Cream

**Grains**
- Wheat
- Cornmeal
- Rye
- Bagel
- Tortilla
- Pita
- Matzo
**Do it!**

**Frozen Pizza**

**Time Required:** 40 minutes

**Equipment/Supplies:**
- 2 different frozen pizzas with nutrition information
- Oven

**Instructions**

Choose a couple pizzas as a group to bake and analyze. You may wish to have several options on hand if this is the first meeting and you aren’t sure about allergies/intolerances. Read the directions on the box and pop them in the oven. While the pizzas are cooking, use the boxes to remind members about reading nutrition labels. There is a chart for members to fill in in their book with the names of the pizzas, cost, serving size, calories, fat content, type of crust (deep dish, thin, …), toppings, and how they think it tasted. The taste can be rated by each member differently between 1 (yuck) and 10 (mmm, best pizza ever). Members should circle the pizza they would buy again in the future.

**Bread in a Bag**

**Time Required:** 1.5 hours

**Equipment/Supplies:** 1 set for two members
- 1 extra large zipper lock plastic bag
- 1 tbsp (15 ml) canola oil
- 2 tsp (10mL) salt
- 2 tbsp (30 ml) sugar
- 1 package yeast
- 4 cups (1L) all purpose flour
- Loaf pan
- Warm water
- Measuring cups/spoons

**Instructions:**

Place the yeast, warm water and sugar in the zipper lock plastic bag - let proof for 5 minutes.
If using instant yeast add ½ cup (125 mL) all purpose flour, 1 package instant yeast, ½ cup (125 mL) warm water and the 2 tbsp (30 mL) of sugar - this does not need to proof
Close bag and knead it with fingers until the ingredients are completely blended.
Leave bag closed with contents on the counter and let dough rest for 10 minutes.
After 10 minutes add:
- 2 cups (500 mL) flour
- ¾ cup (175 mL) warm water
- 1 tbsp (15 mL) canola oil
- 2 tsp(10mL) salt
Mix well.
Add 1.5 (375 mL) cups of flour, close the bag and knead it.
Let the dough sit for another 5 minutes - it should double in size.
Open the bag and put the dough onto a clean floured surface.
Form the dough into loaves and put into a greased loaf pan.
Allow 30 minutes to rise.
Bake 20-25 minutes at 350°F (180 °C) oven.
Balloon Blow-Up

Activity Adapted from: Fight Bac! Education Program

Time Required: 1.5 hours

Equipment/Supplies
- Watch
- 2 balloons
- 2 small plastic pop bottles
- Liquid measuring cup
- 3 glass containers large enough to hold at least 3 cups (750 mL) of liquid and the pop bottle
- Mixing spoon
- 1 package of dry yeast
- 50mL of sugar
- Food thermometer
- 2 cups (500 mL) of room temperature water (21°C/70°F)
- 2 cups (500 mL) of warm water (43°C/109°F to 49°C/120°F)
- 2 cups (500 mL) of ice water (below 4°C/40°F)

Instructions
- If you have a large group you may want to assign volunteers for each step or have small groups each completing the experiment.
- Have members fill in their predictions. An example might be: I predict that the ice water will make the balloon bigger than the warm water will. This is not the result but anything is correct in a prediction.
- Have the members fill a container with 2 cups (500 mL) of room temperature water (make sure to use the food thermometer to check).
- Have the members dissolve the sugar and yeast into the room temperature water. Mix well.
- Have the members pour half of the solution into each of the pop bottles
- Quickly stretch a balloon over the top of each of the pop bottles.
- Place 1 bottle into a container – add 2 cups of warm water in the bottom of the container – make sure it covers the yeast solution.
- Measure the temperature with the thermometer.
- Place 1 bottle into a container – add 2 cups of ice cold water in the bottom of the container – make sure it covers the yeast solution.
- Measure the temperature with the thermometer.
- Have the members observe the balloons at 5, 10 and 30 minutes. They may wish to measure the circumference of the balloon with a flexible ruler.
- Record their findings and observations. Discuss findings with the group.

Dig it!

Have members copy down toppings they like, don’t like, and want to try. As a group decide who should bring what toppings for the next meeting. Let the members know that when they go to the store and purchase these groceries they will need to remember the price to put in their book. If the members get the product from home, have them estimate what it would cost in the grocery store.

What’s next?

The history of pizza is very rich. The next builder will help members learn about the different variations on pizza and even create their own. They will use the toppings they have brought and premade crusts.
Skill Builder 1: Pizza Please!

Andy Says....
Your choice of pizza can help meet your daily requirements based on Canada's Food Guide. How is crust made? What gives it that fluffy texture? Yes! This builder looks at the nutrition in pizza, how yeast works, and options for quick meals—frozen pizzas.

Dream it!

What is a pizza made of? Put as many things as you can think of into the correct food groups.

Meats & Alternatives

Dairy

Fruits & Vegetables

Grains

Do it!

Andy's Agriculture Facts...
In 1885, Canadians created their own type of wheat which grew well in our harsh climate and ripened in a shorter time. That variety is Marquis.

Frozen Pizza

Frozen pizza has exploded in the food industry with hundreds of combinations to meet every taste. Buying frozen pizza to bake at home is popular because it's quick and easy to prepare—open the package and pop it in the oven. As a group, buy two different brands of frozen pizza and cook them.

<table>
<thead>
<tr>
<th>Frozen Pizza Comparison</th>
<th>#1:</th>
<th>#2:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Price</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Serving Size</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Calories/Serving</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Fat/Serving</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Type of Crust</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Taste (1 - 10 with 10 the best)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
In the Member Manual

**Bread in a Bag**

Activity adapted from *Soup Sisters 4 in the Classroom*

**What you will need:** extra large zipper closure plastic bag, canola oil, salt, sugar, yeast, all purpose flour, loaf pan, warm water, measuring cups/spoons

1. Place the yeast, warm water and sugar in the Ziploc bag - let proof for 5 minutes. If using instant yeast add 1/2 cup (125 mL) all purpose flour. 1 package instant yeast, 1/4 cup (125 mL) warm water and the 2 tbsp (30 mL) of sugar - this does not need to proof.
2. Close bag and knead it with fingers until the ingredients are completely blended.
3. Leave bag closed with contents on the counter and let dough rest for 10 minutes.
4. After 10 minutes add:
   - 1 cup (500 mL) flour
   - 1 tbsp (15 mL) canola oil
   - 1/4 cup (175 mL) warm water
   - 2 tbsp (30 mL) salt
5. Mix well.
6. Add 1 1/2 cups (375 mL) of flour; close the bag and knead it.
7. Let the dough sit for another 5 minutes - it should double in size.
8. Open the bag and put the dough on a clean floured surface.
9. Form the dough into loaves and put into a greased loaf pan.
10. Allow 30 minutes to rise.
11. Bake 20-25 minutes at 350°F (180°C) oven and enjoy.

I Like This  I Don't Like This  Next Time, I Will Change...

**Balloons Blow-up**

Fill in the prediction table. Dissolve the sugar and yeast into the 2 cups of room temperature water. Pour half of the solution into each of the pop bottles. Quickly stretch a balloon over the top of each bottle. Place each bottle into a large glass container. Pour the ice water into one container and the warm water into the other. Record your balloon observations in the results table.

**Prediction Table**

What you will need: 2 balloons, 2 small plastic pop bottles, funnel, 2 large glass containers, liquid measuring cup, mixing spoon, 1 package dry yeast, 50 mL sugar, food thermometer, 2 cups each of room temperature, warm, and ice water, watch

<table>
<thead>
<tr>
<th>Andy Says....</th>
<th>Predict that the warm / room temperature / cold (circle one) water will make the balloon larger than the warm / room temperature / cold (circle one) water will.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Warm water is 43°C - 49°C. Room temperature water is 21°C. Ice water is below 4°C.</td>
<td></td>
</tr>
</tbody>
</table>

**Results Table**

<table>
<thead>
<tr>
<th>Time</th>
<th>Ice Water</th>
<th>Warm Water</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 minutes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10 minutes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>30 minutes</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

I Andy Adapted from Sight and Sound High School

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**More Eats!**

Want to start making some pizza? Try Rolf’s Pizza Making Game. Use a search engine to find it:

www.eggem.com/game/rolf’s-Pizza-Making-Game.html

**Dig it!**

Toppings that I like on pizza and the food groups they belong to are:

- Yeast is an important ingredient in most crusts because it...

**Andy’s Fun Facts...**

Pepperoni is the most popular topping in North America. • Anchovies are the least popular. • Most pizzas are ordered in during the weather forecast and women are better tippers than men! • 50% of all pizzas are ordered in on Friday and Saturday.

**What’s next?**

The next builder explores the history of pizza. There are many versions of pizza and you will get to invent your own and make it using premade pizza crusts (either you can make ahead or purchase a ready made) and your own choice of toppings!
Skill Builder 2: Pizza Styles

Skills Checklist

- Explain the history and varieties of pizza
- Know how to flavour using herbs
- Create a new style of pizza

Dream it!

Background for Leaders

The bread base of the pizza (called the "crust" in the United States and Canada) may vary widely according to style: thin as in hand-tossed pizza or Roman pizza, thick as in pan pizza, or very thick as in Chicago-style pizza. It is traditionally plain, but may also be seasoned with butter, garlic, or herbs, or stuffed with cheese.

In restaurants, pizza can be baked in a gas oven with stone bricks above the heat source, an electric deck oven, a conveyor belt oven or, in the case of more expensive restaurants, a wood- or coal-fired brick oven. On deck ovens, the pizza can be slid into the oven on a long paddle called a peel and baked directly on the hot bricks or baked on a screen (a round metal grate, typically aluminum). When making pizza at home, it can be baked on a pizza stone in a regular oven to imitate the effect of a brick oven. Another option is grilled pizza, in which the crust is baked directly on a barbecue grill. Greek pizza, like Chicago-style pizza, is baked in a pan rather than directly on the bricks of the pizza oven.

There are many variations on the bread used for crust. In some countries, creations such as French bread pizza, pita pizza, bagel pizza, matzo pizza, and tortilla pizza are popular.

Important Words

- Help members define the following words and look for members using this vocabulary in their discussions. Have members describe the words in terms of their experiences to solidify.

<table>
<thead>
<tr>
<th>Deep Dish</th>
<th>A thick pizza crust that holds a lot of toppings. One slice is a meal.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calzone</td>
<td>A turnover made of pizza dough, either baked or fried</td>
</tr>
<tr>
<td>Neapolitan</td>
<td>Authentic Italian pizza made of Italian wheat flour, natural Neapolitan yeast or brewer’s yeast, salt and water</td>
</tr>
<tr>
<td>Marinara</td>
<td>A variation of Neapolitan pizza: tomato, garlic, oregano and extra virgin olive oil</td>
</tr>
<tr>
<td>Margherita</td>
<td>A variation of Neapolitan pizza: tomato, sliced mozzarella, basil and extra virgin olive oil</td>
</tr>
<tr>
<td>Lazio</td>
<td>Roman style pizza (instead of being from Naples)</td>
</tr>
</tbody>
</table>

Age Considerations

- Ages 10-12

Thinking Ahead

- What will you discuss with members? Gather observations and think of examples that will help support your discussion.
Preparing for Success

- Linking back to the Skills Checklist, help members identify how they will know they have been successful in learning from this builder. Discuss what success in these activities might look like, sound like, or feel like.

Activating Strategies

- Discuss different types of pizza that the members have had. Talk about what makes them unique and whether or not they liked them. Have them create a word web. Here is one example.

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**Do it!**

**Theme & Variations**

**Time Required:** 15 minutes

**Information**

Traditional Crust Pizza - The crust is not too thick and not too thin. Usually it is created by rolling the dough into a round circle then topping it with sauce and cheese.

Deep Dish Pizza - A think crust and dense toppings usually characterize deep-dish pizza, also known as pan pizza. Baking time tends to take longer however one slice might make a meal for many people.

New York Style Pizza - Pizzas from neighborhood pizza parlors in New York tend to be much thinner than its Chicago cousin. The thin crust allows for faster cooking but less dense toppings. The crust is also usually prepared by tossing it up in the air and twirling it.

Calzone - This is basically a stuffed pizza crust. The uncooked crust is filled with traditional topping then folded and baked. An easy to manage snack, these have gained in popularity across the country in the last few years.

Pizza Bread - Also known as French bread pizza, it is perhaps one of the easiest to make. The French bread loaf is usually sliced down the center into two halved. The sauce, cheese and topping are then placed on the flat, sliced surface.

Bagel Pizza - Made much like the French bread pizza but with bagel slices instead.
Instructions

Have members match the descriptions on the left with the names on the right.

**Answers:**
- Thick crust, dense toppings
- Thin crust prepared by twirling
- No tomato sauce
- Folded over pizza
- Crust grilled after cooking
- Uses French Bread Loaf for crust
- Uses a bagel for crust

**Bagel Pizza**
**Calzone**
**Deep Dish**
**Grilled Pizza**
**New York Style**
**Pizza Bread**
**White Pizza**

**Around the World** (optional) Discussion now or while eating mini pizzas.

**Time Required:** 15 minutes

**Equipment/Supplies**
- Pen or pencil
- World map and pizza stickies

**Instructions**

Have members place stickies on the map as you discuss the different types of pizza. Rome, Naples, Sicily, Greece, Australia, New York, Chicago, Hawaii, and California might be on your list to highlight. One idea might be to have members pick a type of pizza to research and then each of the other members about it. Members should describe 5 types of pizzas and point arrows to their namesake place.

**Information**

**Neapolitan pizza (pizza napoletana).** Authentic Neapolitan pizzas are made with local ingredients like San Marzano tomatoes, which grow on the volcanic plains to the south of Mount Vesuvius, and Mozzarella di Bufala Campana, made with the milk from water buffalo raised in the marshlands of Campania and Lazio in a semi-wild state (this mozzarella is protected with its own European protected designation of origin). The dough must be kneaded by hand or with a low-speed mixer. After the rising process, the dough must be formed by hand without the help of a rolling pin or other mechanical device, and may be no more than 3 mm (1/8 in) thick. The pizza must be baked for 60-90 seconds in a 485 °C (905 °F) stone oven with an oak-wood fire. When cooked, it should be crispy, tender and fragrant. Neapolitan pizza has been given the status of a “guaranteed traditional specialty” in Italy. There are three official variants: **pizza marinara**, which is made with tomato, garlic, oregano and extra virgin olive oil (although most Neapolitan pizzerias also add basil to the marinara), pizza **Margherita**, made with tomato, sliced mozzarella, basil and extra virgin olive oil, and **pizza Margherita extra** made with tomato, buffalo mozzarella from Campania in fillets, basil and extra virgin olive oil.
**Lazio style:** Pizza in Lazio (Rome), as well as in many other parts of Italy is available in two different styles: (1) Take-away shops sell pizza rustica or pizza a taglio. This pizza is cooked in long, rectangular baking pans and relatively thick (1-2 cm). The crust is similar to that of an English muffin, and the pizza is often cooked in an electric oven. It is usually cut with scissors or a knife and sold by weight. (2) In pizza restaurants (pizzerias), pizza is served in a dish in its traditional round shape. It has a thin crust similar to the Neapolitan style. It is usually cooked in a wood-fired oven, giving the pizza its unique flavor and texture. In Rome, a *pizza napoletana* is topped with tomato, mozzarella, anchovies and oil (thus, what in Naples is called *pizza romana*, in Rome is called *pizza napoletana*).

**Sicilian-style pizza** has its toppings baked directly into the crust. An authentic recipe uses neither cheese nor anchovies. "Sicilian" pizza in the United States is typically a different variety of product made with a thick crust characterized by a rectangular shape and topped with tomato sauce and cheese (and optional toppings). Pizza Hut’s "Sicilian Pizza", introduced in 1994, is not an authentic example of the style as only garlic, basil, and oregano are mixed into the crust;

**White pizza** (*pizza bianca*) uses no tomato sauce, often substituting pesto or dairy products such as sour cream. Most commonly, especially on the east coast of the United States, the toppings consist only of mozzarella and ricotta cheese drizzled with olive oil and spices like fresh basil and garlic. In Rome, the term *pizza bianca* refers to a type of bread topped with olive oil, salt and, occasionally, rosemary leaves. It’s also a Roman style to top the white pizza with figs, the result called *pizza e fichi* (*pizza with figs*);

**Ripieno** or **calzone** is a pizza in the form of a half moon, sometimes filled with ricotta, salami and mozzarella; it can be either fried or oven baked.

**Non-Italian types of pizza**

In the 20th century, pizza became an international food and now the toppings vary considerably in accordance with local tastes. These pizzas consist of the same basic design but include an exceptionally diverse choice of ingredients.

North American pizza often has vegetable oil or shortening (often, but not always, olive oil mixed into the dough; this is not as common in Italian recipes. This can range from a small amount in relatively lean doughs, such as New York style, to a very large amount in some recipes for Chicago-style deep-dish dough. In addition, thin-crust pizzas are often made with a very high-gluten flour (often 13-14% protein content) of the type also used to make bagels; this type of flour allows the dough to be stretched rather thinly without tearing, similarly to strudel or phyllo dough.

Various toppings may be added, most typically:

- Tomato sauce usually replaces the tomato mixture used on Italian-style pizzas, and is usually a fairly heavily seasoned, smooth sauce with a low water content. On some variants without tomatoes, pesto, alfredo and barbecue sauce are also used.
- Cheese, usually mozzarella but also provolone, cheddar, parmesan or a blend of other cheeses.
- Herbs and seasonings such as basil, oregano and red pepper.
- Fruits and vegetables such as garlic, artichoke hearts, eggplant, olives, onions, spinach, tomatoes, bell peppers, banana peppers, jalepenos and pineapple.
- Mushrooms.
- Meat, such as sausage (pepperoni, salami or Italian sausage), ham, bacon, ground beef, and chicken, or seafood such as anchovies, tuna, salmon and shrimp.

Pizza is normally eaten hot (at lunch or dinner), but is sometimes eaten as cold leftovers for breakfast.
Variations

**New York-style pizza** is a style originally developed in New York City by immigrants from Naples, where pizza was created. It is often sold in generously sized, thin and flexible slices. It is traditionally hand-tossed, moderate on sauce, and moderately covered with cheese essentially amounting to a much larger version of the Neapolitan style. Many pizza establishments in the New York metropolitan area offer two varieties of pizza: "Neapolitan", or "regular", made with a relatively thin, circular crust and served in wedge-shaped slices, and "Sicilian", or "square", made with a thicker, rectangular crust and served in large, rectangular slices.

**Chicago-style deep-dish pizza**, contains a crust which is formed up the sides of a deep-dish pan. It reverses the order of some ingredients, using crust, cheese, filling, then sauce on top. Deep-dish pizza was invented by Ike Sewell and Ric Riccardo and first served in 1943 at Pizzeria Uno, which is still operating along with its twin restaurant, Pizzeria Due, in the River North neighborhood.

**Chicago-style thin-crust pizza** has a thinner crust than Chicago-style deep dish, and is baked flat rather than in a deep dish pan. The crust is thin and firm enough to have a noticeable crunch, unlike a New York-style pizza, yet thick enough to be soft and doughy on the top. The crust is invariably topped with a liberal quantity of southern-Italian style tomato sauce, which is usually quite herbal or highly spiced, and typically contains no visible chunks of tomato. Next, a layer of toppings is added, and a layer of mozzarella cheese which frequently separates from the bottom crust due to the quantity of tomato sauce. Chicago-style thin crust pizzas are cut into three-to-four-inch (8-10 cm) squares, also known as "party cut", as opposed to a "pie cut" into wedges.

**St. Louis-style pizza** is a variant of thin-crust popular in and around St. Louis, Missouri. The most notable characteristic of St. Louis-style pizza is the distinctively St. Louisan Provel cheese used instead of the mozzarella common to Chicago-style thin crust.

**California-style pizza** refers to pizza with non-traditional ingredients, especially those that use a considerable amount of fresh produce. A Thai-inspired chicken pizza with peanut sauce, bean sprouts, and shaved carrots is a popular variant in California-style pizza restaurants, as are pizzas that use chicken and barbecue sauce as toppings.

**Greek pizza** has a thicker, chewier crust and is baked in a pan in the pizza oven, instead of directly on the bricks. Plain olive oil is a common part of the topping, as well as being liberally used to grease the pans and crisp the crust. Variations in other parts of the country include using feta cheese, Kalamata olives, and Greek herbs such as oregano.

**Hawaiian pizza** has "Canadian bacon" (or sliced ham) and pineapple toppings with Mozzarella cheese. This type of pizza is not particularly popular in Hawaii!

**Taco pizza** has ingredients usually associated with tacos, such as; lettuce, shredded beef or hamburger, chopped tomatoes, avocados, corn chips, Cheddar cheese, sour cream and taco sauce.

**Grilled pizza**, invented in Providence, Rhode Island, uses a fairly thin crust cooked on a grill; the toppings are placed on the baked side after the pizza has cooked for a bit and been flipped over.

**English muffin and French bread pizza and pizza bagels** are common convenience pizzas made at home in an oven or toaster, usually with a simple topping of tomato sauce, sliced or shredded cheese, and perhaps pepperoni. French bread pizza is sometimes available commercially as a frozen meal.
**Frozen and ready-to-bake pizzas**
Pizza is also found as a frozen food in grocery stores and supermarkets. A considerable amount of food technology ingenuity has gone into the creation of palatable frozen pizza. The main challenges include preventing the sauce from combining with the dough and producing a crust that can be frozen and reheated without becoming rigid. Modified corn starch is commonly used as a moisture barrier between the sauce and crust. Traditionally the dough is somewhat pre-baked and other ingredients are also sometimes pre-cooked. More recently, frozen pizzas have appeared with completely raw ingredients.

**When the Moon Hits Your Eye . . . Mini Pizzas**

**Time Required:** 50 minutes

**Equipment/Supplies:**
- Can opener
- Cutting boards
- Butter knives
- Cheese graters
- Cookie sheet
- Spoons
- Measuring spoons
- Oven mitts
- Oven

**Instructions:**

1) Have members design an appealing, nutritious mini pizza using the recipe and variations provided.

**Ingredients:**
- 12 English muffins
- 360 g (12 oz) Mozzarella cheese
- 360 g (12 oz) Cooked ham
- 2 Green peppers
- 12 Mushrooms
- 1 x 398-ml can (14 oz) Pineapple tidbits
- 1 x 398-ml can (14 oz) Tomato sauce
- 15 ml (3 tsp) Oregano

**Directions:**
- Wash and cut vegetables.
- Grate cheese.
- Slice the English muffin in half.
- Open tomato sauce and spread tomato sauce on each half with spices on top.
- Add toppings (be creative) and sprinkle grated cheese on top.
- Broil in oven until bubbly. Watch carefully so your pizza doesn’t burn. Enjoy this tasty snack!

**Variations:**
- Use whole-wheat English muffins and partly skimmed mozzarella cheese.
- Instead of cooked ham, try other deli meat (turkey or chicken) or canned meat or fish.
- Try using whole-wheat pita bread, bagels or sliced bread instead of English muffins.
Personal Pan Pizza

Time Required: 50 minutes

Equipment/Supplies: pre-made pizza crusts, pizza topping ingredients

Instructions:
1) Have members design their ideal pizza, name it, and draw it.
2) Using pre-made pizza crusts, have the members bake their pizzas.

Herb Garden Activity adapted from: Food for Thought

Choose one of the following activities to learn more about how herbs can add flavour without adding fat or salt to your pizza (circle the activity you chose):
1. Start your own herb garden inside in a sunny spot. Pick three types of herbs to grow. Water and watch them grow. You can use your herbs to flavour your pizzas in the next skill builders.
2. Visit a grocery store and explore either the produce section for fresh herbs or the spice section for dried herbs. Find out what the various herbs are used for and try at least two different ones.
3. Explore your leader’s spice cupboard and find any spices that are typically used for pizza flavouring.

Time Required: 40 minutes

Resources:
For information on herbs, check out www.theepicentre.com/index.html
www.planetbotanic.ca/fact_sheets/fact_sheets.htm

Equipment/Supplies:
- Seeds: parsley, basil, chives, mint, oregano, rosemary, thyme, sage, etc..
- A pot with drainage holes – 1 per member
  You could also use margarine containers (Have the members poke 2-3 holes in the bottom)
- Saucer: if using margarine containers, use the lid as the saucer
- Potting mix or soil
- Small stones
- Markers

Instructions:
- Give each member a pot/margarine container.
- Have the members place several stones in the bottom of the pot.
- Have the members fill the pot with soil and place it on a saucer or the lid from the margarine container.
- Have the members sprinkle the seeds over the soil and cover with more soil. Make sure to read the directions on the seed packet.
- Write the kind of herb on the container.
- Tell the members to water lightly and keep the soil moist until the seeds start to grow.
- When the herbs are full-grown, pinch or clip off the tops of the herbs when you need some. Don’t worry, they will grow back.
- When the herbs are three to four inches and there is no chance of frost they can be planted outside. They may also be left in the original container or planted in a larger pot. If planted in the ground, some herbs such as mint and chives will come up each year.
• Have the members take a picture of their herb garden for their book once the herbs have grown. Members may wish to bring some of their herbs to the next meeting for use in their pizza.

Members can also dry their own herbs to be used all winter long.
• Pinch or clip the herbs selecting only the healthy and undamaged shoots.
• Find a warm, dry place to hang the herbs.
• Tie the stalks together and hang the bundles upside down to dry.
• After the herbs are dry, remove any foliage from the stalks.
• Store the dried herbs in an airtight dark container or in a sealed bag in the freezer – make sure to label and date the herbs.

**Dig it!**

Have members decide what type of pizza they would want to try now that they know it exists. Sicilian? White? Californian?

Have members categorize their pizza into the food groups. Discuss if this seems like a healthy pizza or not. Could they have done something to make it better to eat? Skim cheese, non-processed meat, whole wheat crust, and more vegetables might be good answers.

Herbs can be used as a topping on salads or soups, sprinkled on meat, poultry or fish, added to vegetables or even to your favourite desserts, fruits and yogurts.

• What are the benefits of using herbs and spices?
• What can you use herbs for?
• What are some common herbs?

**What’s next?**

The third builder teaches the members how to make their own crust. Members will compare two pizzas for nutritional information. A pizza garden will be grown to complement the herb garden.

**Leader’s Notes**
Skill Builder 2: Pizza Styles

Andy Says... There are many different types of pizza from all around the world. Square ones, folded over ones, ones with no tomato sauce, and ones with the ingredients baked into the crust. Explore them all with me.

SKILLS CHECKLIST
- Explain the history and varieties of pizza
- Know how to flavour using herbs
- Create a new style of pizza

Dream it!
How many styles of pizza do you know? Use a word web to explore what you already know.

Pizza Styles

Do it!

Theme & Variations:
A traditional pizza has crust that is not too thick and not too thin, usually created by rolling the dough into a round circle then topping it with sauce and cheese. Match each of the variations with its name.

- Thick crust, dense toppings
- Thin crust prepared by swirling
- Crust similar to English muffin and cooked in wood-fired oven
- No tomato sauce
- Folded over pizza
- Crust grilled after cooking
- Tomatoes from volcanic plains and cheese from water buffalo milk
- Uses French Bread Loaf for crust
- Uses a bagel for crust

- Bagel Pizza
- Calzone
- Deep Dish
- Grilled Pizza
- Lazio
- New York Style
- Pizza Bread
- White Pizza
- Neapolitan

The Leader Guide has many interesting facts about styles of pizza around the world. The next pizza is a variation of a Lazio style pizza from Rome.

When the Moon Hits Your Eye... Mini Pizzas

Ingredients:
- 12 English muffins
- 360 g (12 oz) Mozzarella cheese
- 360 g (12 oz) Cooked ham
- 2 Green peppers
- 12 Mushrooms
- 1 x 398-ml can (14 oz) Pineapple tidbits
- 1 x 398-ml can (14 oz) Tomato sauce
- 15 ml (1 tbsp) Oregano

Directions:
- Wash and cut vegetables.
- Grate cheese.
- Slice the English muffin in half.
- Open tomato sauce and spread tomato sauce on each half with spices on top.
- Add toppings (be creative) and sprinkle grated cheese on top.
- Broil in oven until bubbly. Watch carefully so your pizza doesn’t burn. Enjoy this tasty snack!

Makes 1 serving

Variations:
- Use whole-wheat English muffins and partly skimmed mozzarella cheese.
- Instead of cooked ham, try other deli meat (turkey or chicken) or canned meat or fish.
- Try using whole-wheat pita bread, bagels or sliced bread instead of English muffins.

Personal Pan Pizza
Now that you know about the many kinds of pizza, it’s time to create your own. Think about crust, toppings, presentation, and a name. Make a version of it in this builder or plan to make it next time using a premade crust!

<table>
<thead>
<tr>
<th>Crust</th>
<th>My Pizza’s Name</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Serving Suggestions</td>
</tr>
<tr>
<td>My Toppings</td>
<td>Picture:</td>
</tr>
</tbody>
</table>

Andy Says...

1. Eat at least one dark green and one orange vegetable each day
2. Make at least half of your grain products whole grain each day
3. Eat at least two Food Guide Servings of fish each week
4. Satisfy your thirst with water
5. Drink milk every day
6. Regular physical activity is important for a healthy lifestyle, too!
Herbs are leaves of low growing shrubs and can either be used as toppings for pizza or cooked right into the crust. Basil, parsley, oregano, sage, rosemary, dill, chives, and thyme are common herbs we can grow in Canada.

Choose one of the following activities to learn more about how herbs can add flavor without adding fat or salt to your pizza (circle the activity you chose):

1. Start your own herb garden inside in a sunny spot. Pick three types of herbs to grow. Water and watch them grow. You can use your herbs to flavor your pizzas in the next skill builders.
2. Visit a grocery store and explore either the produce section for fresh herbs or the spice section for dried herbs. Find out what the various herbs are used for and try at least two different ones.
3. Explore your leader’s spice cupboard and find any spices that are typically used for pizza flavoring.

More Eats!
Want to know what foods go well with which herbs? Check out:
www.dv4z.com/HealthyLife/healthy37.html or
www.compassionatecooks.com/word/herbs.htm

Andy’s Fun Facts . . .
- The Japanese like squid and Miso Jaga (mournaise, potato, and bacon) on their pizza.
- East Indians like pickled ginger, minced mutton and tofu on their pizza.
- Brazilians like green peas.
- Russians like molokia (sardines, tuna, mackerel, salmon, and onions).
- Australians enjoy gourmet pizzas like samon, dill, bocconcini, tiger prawns and even kangaroo, emu and crocodile meats.

Dig It!
Discuss the following questions with your group or leader:

What type of pizza did you learn about in this builder that you want to try?

Why is it important to learn about different foods?

How would you teach someone about this topic?

What’s next?
In the next builder you will make your own crust for pizza - either the pizza plan one you created in this builder, or a different one - you and your group can choose. What will you need for the next builder? Make a list of supplies.
Skill Builder 3: Crust

Skills Checklist

- Make a pizza from scratch
- Identify healthy choices for dough recipes

Dream it!

Background for Leaders

It has been said that imperfections in the sauce or toppings will be overlooked if the crust is spectacular. Grains such as wheat are the major ingredient in crust. Herbs and spices can be added, as well as cheese for a stuffed crust. Crusts can be thin, thick, grilled, or any other idea that you can come up with.

The self-proclaimed first pizza farm was started in 1993, by Darren Schmall in Madera, California. From there both independent pizza farms and franchise clones of his own farm have proliferated to number in the hundreds in the United States alone. Meanwhile, this has also become a novelty style for organizing one’s own garden. There are two takes on how to plant this garden. The first is any way you want, and the second is shaped in a circle with pizza wedge circles. The idea for both though is to plant ingredients used in a pizza - wheat, tomatoes, herbs, spinach, mushrooms, peppers, etc.

Important Words

Help members define the following words and listen for them using these words in their discussions. To increase the members’ understanding try providing a synonym members know or provide examples. The more personalized the examples the better.

<table>
<thead>
<tr>
<th>Oregano</th>
<th>An aromatic herb of the mint family, having leaves used as seasoning in cooking.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basil</td>
<td>Aromatic herbs belonging to the mint family; purplish-green ovate leaves</td>
</tr>
<tr>
<td>Garlic</td>
<td>A hardy plant of the amaryllis family whose pungent bulb is used in cookery</td>
</tr>
<tr>
<td>Herb</td>
<td>A flowering plant whose stem above ground does not become woody</td>
</tr>
</tbody>
</table>

Age Considerations: 9+

Thinking Ahead

- What will you discuss with members? Gather observations and think of examples that will help support your discussion.

Preparing for Success

- Linking back to the Skills Checklist, help members identify how they will know they have been successful in learning from this builder. Discuss what success in these activities might look like, sound like, or feel like.

Activating Strategies

- Talk about what makes a crust good. Does anyone think the crust is the best part? What type of crust is the favourite?
- Have the members design their own pizza garden and label the foods they are growing. An answer is on the next page.
Active dry yeast: Most commonly available for home bakers. It can be found in packets or in jars that must be stored in the fridge after opening. It must be mixed with water before being mixed into the flour.

Instant yeast: Comes in smaller granules than active dry yeast. It absorbs liquid rapidly and does not need to be hydrated before being mixed into the flour.

Why do you need to “proof” yeast bread?

The term proof in bread has two meanings – one having to do with the yeast and the other having to do with the dough. Yeast is proofed in warm water and a small amount of sugar to determine whether it is active before using. Proofing refers to a stage in the rising of the dough. The dough is shaped into its final form and left to sit for a few minutes for its final rise, which is known as proofing.

What are the steps in proofing?

1. Depending on what type of yeast you are using you will need to dissolve the yeast and sugar in warm water and let stand for about 5 minutes. If the yeast is foamy and smells like bread, it’s active. You do not need to do this step if using instant yeast.
2. Gather the kneaded dough into a ball and cover with a floured linen towel, a piece of plastic wrap or another cover. The covering of the dough prevents moisture loss and contamination of the yeast.
3. Allow dough to rise undisturbed. The dough is done when it approximately doubles in size and does not spring back when poked with finger.
4. Punch the dough down. This relieves stress on the dough, squeezes out unwanted gas and redistributes the yeast.
5. Form the bread, then cover and let rise again. Cover with a damp towel. The second rising usually takes half as long as the first rise.

Be ready to bake as soon as the dough has finished rising.

Kneading does three crucial things for the bread: distributes the yeast and other ingredients evenly, introduces air into the dough, and develops the gluten in the dough. The gluten, or wheat protein, allows the dough to stretch instead of collapsing when the yeast grows inside. If gluten is not developed, the dough will not rise and will produce a heavy loaf.

To knead dough properly:

1. Turn the dough onto a clean, lightly floured work surface
2. Flour your clean hands well
3. Use the heel of your hands to compress and push the dough away from you, and then fold it back over itself
4. Give the dough a little turn and repeat step 3. Put the weight of your body into the motion and get into a rhythm
5. Keep folding over and compressing the dough until it becomes smooth and slightly shiny, almost satiny

The most common test for doneness is to press the dough with your finger. If the indentation remains it is ready for rising. Traditional yeast breads are high and evenly shaped, uniformly golden or dark brown and even in texture with no large air holes.

Compressed/ Cake yeast: Fresh yeast that is most commonly used by commercial bakers. It only lasts for one to two weeks.
Do it!

Get Cooking

Dough Pro

**Time Required:** 50 minutes

**Crust:**
- 2 cups all-purpose flour
- ½ tsp. salt
- 2 tsp. sugar
- 1 envelope quick-rising yeast
- ¼ cup hot water
- Vegetable oil

**Topping:**
- ¾ cup spaghetti sauce
- ¼ tsp. basil
- ¼ tsp. garlic powder
- ¼ tsp. oregano
- 1 ½ cup shredded mozzarella
- your favorite toppings, e.g. pineapple, mushrooms, ham, pepperoni, etc

**Equipment & Supplies:**
- Straight-edged table knife
- Large bowl and clean dishtowel for raising the dough
- Mixing bowl
- Large baking sheet or pizza pans/stone
- Measuring spoons
- Oven
- Rubber spatula or mixing spoon
- Napkins and plates
- Measuring cups (dry and liquid)
- Knife or pizza cutter
- Bread board
- Dishwashing liquid or dishwasher
- Rolling pin
- Potholder

**Instructions:**

1. Preheat oven to 400°F.
2. Measure 1-cup flour accurately, by overfilling the measuring cup, then leveling the excess flour with the table knife. Put flour into mixing bowl.
3. Measure ½ tsp. salt and put it into the mixing bowl.
4. Measure 2 tsp. sugar and put it into the bowl.
5. Pour 1 envelope of quick rising yeast into the mixing bowl.
6. Mix the dry ingredients with a large spoon or spatula.
7. Add 2/3 cup hot water and stir together.
8. Sprinkle 1-cup flour on breadboard. Turn dough onto the floured breadboard.
9. Knead the flour on the board into the dough by pulling the mixture up with your fingers, and pushing it down with the heel of your hands. Turn the dough around on the board ¼ turn. Continue pulling up and pushing down and turning until the dough is smooth and elastic. This will take about five minutes.
10. Lightly coat the large bowl with oil.
11. When the dough is smooth, elastic, and doesn't stick to the dough board, put the ball of dough in the oiled bowl and flip it over so it the whole surface is coated. Cover with towel for an hour.
12. After the dough has doubled in size, punch the center of the dough with your fist to let out air.
13. Clean the breadboard. Flour it lightly. Oil the baking sheet.
14. Put the dough on the breadboard. Use a rolling pin to roll out the dough into a 12-inch circle. This is easier if you roll outward from the center of the circle toward the back, then side, then front, then other side. Put dough onto baking sheet. Clean the breadboard.
15. Use a spoon or pastry brush to lightly smear oil on top of the dough.
17. Sprinkle ¼ tsp. basil on top of the sauce.
18. Sprinkle ¼ tsp. garlic powder on top of the sauce.
19. Sprinkle ¼ tsp. oregano on top of the sauce.
20. Top pizza with any special toppings you have available (pepperoni, ham, bacon, pineapple).
21. Sprinkle 1½ cups shredded mozzarella cheese on top of the sauce.
22. Put pizza in preheated oven and bake until the crust turns golden brown. This will take approximately 20 minutes. Use potholders to take the pans out.
23. Slice the pizza so there will be two slices for each member of your group.
24. Wash and dry the mixing bowl, measuring cups and spoons, oiled bowl, or put them in the dishwasher.
25. Clean your work area. Clean up the plate

**Vegetable Pizza - Appetizer/Snack**

**Ingredients:**
- 1 - 8 ounce package refrigerated crescent roll dough
- 1 - 8 ounce package cream cheese, softened
- 1 - 1 ounce package dry Ranch style dressing mix
- 2 carrots, finely chopped
- 1/2 cup chopped broccoli
- 1/2 cup chopped cauliflower
- 1/2 cup chopped tomato
- 1/2 cup chopped green pepper
- 1 cup of shredded cheddar cheese
- 1/2 cup red bell pepper (optional)
- other favorite chopped vegetables (optional)

**Directions:**
1. Preheat oven to 375 degrees F.
2. Roll out crescent rolls onto a large non-stick baking sheet. Stretch and flatten to form a single rectangular shape on the baking sheet.
3. Bake 11 to 13 minutes in the preheated oven, or until golden brown. Allow to cool.
4. Place cream cheese in a medium bowl. Mix cream cheese with 1/2 of the ranch dressing mix or to taste.
5. Spread the mixture over the cooled crust.
6. Arrange finely chopped vegetables on top. Chill in refrigerator approximately 1 hour.
7. Cut into bit-size squares to serve.

**Fruit Pizza**

**Ingredients:**
- 1/2 cup butter, softened
- 3/4 cup white sugar
- 1 egg
- 1 1/4 cups all-purpose flour
- 1 teaspoon cream of tartar
- 1/2 teaspoon baking soda
- 1/4 teaspoon salt
- 1 (8 ounce ) package cream cheese
- 1/2 cup white sugar
- 2 teaspoons vanilla extract
- A variety of fresh fruit slices to cover surface of pizza (apples, peaches, strawberries, kiwi, banana, blueberries, etc.)

**Directions:**
1. Preheat oven to 350 degrees F(175 degrees C)
2. In a large bowl, cream together the butter and 3/4 cup sugar until smooth. Mix in egg, combine the flour, cream of tartar, baking soda and salt; stir into the creamed mixture until just blended. Press dough into an ungreased pizza pan.
3. Bake in preheated oven for 8 to 10 minutes, or until lightly browned. Cool.
4. In a large bowl, beat cream cheese with 1/2 cup sugar and vanilla until light. Spread on cooled crust
5. Arrange desired fruit on top of filling and chill.
What's next?

Pizza does contain fat and an activity in the next builder will help members see how much fat different foods have. Spices will be compared to the herbs members already know about. Toppings will also be discussed.

Dig it!

How can a crust be made healthier?
- whole wheat flour, better oils, less oil, thin crust, non-stuffed crust, use honey instead of sugar

Would the members add to or remove anything from their pizza garden? They might want a fruit pizza garden or a meat “garden” that raises chickens, turkeys, pigs, beef, etc...

Recipe

**See**

**Time Required:** 20 minutes

**Equipment/Supplies**
- Pen or pencil

**Dough It!**

**Ingredients:**
- 250mL (1 cup) flour
- 2mL (1/2 tsp) salt
- 1 pkg Rapid Mix yeast
- 45mL (3 tbsp) vegetable oil
- 375mL (1 1/2 cup) flour - as needed

Mix first 5 ingredients. Add flour to make dough. Knead 10 minutes. Let rise 20 minutes (turn bowl upside down over dough). Roll to desired shape.

**Perfect - Dough**

**Ingredients:**
- 500 mL (2 cups) all purpose flour
- 125 mL (1 1/2 cup) whole wheat flour
- 15 mL (1 tbsp) sugar
- 2 mL (1/2 tsp) salt
- 250mL (1 cup) warm water
- 15mL (1 tbsp) olive oil

Combine flours, yeast, sugar and salt in large bowl. Combine water and oil and stir into dry ingredients until well blended. Turn the dough onto a lightly floured surface and knead for 8-10 minutes. Add more flour only as needed to prevent the dough from sticking. Turn the bowl over the dough and let it rest for 10 minutes. Divide the dough into 2 large rounds or 8 small ones for pizza pockets.

**Instructions:** Have members compare the two crust recipes and decide upon which is healthier. They may wish to point out why.
In the Member Manual

Skill Builder 3: Crust

Andy Says....
Did you know more than 4 million tonnes of wheat is grown in Manitoba every year? That’s enough to fill 400,000 semi-truck trailers! When lined bumper to bumper, these 400,000 trucks would reach from Winnipeg to Fredericton, New Brunswick and back.

Skills CheckList
- Make a pizza from scratch
- Identify healthy choices for dough recipes

Dream it!

Andy’s Agricultural Facts....
A pizza farm or pizza garden is a circular region of land partitioned into plots, shape like pizza wedges. A pizza farm’s segments may produce ingredients of a pizza, e.g. wheat, tomatoes or herbs, cattle for cheese or beef. This has grown into a significantly expanding cottage industry in the United States, more as a tourist and specialty niche than as a serious supplier of ingredients to the food industry at large. This has also become a novelty style for organizing individual’s personal gardens.

Discuss with your project group or leader some ideas of foods that are used for pizzas that can be grown in a garden? Think about veggie and dessert pizzas too!

Do it!

Get Cooking

Dough Pro
Ingredients:
Crust:
- 2 cups all-purpose flour
- 1/2 tsp salt
- 1 tsp sugar
- 1 envelope quick-rising yeast
- 1/4 cup hot water
- Vegetable oil

Topping:
- 1/2 cup spaghetti sauce
- 1/4 tsp basil
- 1/4 tsp garlic powder
- 1/4 tsp oregano
- 1 1/2 cup shredded mozzarella cheese
- your favorite toppings - perhaps the ones from your pizza creation in the last builder.

What you will need:
- Straight-edged table knife
- Large bowl and clean dishtowel for raising the dough
- Mixing bowl
- Large baking sheet or pizza pans/stone
- Measuring spoons
- Rubber spatula or mixing spoon
- Napkins and plates
- Measuring cups (dry and liquid)
- Knife or pizza cutter
- Bread board
- Dishwashing liquid or dishwasher
- Rolling pin
- Potholder
- Oven
In the Member Manual

**Instructions:**
1. Preheat oven to 400°F.
2. Measure 1 cup flour accurately, by overflowing the measuring cup, then leveling the excess flour with the table knife. Put flour into mixing bowl.
3. Measure ½ tsp salt, and put it into the mixing bowl.
4. Measure 2 tsp sugar and put it into the bowl.
5. Pour 1 envelope of quick rising yeast into the mixing bowl.
6. Mix the dry ingredients with a large spoon or spatula.
7. Add 2 ½ cups hot water and stir together.
8. Sprinkle 1 cup flour on breadboard. Turn dough onto the floured breadboard.
9. Knead the flour on the board into the dough by pulling the mixture up with your fingers, and pushing it down with the heel of your hands. Turn the dough around on the board 1/2 turn. Continue pulling up and pushing down and turning until the dough is smooth and elastic. This will take about five minutes.
10. Lightly coat the large bowl with oil.
11. When the dough is smooth, elastic, and doesn’t stick to the dough board, put the ball of dough in the oiled bowl and flip it over so it the whole surface is coated. Cover with towel for an hour.
12. After the dough has doubled in size, punch the center of the dough to let out air.
13. Clean the breadboard. Flour it lightly. Oil the baking sheet.
14. Put the dough on the breadboard. Use a rolling pin to roll out the dough into a 12-inch circle. This is easiest if you roll outward from the center of the circle toward the back, then side, then front, then other side. Put dough onto baking sheet. Clean the breadboard.
15. Use a spoon or pastry brush to lightly smear oil on top of the dough.
16. Spread ¾ cup spaghetti sauce on the top of the dough.
17. Sprinkle ¼ tsp basil on top of the sauce.
18. Sprinkle ¼ tsp garlic powder on top of the sauce.
19. Sprinkle ½ tsp oregano on top of the sauce.
20. Top pizza with any special toppings you have available (pepperoni, ham, bacon, pineapple).
21. Sprinkle ½ cups shredded mozzarella cheese on top of the sauce.
22. Put pizza in preheated oven and bake until the crust turns golden brown. This will take approximately 20 minutes.

<table>
<thead>
<tr>
<th>I Like This</th>
<th>Don’t Like This</th>
<th>Next Time, I Will Change...</th>
</tr>
</thead>
</table>

**Recipe See**

Which recipe is healthier? Why?

**Dough It!**

<table>
<thead>
<tr>
<th>Dough</th>
<th>Ingredients:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>250 mL (1 cup) flour</td>
</tr>
<tr>
<td></td>
<td>1 pkg Rapid Mix yeast</td>
</tr>
<tr>
<td></td>
<td>45 mL (3 tbsp) vegetable oil</td>
</tr>
</tbody>
</table>

Mix first 5 ingredients. Add flour to make dough. Knead 10 minutes. Let rise 20 minutes (turn bowl upside down over dough). Roll to desired shape. Makes 1 pizza.

**Perfect Dough**

<table>
<thead>
<tr>
<th>Dough</th>
<th>Ingredients:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>500 mL (2 cups) all purpose flour</td>
</tr>
<tr>
<td></td>
<td>15 mL (1 tbsp) sugar</td>
</tr>
<tr>
<td></td>
<td>250 mL (1 cup) warm water</td>
</tr>
</tbody>
</table>

Combine flour, yeast, sugar and salt in large bowl. Combine water and oil and stir into dry ingredients until well blended. Turn the dough onto a lightly floured surface and knead for 8-10 minutes. Add more flour only as needed to prevent the dough from sticking. Turn the bowl over the dough and let it rest for 10 minutes. Divide the dough into 2 large rounds or 8 small ones for pizza pockets.

**More Eats!**

http://www.threecrossranch.com/html/pizza farmer history.html has info about the original pizza farm!

**Dig it?**

Discuss the following questions with your project group or leader:

- What are three ways to make a crust healthier?
- What was most interesting about the recipe comparison?
- How would you explain to someone the connection between agriculture and pizza?

**What’s next?**

Variety is the spice of life. The next builder looks at spices, finding fat in food, and toppings.
Skill Builder 4: Spice of Life

Skills Checklist

- Make nutritious choices for pizza

Dream it!

Background for Leaders

Wars have been fought and countries discovered because of treasured spices. Marco Polo's stories of his trip to China in the late 1290s told of the spice trade in unknown lands and brought many Europeans in search of these spices. In the 1400s-1600s the Spanish, English, Portuguese and Dutch traders competed in the spice trade from the Far East. By the 1800s America was involved in the trade. Many families in the colonies had their own herb gardens. Herbs and spices were also being imported from other countries. They were used for cuisine specialties, as preservatives for the food supply and for special medications. Herbs and spices are a great alternative to salt, which when consumed in high amounts can lead to kidney failure, stroke and heart disease.

Important Words

Help members define the following words and look for members using this vocabulary in their discussions. A few strategies you can use include:

- Teach synonyms by providing a synonym members know.
- Also, teach antonyms. Not all words have antonyms, but thinking about opposites requires the members to evaluate the critical attributes of the words in question.
- Provide non-examples. Similar to using antonyms, providing non-examples requires students to evaluate a word's attributes. Invite students to explain why it is not an example.

| Spice          | Any of a class of pungent or aromatic substances of vegetable origin, as pepper, cinnamon, or cloves, used as seasoning, preservatives, etc. |

Age Considerations

- 10+

Thinking Ahead

- What will you discuss with members? Gather observations and think of examples that will help support your discussion.

Preparing for Success

- Linking back to the Skills Checklist, help members identify how they will know they have been successful in learning from this builder. Discuss what success in these activities might look like, sound like, or feel like.

Activating Strategies

- What is the difference between spices and herbs?
- What are some examples of foods that are have a lot of fat? Lower amount of fat?
- Have members come up with the healthiest and unhealthiest pizzas they can think of. An answer might be:
  - Healthiest: whole wheat crust, herbs no salt, low-fat cheese, vegetables, vegetables, vegetables
  - Unhealthiest: chocolate crust, stuffed with peanut butter, cream cheese sauce, sprinkles, chocolate chips, white chocolate chips, butterscotch chocolate chips, and marshmallows
Do it!

With members, choose 2 of the following 4 activities.

Herbed Crust

Time Required: 40 minutes

Instructions

Ingredients
- 1 1/2 cups all-purpose flour
- 1 cup whole wheat flour
- 1/4 cup cornmeal
- 3/4 teaspoon granulated sugar
- 1/2 teaspoon dried Italian herb seasoning
- 1 1/2 teaspoons baking powder
- 3/4 teaspoon baking soda
- 1 1/4 cups plain fat-free yogurt
- 2 tablespoons olive oil

Directions
1. In a large bowl combine flours, cornmeal, sugar, herbs, baking powder and baking soda; Mix well.
2. In a separate bowl mix together yogurt and oil.
3. Add yogurt mixture to flour mixture; mix until well combined and a soft dough forms.
4. Knead dough lightly, about 1-2 minutes.
5. Roll our or press dough evenly in a lightly greased pan.
6. Top with toppings and bake at 400 degrees F for 20 minutes or until done.

Fat Finder

Time Required: 20 minutes

Equipment/Supplies
- Brown paper bags (not waxed) or brown butcher paper
- 10 Samples of food from each food group including the "other" group; cereal, bread, muffins, chips, chocolate, fruits, vegetables, lentils, crackers, doughnuts, cheese, sandwich meat, hotdog, cookies, butter/oil, peanut butter
- Pens/ Markers

Information
- Fats are a key source of energy for healthy growth, development and activity.
- Fats help the body absorb some of the nutrients that are essential for good health such as vitamins A, D, E, and K. Everyone needs fat, but many Canadians eat more fat than they need for maintaining good health.
- Encourage lower fat choices including grain products, vegetables and fruit, dried peas, beans and lentils.

Instructions
- Have the members place the food samples on the paper and write the food name under each sample.
- After 10 minutes, have the members remove each sample and observe whether it left a spot on the paper.
- Hold the paper up to a light source to see if the light shines through it.
- Explain that the more light showing through the more fat the food contains.
- As a group have the members determine which foods have the most and least fat.
- Rank them in the charts in members manuals: from least fat (1) to most fat (10)
Spice it Up

Time Required: 20 minutes

Equipment/Supplies
- Pen or pencil, internet for research

Instructions
Have members research a spice of their choice and then come back and share their information with everyone. They will need to look up where and how it grows, what it looks like, how it tastes, what it tastes good with, how it is used in recipes, and their references. Some information about spices is on the next page.

Spices come from the bark (cinnamon), root (ginger, onion, garlic), buds (doves, saffron), seeds (yellow mustard, poppy, sesame), berry (black pepper) or the fruit (allspice, paprika) of tropical plants and trees. Herbs are leaves of low growing shrubs. Herbs are seed-bearing plants without woody stems, which die down to the ground after flowering. The use of herbs and spices in cooking offers the chance to prepare exotic gourmet dishes or cultural meals and a way to cut or save calories and fat.

What are common spices and herbs used in other countries?
- Spices enhance the natural sweetness of foods and are an important part of complex flavours of ethnic cuisine.
  - Italian (oregano, rosemary)
  - Mexican (cumin, chili pepper)
  - Thai (ginger, cinnamon, garlic)
  - Greek (garlic, dill weed)
- Indian (saffron, turmeric, cumin)
- Chinese (ginger, garlic)
- Spanish (thyme)
- Canadian (parsley)

### Basil

**Where and how it grows:**
- Hot, Dry Conditions
- Behaves as an annual when frost is in the area
- Can grow outside or inside

**How it tastes:**
- Faint minty peppery flavour

**What it looks like:**
- 30-130 cm tall
- Dark green, oval, crinkly leaves

**What it tastes good with:**
- Tomatoes, eggplant, zucchini, squash, spinach, vegetable and legume soup, poultry, fish,

**How to use it in recipes:**
- Cooking destroys flavour
- Used fresh last minute or dried

**Where I found my info:**
- Wikipedia
- www.theepicentre.com/Spices/basil.html
Saucy - Time!

Optional - not in the members manual. One way to control the amount of salt in your pizza sauce is to make it from scratch.

**Time Required: 80 minutes**

**Ingredients**

- 12 tomatoes
- 3 cloves garlic
- 1 onion quartered
- fresh basil
- fresh oregano
- olive oil
- salt

**Directions**

1. Put first five ingredients in oven safe dish and drizzle olive oil over the top. Bake for 50 minutes at 350 degrees Fahrenheit.
2. Remove skin and seeds from tomatoes and process everything in a food processor. Add salt to taste.
3. Place in a sauce pan and simmer until reduced to your liking.
4. Serve on your favourite pizza or over pasta.
5. Holds in the fridge for a few days or freezes well

Salt Lick

**Time Required: 10 minutes**

**Equipment/Supplies**

- Three jars of pizza sauce with labels. The healthiest will be used on the pizza later.

**Instructions**

Have members examine the sodium (salt) content of each of the sauces. Herbs and spices are a great flavouring alternative that can help lower sodium intake. 11% of the sodium we consume is extra salt we add at the table, 12% of the sodium we consume naturally occurs in our food and water, 77% of the sodium we consume is from processed food and restaurants. Sodium is measured in milligrams (mg) and it is recommended we consume 2300mg of sodium a day. 1 tsp of salt contains 2300 mg of sodium whereas 1 tsp of herbs and spices contain 0 mg.

Company Comparison

**Time Required: 20 minutes**

**References:**

http://www.bostonpizza.com/en/nutrition
http://cache.dominos.com/homev8/docs/menu/dominos_nutrition_v2.21.00.pdf

**Instructions**

Use a search engine or the above websites to compare a similar type of pizza for nutritional content. for three different pizza chains that the members have eaten at. Serving size, calories, fat content, sodium, cholesterol, and carbohydrates should be copied down in the book. Are there surprises or are all the companies similar?
### Skill Builder 4: Spice of Life

#### Andy Says....
Basil, Bay Leaf, Cardamom, Chili, Chives, Cilantro, Coriander, Cumin, Dill, Garlic, Jalapeno Peppers, Laurel, Marjoram, Methi Leaves, Oregano, Parsley, Pepper, and Rosemary are some herbs and spices used in cooking to prepare foods with distinct flavors.

#### SKILLS CHECKLIST
- Make nutritious choices for pizzas

#### Skills Builder 5 looks at even healthier pizza options like a side food of veggies and dip, whole wheat crust, and vegetarianism. There is also a crossword about pizza toppings.

#### Dream it!
What do you think the healthiest pizza is that you could make? Least healthy? Describe each and discuss with your project group or leader.

#### Do It!
**Get Cooking**
**Herbed Crust**
- Try this yeast-free recipe for a crust with the spices and herbs baked in. Use the healthiest sauce on top of your crust and add some yummy toppings!

**Ingredients**
- 1 1/2 cups all-purpose flour
- 1 cup whole wheat flour
- 1/4 cup baking powder
- 3/4 teaspoon baking soda
- 3/4 teaspoon Italian seasoning
- 1/2 teaspoon dried oregano
- 2 tablespoons olive oil

**Directions**
1. In a large bowl combine flour, cornmeal, sugar, and spices. Mix well.
2. In a separate bowl mix together yogurt and oil.
3. Add dry ingredients to the wet mixture and mix until well combined and a soft dough forms.
4. Knead dough lightly about 1-2 minutes.
5. Roll out or press dough evenly in a lightly greased pan.
6. Top with toppings and bake at 400°F for 20 minutes or until done.

| I Like This | I Don't Like This | Next Time, I Will Change...
|-------------|-------------------|-----------------------------|

**Choose 2 of the following 4 activities to learn more about making nutritious choices of pizzas while waiting on your pizza to bake and while eating!**

**Fat Finder**
You will need foods from all five food groups and brown paper that is not waxed. Place the foods on the paper and label them. After ten minutes, remove the foods and hold the paper up to the light. The more light that shines through, the more fat. On the chart on the next page, rank your foods in order of the amount of fat. (Being the least, 10 being the most.)

---

**What's next?**

**Dig It!**
Have the members share their newly found information on spices. You may wish to compile a chart of notes about all the spices to hang on the 4-H kitchen wall. Discuss surprises and other interesting points.

**Talk about the results of the fat finding experiment. Were any of the results different than they predicted?**

**Which company did the best in the “Company Comparison”? The worst? Could they ever eat at this place again knowing what is in the pizza? Or will they try and find a healthier option on the menu?**

**How will they explain to someone the thing they consider when making nutritious choices about pizza?**
Spice it Up
Spices come from the bark (cinnamon), root (ginger, onion, garlic), buds (cloves, saffron), seeds (yellow mustard, poppy, sesame), berry (black pepper) or the fruit (allspice, paprika) of tropical plants and trees. Pick a spice to research and find the information where and how it grows, how it tastes, what it looks like, what it tastes good with, how to use it in recipes, where you found your information. Share your information with your group or your family.

SALT LICK
Sodium is a mineral found in salt. Our recommended daily amount of sodium intake is 2300 mg or 1 tsp. Herbs and spices are a great replacement for salt as each contains 0 mg sodium. Look at three different pizza sauce labels and compare their sodium content. One way to control the amount of salt in your pizza sauce is to make it from scratch. The leader guide has a recipe if this is something you would like to try.

<table>
<thead>
<tr>
<th>Name of Sauce</th>
<th>Sodium Content</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
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<td></td>
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</tbody>
</table>

Company Comparison
Use a search engine, the More Eats! suggestions or menus from the restaurants to find nutritional information and prices of the pizzas that restaurants serve. Compare three popular pizza chains that you are familiar with. Use one type of pizza for the comparison and use the chart below.

More Eats!
How healthy are pizzas in restaurants? www.bostonpizza.com/en/nutrition; www.pizzahut.com/Files/PDF/Updated%20Brochure%20062709.pdf; cache.dominos.com/home8/docs/menu/dominos_nutrition_v2.2.1.06.pdf

<table>
<thead>
<tr>
<th>Company Name:</th>
<th>#1</th>
<th>#2</th>
<th>#3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Serving Size</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Calories</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fat Content</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sodium</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Cholesterol</td>
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<td></td>
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<tr>
<td>Carbohydrates</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Price</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

In the Member Manual

Andy's Agriculture Facts...
The first tomato sauce was made by the Aztecs in 700 A.D. A version of a tomato sauce was included in an Italian cookbook in the 1600’s.

Andy's Fun Facts...
Pizza makers started to spin the dough in the 1930’s. It’s for show only and the dough can be smoothed out just as easily with a rolling pin.

Dig it!
Record your answers to the following questions:

Which two activities did you choose and do?

What surprised you the most in the activities that you did? Why?

How will you explain to someone the things to consider when making nutritious choices about pizza?

Andy's Fun Facts...
Hundreds of years ago, rich people in Italy used flatware made of pewter, which has a high-lead content. Tomatoes, which are acidic, caused the lead to leach out into the food, resulting in lead poisoning and death. Poor people ate off of plates made of wood so they safely ate tomatoes. Thus tomatoes were only eaten by poor people until the 1800’s.

What's next?
The next builder will explore different options for pizza like whole wheat crusts and vegetarian. You will also get to make your own healthy sauce.
Skill Builder 5: Putting It All Together

Skills Checklist

- Design a complete pizza meal
- Create a vegetarian pizza option

Dream it!

Background for Leaders

So pizza can be a healthy choice. To make it even healthier you could choose to use a whole grain crust, use more vegetables on the pizza instead of pepperoni; you could also use tofu. Eat pizza in moderation – while it can be a healthy choice, one or two pieces will do, and go really well with a green salad or veggies and dip!

Important Words

Here are some examples of how to use the “important words” to increase the members understanding:

- Ask members to form a mental image of the new word.
- Get members to use a dictionary and show them the range of information it provides.
- Have members describe (rather than define) the new word in terms of their experiences.

<table>
<thead>
<tr>
<th>Whole Wheat</th>
<th>Prepared with the complete wheat kernel</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vegetarian</td>
<td>A person who does not eat or does not believe in eating meat, fish, fowl, or, in some cases, any food derived from animals, as eggs or cheese, but subsists on vegetables, fruits, nuts, grain, etc</td>
</tr>
</tbody>
</table>

Age Considerations

- Ages 10-12

Thinking Ahead

- What will you discuss with members? Gather observations and think of examples that will help support your discussion.

Preparing for Success

- Linking back to the Skills Checklist, help members identify how they will know they have been successful in learning from this builder. Discuss what success in these activities might look like, sound like, or feel like.

Activating Strategies

- The Know, Want to Know, Learned (KWL) chart is one method of accessing prior knowledge and then solidifying learning. Have members fill in the first two columns about what they already know concerning vegetarianism and what they want to know about vegetarianism. The Learned column will be completed in the Dig It! part of this unit. If they are having problems, you might mention lacto-ovo, lacto and vegan.
Vegetarian

Time Required: 20 minutes

References:


Information:

There are many reasons people choose to avoid animal products. These include health, environmental, ethical/moral, religious or economic concerns.

Semi-vegetarians: avoid meat but do eat poultry, fish, eggs and dairy products.

Pesco-vegetarians: avoid meat and poultry but do eat fish and seafood.

Lacto-ovo: Consume grains, legumes, nuts, seeds, vegetables, fruit, milk products and eggs, but not meat, poultry, fish, seafood.

Lacto: Consume grains, legumes, nuts, seeds, vegetables, fruit, milk products, but not meat, poultry, fish, seafood and eggs.

Vegan: Consume grains, legumes, nuts, seeds, vegetables, fruit, but not meat, poultry, fish, seafood, eggs, milk products, honey, animal by-products (gelatin, bouillon cubes)

To achieve a healthy diet, there is a specific vegetarian food rainbow adapted for those who do not eat milk products or eggs. Benefits of a vegetarian diet include being low in saturated fats and cholesterol, high in fibre, high in folic acid, and high in vitamins and minerals. When meat and other animal products are limited or avoided there is a risk of missing certain nutrients such as protein, calcium, vitamin D, vitamin B12, omega 3 fatty acids, zinc, and iron.

To make sure they get their nutrients, vegetarians eat:

Protein: Soy foods, legumes, nuts/seeds, milk and eggs

Iron: Soy foods, legumes, nuts/seeds, fortified grain products, raisins, prunes, spinach

Calcium: Calcium fortified orange juice, soy beverage, calcium enriched tofu, almonds, dark green leafy vegetables, vegetarian patties

Vitamin B12: Fortified soy foods (beverages and vegetable patties), nutritional yeast

Vitamin D: Fortified milk, soy beverage, fortified margarine, egg yolks

Omega 3 fatty acids: Flaxseed, hempseed, soy beans, walnuts, enriched eggs

Zinc: Legumes, nuts/seeds, breads, milk products, eggs

Instructions

Have members design a vegetarian pizza using. Make sure that it helps supply the nutrients that a meatless pizza could lack. One answer might be:

<table>
<thead>
<tr>
<th>Pizza Name: Lacto-ovo Lovers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crust: Tofu with olive oil to brown</td>
</tr>
<tr>
<td>Sauce: tomato - basil sauce</td>
</tr>
<tr>
<td>Toppings: sunflower seeds, mozzarella, green peppers, corn, broccoli, cauliflower</td>
</tr>
</tbody>
</table>
The Big Dipper  Vegetable Party with Dilly Dip

Time Required: 30 minutes

Ingredients:
Dip
- 1 cup (250 mL) cottage cheese
- 1/2 cup (125 ml) Plain yogurt
- 1 Green Onion
- 1/4 tsp (1 ml) Dried dill weed
- 1/4 tsp (1 ml) Lemon juice
- Pinch Salt
- Pinch Pepper
Vegetables
- Cucumber, carrots, celery, broccoli, mushrooms, red or green pepper

Directions:
1. Finely chop green onion.
2. Mix together green onion, cottage cheese, yogurt and spices in a bowl.
3. Wash the vegetables.
4. Peel the carrots.
5. Cut the carrots, celery and red pepper into strips.
6. Cut the broccoli into florets.
7. Slice the cucumber and the mushrooms can be left whole.
8. Organize vegetables on plates surrounding the bowl of dip.

Spinach and Orange Salad

Ingredients:
1 bunch of spinach rinsed well and patted dry
1 bunch of fresh asparagus cut in 1" pieces
2 cups (500 mL) orange wedges peeled
½ cup (125 mL) dried cranberries
¼ cup (60 mL) sliced almonds

Dressing:
¼ cup (60 mL) orange juice
1 tablespoon (15 mL) lime juice
2 tbsp. (30 mL) extra virgin olive oil
2 tbsp (30 mL) honey

Directions:
1. In a small bowl combine all the dressing ingredients and chill for 5 minutes. Blanch asparagus in boiling water for 3-5 minutes keeping it crisp but a little tender. Drain and rinse in cold water.
2. In a large bowl mix the spinach, orange wedges, dried cranberries, and asparagus and toss with the dressing. Sprinkle the sliced almonds on top and serve immediately.

Yield: 4 servings.
Whole Wheat Pizza Crust

Instructions

Ingredients
- 1 teaspoon white sugar
- 1 1/2 cups warm water
- 1 tablespoon active dry yeast
- 1 tablespoon olive oil
- 1 teaspoon salt
- 3 1/4 cups whole wheat flour

Directions
1. In a large bowl, dissolve sugar in warm water. Sprinkle yeast over the top, and let stand for about 10 minutes, until foamy.
2. Stir the olive oil and salt into the yeast mixture, then mix in 3 cups of whole wheat flour until dough starts to come together. Tip dough out onto a surface floured with the remaining flour, and knead until all of the flour has been absorbed, and the ball of dough becomes smooth, about 10 minutes. Place dough in an oiled bowl, and turn to coat the surface. Cover loosely with a towel, and let stand in a warm place until doubled in size, about 1 hour.
3. When the dough is doubled, tip the dough out onto a lightly floured surface. Form into a tight ball. Let rise for about 45 minutes, until doubled.
4. Preheat the oven to 425 degrees F (220 degrees C). Roll a ball of dough with a rolling pin until it will not stretch any further. Then, drape it over both of your fists, and gently pull the edges outward, while rotating the crust. When the circle has reached the desired size, place on a well oiled pizza pan. Top pizza with your favourite toppings. Bake for 16 to 20 minutes (depending on thickness) in the preheated oven, until the crust is crisp and golden at the edges, and cheese is melted on the top.

Yield: 1 thick crust

Whole Grain

Time Required: 20 minutes

Information:

Canada's Food Guide recommends that you make at least half of your grain product choices whole grain each day. Whole grains are a source of fibre and are typically low in fat. A diet rich in whole grains has been shown to have a number of health benefits and may help reduce your risk of heart disease. Grains are the seeds of certain plants. The seed, or kernel, is made up of three parts: the bran, the endosperm and the germ - all of which contain valuable nutrients that play an important role in your diet. Grains can be either whole or refined. Whole grains contain all three parts of the kernel. Refined grains are whole grains that have had the germ and the bran removed. This results in a loss of fibre, vitamins and minerals. Some refined grains are enriched by adding back lost minerals and vitamins. In Canada, manufacturers are required to enrich white flour, resulting in a flour that is a significant source of several vitamins and iron. However, it still lacks some nutrients and the fibre found in whole grain flour.

Under the Food and Drug Regulations, up to 5% of the kernel can be removed to help reduce rancidity and prolong the shelf life of whole wheat flour. The portion of the kernel that is removed for this purpose contains much of the germ and some of the bran. If this portion of the kernel has been removed, the flour would no longer be considered whole grain.
Whole wheat bread is made with whole wheat flour. As sold in Canada, whole wheat flour may have much of the germ removed. Therefore, 100% whole wheat bread may not be whole grain - however, it remains a nutritious choice that provides dietary fibre not found in white bread. Products labelled with the words "multigrain," and "organic" are not necessarily whole grain - the flour or grains in the products may be made with or consist of little or no whole grains. (Information from Health Canada)

Using some labels from grain products, discuss with members the differences between products labelled whole grain vs. multigrain or organic.

What’s next?

In the final Builder, members learn about where the ingredients for a pizza come from and the steps they pass through to make it to the plate. Members will use their pizza skills to fundraise for a charity.

Dig it!

Have members return to the Dream It! Section to fill out the Learned column. If the members have not answered all the questions from the Want to Learn part, help them find the solutions.
Skill Builder 5: Putting It All Together

Andy Says...
How do we make sure the pizza meals we plan are well rounded and meet Canada's Food Guide recommendations? What about vegetarian pizzas? There are some simple ways to add the nutrients we need by looking at the crust, the toppings and the side dishes!

SKILLS CHECKLIST
- Design a complete pizza meal
- Create a vegetarian pizza option

**Important Words**
Watch for these important words in this builder:
Whole Wheat, Vegetarian

Dream it!

There are many reasons people choose to avoid animal products. These include health, environmental ethical/moral, religious or economic concerns. Eating vegetarian requires paying attention to what you eat to ensure you get the nutrients your body needs. To achieve a healthy diet, there is a specific vegetarian food rainbow adapted for those who do not eat milk products or eggs. The Leader's Guide has some background information about being vegetarian. What do you know and want to know about vegetarianism? Complete the Know and Want to Know sections now, and fill in the Learned part at the end of the builder.

<table>
<thead>
<tr>
<th>Know</th>
<th>Want to Know</th>
<th>Learned</th>
</tr>
</thead>
</table>

More Info!

Vegetarian Pizza Design

Design a vegetarian pizza using interesting toppings. Think of soy, legumes, nuts, and other fruits/vegetables for your tasty pizza design.

Pizza Name: 
Crust: 
Sauce: 
Toppings: 

Do it!
Get Cooking

Plan a balanced pizza meal. You can make the vegetarian pizza you designed, or plan to make something else. You can use the whole wheat crust recipe in the Leader's Guide or one of the crusts you have made already in this project. Then, decide what your side dishes will be to make sure you have the nutrients you need for a balanced meal. Refer to Canada's Food Guide to be sure. The recipes below may fit your menu.

The Big Dipper: Vegetable Party with Dilly Dip

**Ingredients:**
- Dip
- 1 cup (250 mL) cottage cheese
- 1/2 cup (125 mL) Plain yogurt
- 1 Green Onion
- 1/4 tsp (1 mL) Dried dill weed
- 1/4 tsp (1 mL) Lemon juice
- Pinch Salt
- Pinch Pepper

**Vegetables of your choice:**
- broccoli, carrots, celery, red pepper, cucumber, mushrooms

Yield: 3 servings

<table>
<thead>
<tr>
<th>I Like This</th>
<th>I Don’t Like This</th>
<th>Next Time, I Will Change...</th>
</tr>
</thead>
</table>

Spinach and Orange Salad

**Ingredients:**
- 1 bunch of spinach rinsed well and patted dry
- 1 bunch of fresh asparagus cut in 1” pieces
- 2 cups (500 mL) orange wedges peeled
- 1/2 cup (125 mL) dried cranberries
- 1/2 cup (60 mL) sliced almonds

**Dressing:**
- 1/2 cup (60 mL) orange juice
- 1 tablespoon (15 mL) lime juice
- 2 tbsp. (30 mL) extra virgin olive oil
- 2 tbsp (30 mL) honey

Yield: 4 servings

<table>
<thead>
<tr>
<th>I Like This</th>
<th>I Don’t Like This</th>
<th>Next Time, I Will Change...</th>
</tr>
</thead>
</table>

More Info!
A great pizza game is at: 4hgarden.msu.edu/kidstour/kids/pizzapizza.html

In the Member Manual
Whole Grain Products

Canada’s Food Guide recommends that you make at least half of your grain product choices whole grain each day. Whole grains are a source of fibre and are typically low in fat. A diet rich in whole grains has been shown to have a number of health benefits and may help reduce your risk of heart disease.

Grains are the seeds of certain plants. The seed, or kernel, is made up of three parts: the bran, the endosperm, and the germ - all of which contain valuable nutrients that play an important role in your diet. Grains can be either whole or refined. **Whole grains** contain all three parts of the kernel. **Refined grains** are whole grains that have had the germ and the bran removed.

Whole wheat bread is made with whole wheat flour. As sold in Canada, whole wheat flour may have much of the germ removed. Therefore, 100% whole wheat bread may not be whole grain - however, it remains a nutritious choice that provides dietary fibre not found in white bread. Products labelled with the words “multigrain,” and “organic” are not necessarily whole grain - the flour or grains in the products may be made with or consist of little or no whole grains.

Look at some product labels to see the differences between those labelled as whole wheat vs. multigrain or organic. Discuss with your group.

**Dig it!**

**Think about this builder and the activities you did ...**

Review the Skills Checklist on page 15. What skills have you developed? Do you need more practice?

**Record it ...**

Head back to page 15 and fill in the Learned portion of the Dream It! Section. Record what you have learned in your Portfolio Page.

**Apply it ...**

Explain how you will use the knowledge and skills developed in this builder in your everyday life.

**What’s next?**

The final builder will help you use your pizza baking skills for fundraising for a charity. You will also explore the many steps that need to happen before a pizza can be eaten.
Skill Builder 6: Charity Pie

Skills Checklist

- Understand the route of pizza to the plate
- Use pizza as fundraising

Dream it!

Background for Leaders

One in nine jobs in Canada is dependent upon agriculture. The ingredients for a pizza pass through many different hands before they end up in a mouth.

Important Words

Help members define the following words and look for members using this vocabulary in their discussions. Ask for sentences that "show you know." When members construct novel sentences they confirm their understanding of a new word. Have members use as many terms per sentence to show that connections are useful. Members can also create impromptu speeches using these terms.

<table>
<thead>
<tr>
<th>Charity</th>
<th>An institution, organization, or fund established to help the needy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fundraising</td>
<td>The act or process of raising funds, as for non-profit organizations</td>
</tr>
</tbody>
</table>

Age Considerations

- Ages 10-12

Thinking Ahead

- What will you discuss with members? Gather observations and think of examples that will help support your discussion.

Preparing for Success

- Linking back to the Skills Checklist, help members identify how they will know they have been successful in learning from this builder. Discuss what success in these activities might look like, sound like, or feel like.

Activating Strategies

- Discuss what fundraising and charity mean to the members. If they could give money to anything what would it be? Why are people philanthropists?
- Choose a cause and then create some type of plan to fundraise for it using pizza baking skills. This could be selling slices of pizza, whole pizzas, serving pizza, teaching a pizza making class or any other idea. Date, place, time, and who does what should be included in the plan. The results will be filled in after the event. This could be feelings about how the event went or the monetary amount raised.
**Do it!**

**Pizza Path**

**Time Required:** 20 minutes

**Equipment/Supplies**
- Pen, pencil

**Instructions**
Have members connect the picture to the words that correctly describe the person's job. The path is correct for the pictures from the top of the page to the bottom.

**Answers**

Farmer

Hi! I'm the person who grows the wheat which makes the crust for your pizza treat.

Miller

I take wheat kernels which is a must and grind it into the flour for the crust.

Vegetable Grower

Tomatoes, onions, peppers, mushrooms and more, I make sure that all of these get to the store.

Milk Inspector

Once the milk is on the truck and driven away from the farm, I make sure it is safe and will do you no harm.

Cheese Maker

I work long days and sometimes into the night to make sure your mozzarella cheese is just right.

Butcher

I have salami, pepperoni, ham, and bacon in my store for the pizza you are making.

Delivery Person

If you order your pizza and wait a few minutes I will bring it as fast as I can within the speed limits.

Chef

I take all the ingredients and put it together to make you the best tasting pizza ever.
**Thank A Farmer**

**Time Required:** 20 minutes

**Equipment/Supplies** (depends upon what the members choose)
- Pens, pencils, markers, crayons, thank you cards
- Pizzas

**Instructions**

Have members decide upon a way to thank a farmer for providing food. It could be any type of farmer (vegetable, fruit, grain, beef, pork, poultry, bison, emu, …). If you are not aware of any local farmers, you may wish to ask at your MAFRI Go office, check out commodity groups and associations, or use the search engine with the name or your town and agriculture or farm. This website might be useful: http://100milemanitoba.org/

The thanking can be done through a thank you card, delivering a pizza, or any other method the members wish to choose.

**A Good Deed**

**Time Required:** 20 minutes

**Equipment/Supplies**
- Photo of the member at the charity fundraiser

**Instructions**

Members need to affix a picture of themselves participating at the charity fundraiser.

**Dig it!**

Have members fill out the results of their charity fundraiser. How did it feel? Would they do it again? Why do they think it was a success or failure? Were any steps missing in the plan that need to be remembered for next time? How much money was raised?

Proceed through the following steps with the members:

**Thinking about this builder and the activities…**
Review the skills checklist. What skills have you developed? Do you need more practice? What skills did you use to make this project a success?

**Record it . . .**
Discuss what you have learned with your leader so that the information can be recorded on your portfolio page.

**Apply it . . .**
How would you explain to others the steps you need to take to have a successful project?

Congratulations! You have managed to complete the Discovering Pizza book.
Members will now begin to work on the Showcase Challenge. Have a great achievement!
The members could not have done it without you.
Skill Builder 6: Charity Pie

Andy Says....
Have you ever wanted to be a philanthropist? A philanthropist is someone who makes every effort to improve the well being of society. In this builder, you will use your pizza abilities to help out someone else by contributing in some way to your community.

SKILLS CHECKLIST
- Know the route of pizza to the plate
- Use pizza to build community

Dream It!

“Hands to Larger Service”
It can feel really empowering to use your skills to help others. Sometimes people give time or money to charities because they believe the work they do makes a difference or because they have been personally affected by the cause. This is all part of building and contributing to your community. “Hands to Larger Service”? What would you like to do to support an organization or group? You could: organize a pizza fundraiser with a local business, make a pizza meal for a day care, group of seniors or for a local soup kitchen, provide the meal for a 4-H club meeting. What other ideas do you have? Create a plan with your fellow members to get your new pizza skills to use. Complete “The Results” box until the Dig It! section.

<table>
<thead>
<tr>
<th>The Plan</th>
<th>Why We Chose This Cause</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Who:

The Results

Andy’s Fun Facts...
- In Hong Kong, China, pizza delivery times are most influenced by elevators.
- It can take longer to travel vertically than horizontally as so many people live in high rises and elevators can be very congested during peak hours.

In the Member Manual
In the Member Manual

Do it!

Pizza Path

Before you get the ingredients for a pizza, they pass through many different steps. Match the people with their job description.

Grain Farmer

Once the milk is on the truck and driven away from the farm, I make sure it is safe and will do you no harm.

Milk Inspector

I work long days and sometimes into the night to make sure your mozzarella cheese is just right.

Cheese Maker

If you order your pizza and wait a few minutes I will bring it as fast as I can within the speed limits.

Butcher

I have salami, pepperoni, ham, and bacon in my store for the pizza you are making.

Chef

I take wheat kernels which is a must and grind it into the flour for the crust.

Miller

Hi! I'm the person who grows the wheat which makes the crust for your pizza treat.

Vegetable Grower

Tomatoes, onions, peppers, mushrooms and more. I make sure that all of these get to the store.

Delicious Person

I take all the ingredients and put it together to make you the best tasting pizza ever.

More Eats!

Do you want to know more about these people? Check out: http://www.gov.mb.ca/agriculture/food/pizzapizzazz/

Thank a Farmer

In 9 jobs in Canada depend on agriculture. Farmers just begin the process of getting food on your table. How could you thank a farmer? Write an article for the local newspaper! Send a thank you note! Bake them a pizza! Buy them flowers! Fill in the blanks below.

I thanked __________________________.

I thanked them by __________________________.

Dig it!

Insert a photo of your “My Hands to Larger Service” activity. In this picture, I am __________________________.

I want you to notice __________________________.

Go back to the Dream It! section and fill in the results of your “My Hands to Larger Service” activity. How did it go? Was your plan thorough enough? Did it make you feel good? What were the results?

What’s next?

The showcase challenge and My Portfolio Page are all that you have remaining to complete this project. You are now a pizza pro - from the crust to the sauce to the toppings, you can make it all. Congratulations!
Showcase Challenge

Have members use their member project books to help them in organizing what they have learned. The form of presentation can vary according to the wishes of the leaders and member’s ability. Information could be presented in many forms, some of which are: posters, pamphlets, written reports, speeches, computer presentations, displays, etc. Suggestions are listed on the Showcase Challenge page at the back of the member workbook. The best results are almost always obtained when members are allowed to present their information in the style of their choice.

In the Member Manual

Showcase Challenge

*Bringing it all together!*

Now that you have finished this project, it is time to think about how you will share your experiences and knowledge with others. You may put your new skills to work by helping at a community event or at your club Achievement or teaching others about your topic. The goal of the Showcase Challenge is to help highlight your new skills and help you understand how you can use them. It can be an opportunity to receive feedback from others on your project. So go back through your manual and find some highlights of your learning (what you are proud of!) and think about how you will “showcase” it.

**Dream It!**

*Here are some Showcase Challenge Suggestions:*

- Demonstrate something you made or learned about
- Act out a play
- Teach a class
- Use your new skills to help with the Club Achievement plans
- Make a poster or display
- Make a video or slideshow
- Organize “Pizzalympics”
- Or come up with your own idea. It is up to you and your leader!

**My Showcase Challenge Plan**

My showcase idea: ____________________________________________

__________________________________________

What materials and resources do I need? ____________________________________________

__________________________________________

Who do I need to help me? ____________________________________________

__________________________________________

When do I need to have things done by? ____________________________________________

__________________________________________
**Do It!**

Insert or attach your finished product or a photo of you sharing your skills in your Showcase Challenge.

---

**Dig It!**

Now that you have showcased your project skills:
- How did your Showcase Challenge go?

- What would you do differently next time?

- How will you use your new skills in the future? *(in different situations?)*
Portfolio Page

Once members have completed all the builders they will have a lot of information recorded in their manuals. These are products of their learning. As a final project activity, members and leaders will pull together all this learning in completing the portfolio page in the Member Manual. There is a skills chart that lists the skills members are expected to complete by the end of the project. Leaders must indicate how they know the member was successful at a particular skill. Leaders will find evidence if they think about what they have observed members doing, what discussions they have had with members, and what members have produced. If leaders think that members need to go back and improve on any skill, this chart helps them clarify what needs to be done.

My 4-H Portfolio Page

Name: ___________________ Date: ____________ Year in 4-H: _______
Club: ___________ Hours Spent on 4-H: _______ (Project and Other 4-H Activities)

Discovering Pizza Project Skills Chart
To be completed by the leader and the member based on observations and conversations throughout the project.

<table>
<thead>
<tr>
<th>Skill Builder</th>
<th>Members will be able to…</th>
<th>We know this because…</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Each Skill Builder had a Skills Checklist which identified the skill you will learn.</td>
<td>Identify activities completed and record observations and information from discussions about activities.</td>
</tr>
</tbody>
</table>
| 1             | • Describe the food groups in a pizza  
                • Make pizza dough from scratch | |
| 2             | • Explain the history and varieties of pizza  
                • Know how to flavour using herbs  
                • Create a new style of pizza | |
| 3             | • Make a pizza from scratch  
                • Identify healthy choices for dough recipes | |
| 4             | • Make nutritious choices for pizzas | |
| 5             | • Design a complete pizza meal  
                • Create a vegetarian pizza option | |
| 6             | • Understand the route of pizza to the plate  
                • Use pizza as community building | |
| Showcase & Portfolio | • Explain success in using the skills listed above | |

Additional Comments/Activities:

Leader Point of Praise!

I am most impressed by…

I acknowledge that the member has completed the 4-H project requirements.

Leader’s Signature: ____________________________
Above and Beyond!

In addition to project skills, 4-H also increases skills in meeting management, communications, leadership, community involvement through participation in club, area, or provincial 4-H events or activities. List below any activities you participated in this year in 4-H.

(Some examples include Executive Positions Held, Workshops, Communication, Community Service, Rally, Bonsiels, Conferences, Judging, Camps, Trips, Awards, Representation to Area or Provincial Councils, etc)

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

**Feel Free to add additional pages that include awards, certificates, new clippings, photos or other items that describe your 4-H involvement.**

Member Point of Pride!

What I learned...

What I need to improve on...

What I want others to notice...

Member’s Signature: ____________________________

Point of Praise! Another’s perspective on your achievements in 4-H.

(community professionals, MAFRI staff, 4-H club head leaders, 4-H Ambassadors, friends of 4-H)

I am most impressed by...

I believe that you have learned...

In the future I encourage you to...

Signature: ____________________________
**4-H Achievement**

4-H Achievement is... a 4-H club celebration when members have completed their projects. Achievements are planned by the club to give recognition to members and leaders for their accomplishments in their 4-H projects and club activities.

A 4-H Achievement can take many different formats: from choosing a theme, to member project displays, to members using their new skills for the event (entertainment, food, decorating, photographer, etc.), to members presenting their project to the whole group, the options are endless and open to the creativity of the members and leaders in each club!

Clubs may also plan their Achievement to promote 4-H to the community or to recognize sponsors and others who have helped the club.

Members and leaders - be sure to check your project books for the project completion requirements, so you will be ready for your club’s Achievement celebration!

If you have any questions, comments or suggestions for this or other 4-H projects contact:

**Manitoba 4-H Projects**  
Manitoba Agriculture Food and Rural Initiatives  
1129 Queens Avenue  
Brandon, MB R7A 1L9  

Email: 4h@gov.mb.ca  
Phone: 204-726-6613  
Fax: 204-726-6260

This manual is for educational use only and is not intended as professional advice.

For more information about 4-H and the many 4-H opportunities available please visit

http://www.gov.mb.ca/agriculture/4-h/
What is 4-H?

4-H is an international youth organization involving more than 7 million members in 80 countries around the world.

In Canada, 4-H began in 1913 in Roland, Manitoba as a community-based organization dedicated to growth and development of rural youth. Today’s 4-H program reaches both farm and non-farm youth across Canada. The motto of “Learn to Do by Doing” is embodied in the program, as 4-H focuses on skill development as well as personal development of life skills such as communications, leadership and citizenship.

4-H Motto

“Learn To Do by Doing”

4-H Pledge

I pledge,
My HEAD to clearer thinking,
My HEART to greater loyalty,
My HANDS to greater service,
My HEALTH to better living,
For my club, my community, and my country.

4-H Quality Equation Principles

Quality People
- Promote responsibility, respect, trust, honesty, fairness, sportsmanship, citizenship, teamwork and caring.

Quality Experiences
- Provide members with personal development and skill development experiences.

Quality Projects
- Promote and value quality effort.
- Promote high quality, safe food production within industry standards.

Manitoba 4-H project material is developed by
Manitoba Agriculture, Food and Rural Initiatives (MAFRI)