



4-H Ontario

[www.4-hontario.ca](http://www.4-hontario.ca)

## 4-H ONTARIO PROJECT



**Pizza**

**LEADER RESOURCE**



## **The 4-H Pledge**

I pledge my Head to clearer thinking,  
my Heart to greater loyalty,  
my Hands to larger service,  
my Health to better living,  
for my club, my community and my country.

## **The 4-H Motto**

Learn To Do By Doing

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# INTRODUCTION

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## Welcome to 4-H Ontario's 'Pizza Project!'

One of the most popular dishes in the modern world is without a doubt, pizza! Naturally, different cultures and local cuisines have played a big part in the creation of a wide variety of pizza types. While many food chains made pizza using their "fast food" mentality, the original recipes for home and restaurant made pizza still represents one of the healthiest food on the today's market.

### Objectives

1. To learn how to safely prepare and cook pizza
2. To learn how to prepare a meal with proper sanitary practices
3. To understand how quick and economical it is to make pizza
4. To learn how to make pizza healthy
5. To learn about the culture and history of pizza
6. To learn about a variety of different types of pizzas
7. To learn how to accommodate various dietary restrictions when making pizza

### How to Use This Manual

4-H Ontario's Pizza project is made up of 3 parts:

#### 1. The Reference Book:

The reference book is laid out into 6 meetings:

Meeting 1 – Pizza Basics - History & Legends of Pizza

Meeting 2 – Pizza Can Be Nutritious!

Meeting 3 – Non-traditional Pizza

Meeting 4 – International Pizza

Meeting 5 – What if I Can't Eat Regular Pizza?

Meeting 6 – Pizza Side Dishes & Extras

Each meeting has been broken down into an Introduction with Sample Meeting agendas, References and Resources, Topic Information and Activities.

**Sample Meeting Agendas:** are at the beginning of each meeting. The agendas give suggestions for topic information, activities, recipes and judging and/or communications activities along with suggested times for each section. These are only suggestions

– you will know your group best and will know the skill and attention level of your members. There is more topic information and activities than what can be completed in a two hour meeting. Be creative!

Activities: should be used in combination with the discussion of topic information to teach members in a hands-on, interactive learning environment.

## **2. The Record Book**

This booklet is designed to make it easier for members to record information throughout the club. Members are to record their expectations and goals for the project in addition to contact information, meeting dates, roll calls and records of recipes made at the meetings and at home. Print or photocopy pages from the Reference Book that you think will benefit the members either as a resource or an activity. Answers for the Activity Pages can be found at the back of the Record Book.

The Record Book should be given to each member at the beginning of the first meeting. Ask members to keep it in a binder or duotang so they can add to it easily.

Go through the Record Book with the members and explain the charts and forms. Encourage them to use their Record Books at every meeting and record as much information as possible. As an added incentive, a prize could be given at the end of the project for the best Record Book.

## **3. The Recipe Book**

This booklet includes several recipe options, divided by meeting. You are encouraged to try one or more of the recipes with the members at each meeting to give a hands-on, guided experience in preparing a recipe. Each recipe provides information on ingredients needed, directions, preparation and cooking/baking times and the yield of the recipe (number of servings).

## **Planning a Meeting**

Plan your meetings well. Review all the information well in advance so you are prepared and ready to cook up a storm!

### ***Before Each Meeting:***

- Read the topic information and activities and photocopy any relevant resources for the members' Record Books.
- Be familiar with the topic information for each meeting. Think of imaginative ways to present the information to the members. Do not rely on just reading the information out loud. Review available resources, plan the meetings and choose activities and themes that complement the ages and interests of your members. The Record Book contains extra activities that can be used if you need to fill in time or if one of the suggested meeting activities does not suit your group of members.
- Gather any equipment, ingredients and/or resources that will be needed to complete the meeting.

- Each 4-H project must be held over a period of at least 4 separate meetings, totaling a minimum of 12 hours. Typically, 4-H meetings are approximately 120 minutes (2 hours) in length. Before each meeting, create a timeline to ensure that you are providing an adequate amount of instructional time for club completion.

Included on the following page is a Leader's Planning Chart to help with the planning of meetings. In addition to the chart, keep track of what went well and what should be changed next time. That way, each time this project is run, the content of the meetings can be different!

When planning each meeting, a typical 4-H meeting agenda should include the following:

- Welcome & Call to Order
- 4-H Pledge
- Roll Call
- Parliamentary Procedure:
  - Secretary's Report
  - Treasurer's Report (if any)
  - Press Report
  - New Business: local and provincial 4-H activities/opportunities, upcoming club activities
- Meeting content, activities and recipes
- Clean-up
- Social Recreation and/or refreshments
- Adjournment

### ***Judging and Communications:***

Each meeting must include either a judging or public speaking activity.

- Judging gives the members an opportunity to use judging techniques as part of the learning process. Through judging, members learn to evaluate, make decisions and communicate with others. They also develop critical thinking skills, confidence and self-esteem. Many examples are used in this reference book but use your imagination! As long as members are setting criteria and critically thinking about where items fit within that set of criteria, they are learning the basic skills of judging!
- A communications activity has been provided for each meeting but can be included in the Roll Call or social recreation time. These activities do not need to involve the topic of pizza as the outcome is more about understanding the concepts of effective communication.

**Leader Planning Guide:**

Meeting #	Date/Place/ Time	Topics Covered	Activities	Materials Needed

***As a club volunteer your responsibilities are to:***

- Complete the volunteer screening process and to attend a volunteer training session.
- Notify the local Association of the club, arrange a meeting schedule and participate in club meetings, activities and the Achievement program.
- Review the project material in the Reference, Record and Recipe books to familiarize yourself with the information and adapt it to fit your group. Be well organized and teach the material based on your group's age, interest and experience level.
- Organize the club so members gain parliamentary procedure, judging and communication skills.
- Have membership lists completed and submitted along with fee collected (if applicable) by the end of the second meeting.
- Have members fill out a Participant Agreement Form and identify any health concerns. Ensure that all members, leaders and parent helpers know the appropriate actions during any emergency. Check with members for any food allergies or dietary restrictions and plan recipes and snacks accordingly.

***As a club member your responsibilities are to:***

- Participate in at least 2/3 of his/her own club meeting time. Clubs must have a minimum of 12 hours of meeting time.
- Complete the project requirement to the satisfaction of the club leaders.
- Take part in the project Achievement Program.
- Fill in and complete the Record Book.
- Complete any other projects as required by the club leaders.



**I pledge my Head to clearer thinking,  
my Heart to greater loyalty,  
my Hands to larger service  
my Health to better living  
for my club, my community and my country.**





## Glossary of Terms

**Al Dente** - cooked so as to be still firm when bitten into

**Fluting** - to make decorative grooves on the edge of pastry, most often made using fingers

**Mezzaluna** – a moon-shaped, double-handled knife made especially for cutting pizza

**Pizza peel or paddle** - an elongated wooden or metal paddle used to place the pizzas in and remove them from deep ovens

## Additional References and Resources

Alberta Health Services [www.albertahealthservices.ca](http://www.albertahealthservices.ca)

All Recipes [www.allrecipes.com](http://www.allrecipes.com)

Canadian Pizza [www.canadianpizzamag.com](http://www.canadianpizzamag.com)

Conde Nast Traveller [www.cntraveler.com](http://www.cntraveler.com)

Cooking Classy [www.cookingclassy.com](http://www.cookingclassy.com)

Diabetic Living Online [www.diabeticlivingonline.com](http://www.diabeticlivingonline.com)

Diabetes Monitor [www.diabetesmonitor.com](http://www.diabetesmonitor.com)

Ecokids [www.ecokids.ca](http://www.ecokids.ca)

Education.com [www.education.com](http://www.education.com)

Food Allergies <http://foodallergies.about.com>

Food.com [www.food.com](http://www.food.com)

Food Nutrition Facts [http://www.food-nutrition-facts.net/pizza\\_nutrition/pizza\\_nutrition.html](http://www.food-nutrition-facts.net/pizza_nutrition/pizza_nutrition.html)

Guinness World Records [www.guinnessworldrecords.com](http://www.guinnessworldrecords.com)

Health Canada Booklet – Nutrient Value of Some Common Foods [www.hc-sc.gc.ca](http://www.hc-sc.gc.ca)

Health Canadians – Gov't of Canada <http://healthycanadians.gc.ca>

Inspired Taste [www.inspiredtaste.net](http://www.inspiredtaste.net)

Kraft Foods [www.kraftrecipes.com/](http://www.kraftrecipes.com/)

Mayo Clinic [www.mayoclinic.org](http://www.mayoclinic.org)

McMaster University Food Allergy Public Perception Research <https://macsphere.mcmaster.ca/bitstream/11375/10970/1/fulltext.pdf>

My Recipes [www.myrecipes.com](http://www.myrecipes.com)

National Food Service Management Institute <http://nfsmi.org>

Ontario Ministry of Agriculture & Food [www.omafra.gov.on.ca](http://www.omafra.gov.on.ca)

Pampered Chef [www.pamperedchef.ca](http://www.pamperedchef.ca)

Pillsbury [www.pillsbury.com](http://www.pillsbury.com)

Pizza Facts <http://www.pizzafacts.net/>

Pizza Making [www.pizzamaking.com](http://www.pizzamaking.com)

Pizza Tips & Secrets <http://home.comcast.net/~cmptj/pizza/tips.htm>

Tastes from Scratch <http://tastesbetterfromscratch.com>

Taste of Home [www.tasteofhome.com](http://www.tasteofhome.com)

The Food Network [www.foodnetwork.com](http://www.foodnetwork.com)

University of Guelph [www.uoguelph.ca](http://www.uoguelph.ca)

What's Cooking America <http://whatscookingamerica.net>

What's Cooking America – Pizza – History and Legends of Pizza <http://whatscookingamerica.net/History/Pizza/PizzaHistory.htm>

Wilderdom [www.wilderdom.com/games](http://www.wilderdom.com/games)

## MEETING 1: PIZZA BASICS - HISTORY & LEGENDS OF PIZZA

### Objectives:

- Learn the election procedure for establishing an executive.
- Learn about the history and legends of pizza.
- Learn the basics of great pizza making.

### Roll Calls

- What is your favourite kind of pizza?
- What is your reason for wanting to learn more about pizza?
- What is your favourite pizza topping?

### Sample Meeting Agenda – 2 hrs. 35 minutes

Welcome, Call to Order & Pledge		5 min
Roll Call		5 min
Public Speaking/ Judging Activity	Activity #1 – Tomato Toss (Get to Know Each Other Game – instructions found at the end of this meeting)	15 min
Parliamentary Procedure	Elect executive, hand out Record Books and discuss club requirement. Fill out club and member information in Record Books, and have each member fill out their “Member Expectations and Goals” page.	30 min
Topic Information Discussion	Review History of Pizza and The Well Stocked Kitchen. Review Kitchen Safety.	20 min
Topic Information Discussion	Review Making The Dough, Topping the Pizza, Baking the Pizza and Cutting the Pizza  <b>NOTE:</b> this information could be covered in combination with Activity #2	30 min
Activity Related to Topic	Activity #2 – Choose and prepare a recipe(s) from the Meeting #1 listing in the Recipe Book.	40 min
Wrap up, Adjournment & Social Time!		10 min
At Home Challenge	Prepare one of the recipes listed for Meeting #1 and record the results in the Record Book.	

**NOTE:** Depending on the time required to prepare the chosen recipe(s) from the Recipe Book, the activities may need to be reversed on the agenda.

## Electing Your Executive

Elections can be chaired by a youth leader, senior member or club leader. The person chairing the elections is not eligible for any positions.

### Procedure:

1. All positions are declared vacant by the chairperson, who indicates this by saying "I'd like to declare all positions vacant."
2. The group decides on the method of voting (i.e. show of hands, ballot or standing).
3. The chairperson accepts nomination from members for each position being filled. Nominations do not require a seconder. Nominations are closed by motion or declaration by the chairperson.
4. Each member nominated is asked if he/she will stand for the position. Names of members who decline are crossed off.
5. Voting takes place by selected method and majority rules (i.e. member with most votes).
6. Announce the name of the successful member. Offer congratulations and thank all others that ran for the position.
7. If ballots are used, a motion to destroy the ballots is required and voted on.

## Steps in Making a Motion

The motion is a very important key to having good meetings. Motions are a way of introducing topics for discussion and allowing each member to speak and vote. Any member can make a motion.

### Steps in Making a Motion:

1. Address the chairperson (i.e. raise your hand).
2. Wait for the chairperson to acknowledge you.
3. Make the motion: "I move that..."
4. Another person seconds the motion: "I second the motion."
5. Chairperson states the motion.
6. Chairperson calls for discussion of the motion.
7. Chairperson restates the motion.
8. Chairperson calls the vote: "All in favour? Opposed?"
9. Chairperson announces the result of the vote: "Motion carried" or "Motion defeated."

## **Topic Information**

### **History of Pizza**

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.”

The 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.

In one of its many forms, 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.

#### **6th Century B.C.**

At the height of the Persian Empire, it is said that the soldiers of Darius the Great (521-486 B.C.), accustomed to lengthy marches, baked a kind of bread flat upon their shields and then covered it with cheese and dates.

#### **3rd Century B.C.**

Marcus Porcius Cato (234-149 B.C.), also known as Cato the Elder, wrote the first history of Rome. He wrote about “flat rounds of dough dressed with olive oil, herbs, and honey baked on stones.”

#### **1st Century B.C.**

In the translated version of “The Aeneid” written by Virgil (70-19 B.C.), it describes the legendary origin of the Roman nation, describing cakes or circles of bread:

“Beneath a shady tree, the hero spread his table on the turf, with cakes of bread. And, with his chiefs, on forest fruits he fed. They ate and, not without the god’s command. Their homely fare dispatch’d, the hungry band invade their trenchers next, and soon devour, to mend the scanty meal, their cakes of flour. Ascanius this observ’d, and smiling said: “See, we devour the plates on which we fed.”

#### **1st Century A.D.**

Our knowledge of Roman cookery derives mainly from the excavations at Pompeii and from the great cookery book of Marcus Gavius Apicius called “De Re Coquinaria.”

No matter how you slice it, Canadians love pizza! But, it wasn’t invented in Canada. To understand why it looks like it does today, we need to know about the origins of pizza.

## Pizza History

Apicius was a culinary expert and from his writings, he provided us with information on ancient Roman cuisine. It is recorded that so great was Apicius' love of food that he poisoned himself for fear of dying of hunger when his finances fell into disarray. Apicius' book also contains recipes which involve putting a variety of ingredients on a base of bread (a hollowed-out loaf). The recipe uses chicken meat, pine kernels, cheese, garlic, mint, pepper, and oil (all ingredients of the contemporary pizza). The recipe concludes the instruction "insuper nive, et inferes" which means "cool in snow and serve!"

**79 A.D.** - In the ashes after Mount Versuvius erupted and smothered Pompeii on August 24, 79 A.D., evidence was found of a flat flour cake that was baked and widely eaten at that time in Pompeii and nearby Neopolis, The Greek colony that became Naples. Evidence was also found in Pompeii of shops, complete with marble slabs and other tools of the trade, which resemble the conventional pizzeria. The Museo Nazionale at Naples exhibits a statue from Pompeii which because of its stance is called I pizzaiolo.

### 16th Century

1522 - Tomatoes were brought back to Europe from the New World (Peru). Originally they were thought to be poisonous, but later the poorer people of Naples added the new tomatoes to their yeast dough and created the first simple pizza, as we know it. They usually had only flour, olive oil, lard, cheese, and herbs with which to feed their families. All of Italy proclaimed the Neapolitan pies to be the best. At that time, the Tavern of the Cerrigloi was a hangout for the Spanish soldiers of the Viceroy. It is said that they flocked there to feast on the specialty of the house - pizza.

### 17th Century

By the 17th Century, pizza had achieved a local popularity among visitors to Naples who would venture into the poorer sections to taste this peasant dish made by men called "pizzaioli."

### 18th Century

Queen Maria Carolina d'Asburgo Lorena (1752-1814), wife of the King of Naples, Ferdinando IV (1751-1821), had a special oven built in their summer palace of Capodimonte so that their chef could serve pizzas to herself and to her guests.

### 19th Century

**1889** - Umberto I (1844-1900), King of Italy, and his wife, Queen Margherita di Savoia (1851-1926), in Naples on holiday, called to their palace the most popular of the pizzaioli (pizza chef), Raffaele Esposito, to taste his specialties. He prepared three kinds of pizzas: one with pork fat, cheese, and basil; one with garlic, oil, and tomatoes; and another with mozzarella, basil, and tomatoes (in the colors of the Italian flag). The Queen liked the last kind of pizza so much that she sent to the pizzaiolo a letter to thank him saying, "I assure you that the three kinds of pizza you have prepared were very delicious." Raffaele Esposito dedicated his specialty to the Queen and called it "Pizza Margherita." This pizza set the standard by which today's pizza evolved as well as firmly established Naples as the pizza capitol of the world.

In the late 19th century, pizza was sold in the streets in Naples at breakfast, lunch, and dinner. It was cut from a large tray that had been cooked in the baker's oven and had a simple topping of mushrooms and anchovies. As pizza became more popular, stalls were set up where the dough was shaped as customers ordered. Various toppings were invented. The stalls soon developed into the pizzeria, an open-air place for people to congregate, eat, drink, and talk.

Pizza migrated to America with the Italians in the latter half of the 19th century. Pizza was introduced to Chicago by a peddler who walked up and down Taylor Street with a metal washtub of pizzas on his head, crying his wares at two cents a chew. This was the traditional way pizza used to be sold in Naples, in copper cylindrical drums with false bottoms that were packed with charcoal from the oven to keep the pizzas hot. The name of the pizzeria was embossed on the drum.

## 20th Century

**NOTE:** For many people, especially among the Italian-American population, the first American pizzas were known as Tomato Pie. Even in the present 21st century, present-day tomato pie is most commonly found in the Northeastern United States, especially in Italian bakeries in central New York. Tomato pies are built the opposite of pizza pies - first the cheese, then the toppings, and then the sauce.

**1905** - Gennaro Lombardi claims to have opened the first United States Pizzeria in New York City at 53 1/2 Spring Street. Lombardo is now known as America's "Patriaca della Pizza." It wasn't until the early 1930s that he added tables and chairs and sold spaghetti as well.

**1912** - Joe Papa opened Papa's Tomato Pies on South Clinton Avenue in 1912, at age 17. He had emigrated from Naples during the prior decade and settled in Trenton in the burgeoning Italian neighborhood of Chambersburg. Before launching his own restaurant, he worked at Joe's Tomato Pies

**1943** - A pizza with a flaky crust that rises an inch or more above the plate and surrounds deep piles of toppings. It is said that this pizza was created by Ike Sewell at his bar and grill called Pizzeria Uno.

**1945** - With the stationing of American soldiers in Italy during World War II (1941-1945) came a growing appreciation of pizza. When the soldiers returned from war, they brought with them a taste for pizza.

**1948** - The first commercial pizza-pie mix, "Roman Pizza Mix," was produced in Worcester, Massachusetts by Frank A. Fiorello.

**1950's** - It wasn't until the 1950s that Americans really started noticing pizza. Celebrities of Italian origin, such as Jerry Colonna, Frank Sinatra, Jimmy Durante, and baseball star Joe DiMaggio all devoured pizzas. It is also said that the line from the song by famous singer, Dean Martin; "When the moon hits your eye like a big pizza pie, that amore" set America singing and eating pizzas.

**1957** - Frozen pizzas were introduced and found in local grocery stores. The first was marketed by the Celentano Brothers. Pizza soon became the most popular of all frozen food.



## 21st Century

December 9, 2009 - The European Union established a ruling to protect Naples' Neapolitan pizzas. The EU's ruling said Neapolitan pizza was now part of Europe's food heritage, and that all pizzerias aspiring to supply and make the real Neapolitan pizzas must comply to strict traditional standards regarding ingredients and preparation that include using only San Marzano tomatoes and fresh buffalo mozzarella cheese. This protect status will enable producers to not only boast about their exclusivity, but also charge a premium for the pizza.

## The Well Stocked Pizza Kitchen

There is nothing more frustrating when beginning to prepare a recipe than to discover an ingredient or two missing from your kitchen. The smart pizza maker always insures a full stock of a wide variety of ingredients is on hand to make the experience of home pizza making more enjoyable and successful.

The following is a basic list of ingredients and kitchen accessories to support most of your pizza preparation and baking needs.

### ***Sauce Ingredients:***

Butter  
Tomato puree  
Olive Oil  
Salt  
Garlic  
Black Pepper  
Yellow Onions  
Whole Oregano  
Whole Italian Tomatoes  
Basil

### ***Dough Ingredients:***

Water (100°F to 120°F)  
Sugar  
Active Dry Yeast  
Salt  
Olive Oil  
White Flour

\*\*Flour that is used in baking comes mainly from wheat, although it can be milled from corn, rice, nuts, legumes, and some fruits

### **FUN FACT**

Hawaiian pizza is a Canadian creation. Sam Panopoulos, who opened the Satellite Restaurant on King Street in downtown Chatham, Ontario in 1962, came up with the idea for the Hawaiian pizza.

Source: Village Voice newspaper, New York



and vegetables. The type of flour of flour used is vital for getting the product right. Different types of flour are suited to different items and all flours are different you cannot switch from one type to another without consequences that could ruin the recipe. To achieve success in baking, it is important to know what the right flour is for the job.

Explore other options for types of flour in recipes that call for white flour. Many flours can be used in combination with white flour to achieve a great crust that is healthier and may have a slightly different flavour.

Flours such as whole wheat, soy, rye, quinoa, rice, oat, corn, buckwheat and barley can be used in combination with white flour. Visit Meeting #3 for a variety of wheat choices, which ones are best for pizza crust and in what proportions the flour should be used.

### ***Herbs, Spices and Seasonings:***

Salt  
Black Pepper  
Sugar  
Oregano  
Basil  
Sage  
Savory  
Marjoram  
Thyme  
Rosemary

### ***Basic Toppings:***

Pepperoni  
Mushrooms  
Italian Sausage  
Green Peppers  
Onions  
Ham  
Pineapple  
Shredded Mozzarella Cheese

## **Making The Pizza Dough**

### **Basic Rising Crust**

The wholesome activity of pizza dough making has been played out in kitchens across the planet for century after century. This magical transformation combines the most common of natural ingredients, through an age old process, into healthful, tasteful and universally appealing food which can literally be considered to be the staff of life.

Making your own pizza dough by hand is, at the same time, the most challenging and the most satisfying of culinary experiences. It is an art that can be mastered, with practice. Homemade pizza dough, “from scratch,” is without a doubt the single most defining factor that differentiates a great pizza from any other pizza that you will ever have. And, the personal gratification that comes from successfully making pizza at

home for yourself, your family and your friends is unparalleled.

Using the Basic Pizza Crust recipe from the Recipe Book, the recipe will make enough pizza dough for one 12" (30cm) pizza. The recipe is a good place to start if you've never hand-made dough before and it's not too large a portion to work with at one time.

No special machinery is required, except your hands. You will however, need to have a large mixing bowl, a measuring cup, measuring spoons, a large whisk or wooden mixing spoon and some plastic wrap at the ready before your start, along with the dough ingredients.

You may also want to have a dish cloth, dish towel or paper towels handy as well. You will quickly find that once you start making pizza dough by hand that it is a challenge and an unnecessary interruption to have to stop mid-process in order to go looking for needed supplies.

### **Panning the Prepared Pizza Dough**

To "pan" pizza dough, first rub or brush the inner cooking surface of a 12" (30cm) round pizza pan with a thin layer (about 15mL (1 tbsp.)) of olive oil.

Place the prepared dough ball on a lightly flour tabletop. Sprinkle a little flour on top of the dough and begin flattening out the ball with your hands until it is about 2.5cm (1") thick, forming as circular a shape as possible.

NOTE: When kneading dough, try using cornmeal in place of flour.

At this point, try either of the following methods:

#### ***Rolling Pin Method***

1. With a rolling pin, roll out a circular sheet of dough, about ¼" to 3/8" thick, about 14" to 15" in diameter.
2. Lightly dust your tabletop or a large cutting board with flour. Place your dough portion in the centre of the tabletop and dust the top of the dough with a sprinkling of flour, as necessary, to keep it from sticking to the rolling pin.
3. Rolling from the centre outward, press the pin to the top, the bottom, to the left and to the right. Repeat this process several times as the dough begins to stretch outward. You will find that its elasticity tends to want to draw it back into its original shape. This is normal. Be patient and persistent.
4. Lift the dough sheet up from the tabletop and sprinkle flour underneath it from time to time. Continue rolling until the dough "relaxes," losing its elasticity and eventually maintaining the prescribed thickness and diameter.
5. Place the "sheeted" circle of dough down in the centre of the baking pan. The edges of the dough will droop over the edge of the pan. Starting from the centre of the dough, draw the dough evenly out to the edge or wall of the pan, letting out any air trapped between the dough and the pan. The dough will conform to the shape of the baking pan.

6. Trim the excess dough away from the outer edge of the pan with a dough knife. With your thumb, press the dough edge inward around the pan edge, “fluting” it as you go.

### ***Hand Pressing Method***

1. Place the flattened portion of dough in the centre of the pan. With palms and fingers, begin pressing the dough outward to the edge of the baking pan.
2. Make every effort to maintain a consistent thickness of dough on the bottom of the pan. Continue to stretch and press the dough until its outer edge meets and begins to bunch up against the inner wall or curled edge of the baking pan.
3. Finish the crust edge by “fluting” it with your thumb or a fork.



### ***Pizza Dough Making Tips***

1. At this point, some pizza bakers will price several series of small holes around the flattened dough sheet using a fork, going all the way through to the baking pan surface to prevent the dough from “bubbling.” This is often caused when air builds up and is trapped underneath the dough as the pizza bakes.

Now that you have a perfectly shaped “panned” sheet of dough you are ready for sauce, cheese and toppings. Or, after covering it or tightly wrapping it, you can store it in the freezer for use in the future or in the refrigerator for prep and baking later in the day.

### ***Topping the Pizza***

Using one of the pizza sauce recipes from the Recipe Booklet, or using a prepared pizza sauce, ladle the sauce onto the middle of the panned sheet of dough. Spread the sauce evenly over the surface of the dough. Spoon the sauce out to the edge of the dough sheet, leaving an ‘un-sauced’ area about 2cm to 2.5cm (3/4” to 1”) of the dough crust.

The exposed “margin” of dough around the circumference of the pizza will allow the crust to rise and crisp more quickly than the covered dough, creating the classic, puffed up edge of the pizza.





The sauce, melted cheese and toppings will be better retained on top of the pizza as well with the puffed up edge to hold them all in.

Next, layer part of your cheese over the sauce, creating an evenly distributed bed of cheese on which to arrange your toppings. Reserve about a third of the cheese that the recipe call for to use on the top of the pizza.

From this point on, let your eyes, nose, creativity and taste buds take over. Naturally, the more kinds of toppings you use, the smaller the quantities of each you'll want to add to the pizza. Some toppings (fresh vegetables, certain cheeses and fatty meats) are higher in moisture and fat content. Those liquids will be released quickly during the baking process. If the liquid contents are too high and do not evaporate during baking, puddling and pooling will occur in the middle, bottom of the pizza. This often results in preventing the dough bottom from fully cooking through and causing a soggy pizza centre.

## Baking the Pizza

If this is the first time cooking a pizza in your oven, you should test the oven for the best combination of rack placement, baking temperature and baking time. Other variables that come into play are the quantities of the toppings used as well as their fat and water content. Electric ovens tend to bake hotter, dryer and faster than gas ovens, so make your adjustments accordingly. Make adjustments to your baking process one at a time until you've found the perfect balance of rack position, temperature and baking time to suit your oven.

Start by placing an oven rack in the middle of the oven. Turn on the oven, setting the temperature to 230°C (450°F). When the oven is at that temperature, place a pizza in the centre of the middle rack to allow for maximum air circulation around the pan. A simple cheese and pepperoni pizza will bake evenly and thoroughly in a 230°C (450°F) oven on the middle rack in only 12 minutes.

ALWAYS use hot mitts when handling hot pans in and around the oven. Also, a wooden pizza peel with a short handle is terrific for handling hot pans in the home kitchen. Open the oven, slide the rack and pan out for access and remove the pizza to a counter-top.

Signs to look for that the pizza is ready are:

1. The cheese has melted on top and is beginning to brown
2. The crust edge has browned, from a medium to a golden brown
3. Carefully lift the edge of the pizza to inspect its bottom. The bottom dough should be evenly browned.



If these signs are evident, your pizza is done!

The following are suggested baking recommendations for various pan and pizza styles using the 30cm (12") diameter pan system:

**Pan Type – Pizza Style – Rack Position – Oven Temp. – Baking Time**

- Thin Crust, Plain Cheese, Middle Rack, 230°C (450°F), 10 minutes
- Classic, Cheese/Pepperoni, Middle Rack, 230°C (450°F), 12 minutes
- Classic, Deluxe (7 item), Middle Rack, 190°C (375°F), 20 minutes
- Deep-Dish, Meat-Lovers, Bottom Rack, 180°C (350°F), 30 minutes

**Cutting the Pizza**

DO NOT CUT or SLICE THE PIZZA WHILE STILL IN THE PAN! Once your pizza is done, remove it from the oven and place it on a cooling rack, still in the pan, to cool and “set” for a couple of minutes.

**CAUTION:** The melted cheese retains heat longer than the other contents and can cause severe burns to hands, lips and tongue if handled too soon!

Once the pizza has set and cooled, the pizza will easily slide out of the pan. Securely grab an edge of the crust and slide the whole pizza on to a cutting board.

Cut the pizza with a large bread knife, serrated knife, pizza wheel or mezzaluna. A 30cm (12") pizza will yield 8 equal slices. A 22.5cm (9") pizza is usually cut into 6 slices. A 40cm (16") pizza can be cut in 10 slices. Now, you can return the pizza slices

to the pan for serving or place the slices on individual serving plates. Always use a plastic spatula or other plastic serving utensil when removing/serving pizza from the pans. Metal utensils may leave unnecessary marks or scars on the baking surface.



## BEFORE THE NEXT MEETING

Try one of these activities at home.

1. What is your family's favourite type of pizza? Does everyone in your family like the same toppings? Using the chart provided in the Record Book, survey your family and record their favourite toppings and the toppings they really don't like.

### AND/OR

2. Go through your kitchen with an adult in your household. Using the information in meeting #1, review what items you have for making pizza and which items you may need to purchase or borrow from someone.





## DIGGING DEEPER

### For Senior Members

Review the following and be prepared at the next meeting to demonstrate to the group one or more of the following tips for making great pizza!

### Tips for Great Pizza

Great homemade pizza is not difficult to make. It can be as simple or as complex as you want to make it, but the easiest approach is to work with fresh and simple ingredients. However you make it, three basic factors apply for good pizza:

1. Yeast dough – the first major secret of great homemade pizza
2. Correct Construction – crust, sauce, cheese and toppings
3. High temperature – bake at 260°C (500°F)

### Equipment Tips

1. Pizza Stone – the second major secret of great homemade pizza, the pizza stone provides a uniformly heated surface which absorbs moisture from the pizza and makes the crust crispy. Place on the bottom oven rack and pre-heat the oven one hour before baking pizza directly on the stone (if the top gets done before the bottom, you will need to move the stone to a lower shelf before the next round. If the bottom gets crispy before the cheese caramelizes, then you will need to raise the stone for subsequent baking).
2. Oven Thermometer – check your oven temperature.
3. Pizza Screen – second choice and an alternative to a pizza stone. The screen also does not trap moisture in the pizza crust. Use it on the middle oven rack.
4. Wooden Pizza Peel – essential for placing pizza directly on the stone. Use coarse cornmeal or flour spread on the peel under the dough to aid in sliding the pizza off the peel and onto the stone.
5. Pizza Cutter Wheel – the larger the better.
6. Pizza Pans – all sizes are available at local restaurant supply stores.
7. Pizza oven – your oven at home will do a wonderful job of cooking pizza but pizza ovens (available at many hardware or department stores) will do a superior job.

### Crust Tips

1. Use all-purpose flour for deep-dish pizza and calzones.
2. Moist dough makes a tender crust.
3. Store individual raw dough portions dusted with flour in re-sealable bags in the refrigerator for up to a week.

4. Store individual raw dough portions dusted with flour in re-sealable bags in the freezer for up to a month. Defrost in the refrigerator.
5. For a thicker crust, let the dough crust rise covered for 30 minutes before adding sauce, cheese and toppings.
6. Bake on a pizza stone or pizza screen for a crispier crust.

***Sauce Tips***

1. Use canned, crushed tomatoes for an authentic sauce.
2. Add fresh oregano, garlic, crushed peppercorn to sauce for added flavour.
3. The intensity (spiciness) of the tomato sauce may be adjusted by the amounts of garlic and crushed peppercorn that are used.
4. To give the sauce more “bite” add Balsamic vinegar.
5. Create oil sauces using extra virgin olive oil, herbs/spices and fresh garlic.

***Cheese Tips***

1. Try different cheeses – Monterey jack, provolone, goat cheese, feta, fontina, gorgonzola.
2. Use whole milk mozzarella. It is smoother melting and richer tasting.
3. Use cheese mixtures. For example, use 2 parts mozzarella, 2 parts Monterey jack and 1 part provolone.

***Toppings Tips***

1. Meat toppings must always be pre-cooked. Never try to use raw hamburger, sausage, chicken, etc. as a topping and expect it to cook with the pizza.
2. Try different herbs.
3. Thoroughly drain any topping that would add moisture to prevent sogginess.
4. Grow your own basil (use fresh off the plant or dried) and oregano (use dried).  
15ml (1tbsp.) fresh chopped herbs = 5mL (1 tsp.) dry herbs
5. Rub dried herbs between fingers to release flavor oils
6. Use extra virgin olive oil (more expensive than virgin but there is a difference)

***Technique Tips***

1. Cool baked pizza on a wire rack for 2 to 3 minutes before cutting to allow cooked cheese to set up and to preserve a crispy crust (steam from the baked pizza would be trapped between the hot pizza and the pan if not set on a wire rack)
2. If assembling pizza ahead, seal the pre-baked crust (5 minutes at 260°C (500°F) after cooling by lightly brushing it with oil to avoid moisture absorption.

3. For homemade frozen pizza, seal the pre-baked crust (5 minutes at 260°C (500°F) after cooling by lightly brushing it with shortening. Add sauce, cheese and toppings and freeze in a re-sealable bag. To bake, place frozen pizza on a pizza screen on the middle rack in a cold oven and set oven at 200°C (400°F). Check at 22 to 24 minutes and remove when the crust is golden brown and cheese is bubbly. Cool on a wire rack for 2 to 3 minutes before cutting it into wedges and serving.

## ACTIVITIES

### Activity #1 – Tomato Toss

If playing outside, a tomato could be used, but if indoors, use a red ball.

Have members stand in a circle. Before starting this game, go around the circle and have everyone say their name.

Then, give the “tomato” (ball) to one person in the circle. Have them say the name of someone and then carefully throw the tomato to them. That person must then say the name of someone else in the group and throw the tomato to them. Once someone has received and thrown the tomato, they cannot be chosen again until everyone in the group has had the tomato at least once.

If someone says a name incorrectly and throws the tomato, the tomato must be returned to the person who threw it who then tries again to get someone’s name correct.

## MEETING 2: PIZZA CAN BE NUTRITIOUS!

### Objectives

- Learn that pizza can be a healthy choice in your diet.
- Learn how to make your pizza a healthy choice.
- Learn how to read a nutrition label.

### Roll Calls

- How many times a week do you eat pizza?
- Name an item on a pizza and which food group it belongs to.
- Name a vegetable that could be put on a pizza.

### *Sample Meeting Agenda – 2 hrs. 10 minutes*

Welcome, Call to Order & Pledge		5 min
Roll Call		5 min
Parliamentary Procedure	Minutes & Business	10 min
Topic Information Discussion	Review Pizza Nutrition and How to Read a Nutrition Label.	20 min
Public Speaking/Judging Activity	Activity #3 - Restaurant Pizza Nutrition worksheet (instructions found at the end of this meeting – worksheet found in the Record Book)	20 min
Activity Related to Topic	Activity #4 – Choose and prepare a recipe(s) from the Meeting #2 listing in the Recipe Book.	60 min
Wrap up, Adjournment & Social Time!		10 min
At Home Challenge	Prepare one of the recipes listed for Meeting #2 and record the results in the Record Book.	

**NOTE:** Depending on the time required to prepare the chosen recipe(s) from the Recipe Book, the activities may need to be reversed on the agenda.

## **Topic Information**

### **Pizza Nutrition**

A lot of people might criticize you for eating pizza – nutrition and pizza can't possibly go hand in hand is what they would have you believe. The truth is, pizza has lots of good, nutritional ingredients and if you pick and choose your toppings properly, pizza can be a healthy meal. The key thought, is not to go to your local pizza eatery and order a large pizza with three kinds of meat and cheese and sit there and eat the whole thing – or even three or four slices. Having a healthy pizza meal is going to take more work than that.

For instance, if you regularly eat at national or well-known pizza restaurants, you will be able to find out the exact nutritional content in one slice by asking for their brochure, which gives nutritional values of each item they sell. Or, you can visit their website to find out the same information. Nutritional content labels are usually based on one slice so keep that in mind as well when you study the pizza. Nutrition contents can be found on frozen pizzas as well.

Pizza products can be a good source of protein, complex carbohydrates (primarily starches) and various vitamins and minerals. The lowest fat and sodium content in each slice should be priority in making a decision about what kind of pizza to buy. Protein is a good nutrient and cheese and meat-toppings make pizza a high protein bonanza. Don't worry about getting too much protein. But when the protein is from cheese and meat, you will need to adjust the amounts of each to get the best choices for fat and salt.

One healthy choice in this department is making your pizza with half the cheese or with light cheese. Or, try going without cheese altogether. Then take a look at the meat content. When choosing healthy pizza, stay away from pizzas with names like meat-lovers, multi-meat, extra meat or meat combo. Ham is a good choice as is chicken for pizza. Nutrition is based on how lean the meat is that you pick.

When determining what is healthy for the crust on your pizza – nutrition here will mean not choosing anything in the area of thick crust or stuffed crust. Go for thin crust. Also, go with the lowest carbohydrate level you can manage to find. The fact that pizzas are usually low in simple sugars and higher in complex carbohydrates (starches) is good as is the fact that they use oil-based shortenings which reduces any cholesterol levels.

The most perfect crust choice is whole wheat, thin crust and these are getting easier to find both in restaurants and stores.

The tomato sauce is one of the healthiest pizza ingredients and contains a good supply of vitamin A. Tomatoes also contain lycopene which is known to be a powerful antioxidant. Lycopene helps in the fight against many different types of cancer. Studies have shown that people who eat pizza at least once a week have a smaller chance to get ill from several forms of cancer (mouth, stomach, lung, prostate and more).

#### **FUN FACT**

October is National Pizza Month.

Source: [www.canadianpizzamag.com](http://www.canadianpizzamag.com)

Other important nutrients found in pizza are thiamin, riboflavin and niacin. Cheese is a good source of calcium.



Try to make your pizza have the lowest calorie content you can manage. Adding fruit and vegetable toppings to your pizza is a great way to add taste to your pizza as well as adding to your vitamin content without adding too many calories. Good choices for fruit and vegetable toppings include spinach, pineapple, mushrooms, black olives, onions, garlic, peppers (green are good but red give you more vitamins) and broccoli.

People who are on a diet have found that vegetable pizza, or one made from olives, olive oil and fish, represent one of the best dietary meals on earth. They can be

made in such a way to have great taste and still have low amounts of fat and cholesterol that are normally associated with meals with meat and cheese.

So, if you have decided to eat healthy, the good news is you don't need to take pizza out of your diet. Make some alternative choices for the cheese, crust and toppings and don't over-eat. Usually one or two slices at a meal is all you will need. Add a salad to make the meal even healthier. And, ultimately, the perfect way to get exactly the ingredients you want in your pizza is to make it homemade. Watch out for the sodium

content. Always go for the lowest sodium and fat content you can find and the lowest number of overall calories. That means to aim for 200 to 250 calories per slice. You will still get a tasty pizza and you will be healthier for it!

#### FUN FACT

In 2013, 95% of Canadians reported eating pizza at least once a month.

Source:  
Rich Insights, Pizza Edition 2013

#### How to Read a Nutrition (Food) Label

In order to decide which pizza is the best choice, you will need to know how to read a nutrition label. Nutrition labels are also sometimes referred to as Food Labels.

Food labels are found on packaged foods. They provide information on nutritional value, ingredients and nutrition claims. Reading these labels will help you make healthier food choices.

#### Nutrition Facts Valeur nutritive

Per 1/6 pizza (101 g) / Pour 1/6 pizza (101 g)

Amount Teneur	% Daily Value % valeur quotidienne
<b>Calories / Calories 240</b>	
<b>Fat / Lipides 10 g</b>	<b>15 %</b>
Saturated / saturés 3.5 g + Trans / trans 0.2 g	<b>19 %</b>
<b>Cholesterol / Cholestérol 20 mg</b>	
<b>Sodium / Sodium 580 mg</b>	<b>24 %</b>
<b>Carbohydrate / Glucides 27 g</b>	<b>9 %</b>
Fibre / Fibres 2 g	<b>8 %</b>
Sugars / Sucres 3 g	
<b>Protein / Protéines 10 g</b>	
Vitamin A / Vitamine A	2 %
Vitamin C / Vitamine C	4 %
Calcium / Calcium	10 %
Iron / Fer	15 %



***Nutrition Facts table***

The Nutrition Facts table gives you information on how much of the 13 core nutrients and calories are in a serving of food. Use this information and % Daily Value to choose and compare food products for a healthier you.

***Serving Size***

An amount of food – also known as the serving size – is listed at the top of the Nutrition Facts table. All of the information in the nutrition Facts table is based on the amount of food listed. The serving size is not necessarily the suggested portion of food you should eat. It is a reference amount for the calories and nutrients on the Nutrition Facts table.

The serving size on the Nutrition Facts table helps you:

- Understand how much of a nutrient you're eating
- Determine how many calories you're eating
- Compare the nutrition information between two food products

***Ingredient List***

Food companies have to put the ingredient list on packaged foods, from most to least. This means that the food contains more of the ingredients at the beginning of the list and less of the ingredients at the end of the list. This is determined by the weight of each ingredient.

Reading the ingredient list is both important and useful. It can help you:

- Check if a food product has a certain ingredient
- Avoid ingredients in case of a food allergy or intolerance



## BEFORE THE NEXT MEETING

Try one of the following activities:

1. Design your ideal pizza using only vegetables and fruit. Record the recipe in your Record Book. If you are adventurous, try making the pizza and record both your comments on how it tasted as well as comments from friends and family.

OR

2. Using the Internet, research the nutritional data of pizzas from each pizza restaurant you can think of and determine which restaurant serves the overall healthiest pizza. Try to determine which restaurants come in second and third. Record your findings in your Record Book.

## DIGGING DEEPER

### For Senior Members

Does your school cafeteria provide pizza as an option for lunch at least once a month? If not, try and find out why.

If your school cafeteria does offer pizza as an option, where do they get the pizza from? Is it made onsite? Is it from a restaurant? Is it purchased frozen from a food supply company?

In today's society, with obesity on the rise, young people should be asking more about the food they are eating. Pizza for a meal is a great option, provided that healthy options are being chosen when making the pizza.

If the pizza that is being served at your cafeteria is from a restaurant or a food supply company, try and find out what the nutritional content of that pizza is. If the nutritional content shows that the pizza is high in fat and/or carbohydrates, ask about healthier options for pizza and other foods that could be served on the menu. If the people that operate the cafeteria are not interested in discussing options, then maybe it's time to think about different choices for lunch other than what is offered in the cafeteria.

## ACTIVITIES

### Activity #3 – Restaurant Pizza Nutrition

Provide each 4-H member with a 'Pizza Nutrition' worksheet (found in the Record Book). Using the Internet, nutritional brochures that have been collected from a pizza restaurant(s) in your area and/or the packaging from frozen pizzas, fill out the nutritional information required on the worksheet.



## MEETING 3: NON-TRADITIONAL PIZZA

### Objectives

- Learn about types of pizza that are non-traditional
- Learn about different types of flour that can be used in traditional pizza recipes
- Improve judging skills by judging various pizza related items
- Learn to think outside of the box when it comes to creating various pizzas

### Roll Calls

- Suggest how pizza could be included in breakfast.
- What is the strangest ingredient you've ever had on pizza?
- Name an ingredient you would not want on your pizza.

### Sample Meeting Agenda – 2 hrs. 5 minutes

Welcome, Call to Order & Pledge		5 min
Roll Call		5 min
Parliamentary Procedure	Minutes & Business	10 min
Topic Information Discussion	Discuss Non-Traditional Pizzas	15 min
Activity Related to Topic	Activity #5 - Choose and prepare a recipe(s) from the Meeting #3 listing in the Recipe Book.	60 min
Public Speaking/Judging Activity	Activity #6 – Judging (instructions found at the end of this meeting. Judging Card found in the Record Book).	20 min
Wrap up, Adjournment & Social Time!		10 min
At Home Challenge	Prepare one of the recipes listed for Meeting #3 and record the results in the Record Book.	

**NOTE:** Depending on the time required to prepare the chosen recipe(s) from the Recipe Book, the activities may need to be reversed on the agenda.

## Topic Information

Although it is one of the world's simplest and most popular foods, pizza is actually quite difficult to define.

Not all pizzas are created with the traditional tomato sauce, cheese, meat and vegetable toppings. And, not all pizzas are served hot. Over the years, many variations of pizza have been created including breakfast, fruit, vegetable, candy, cookie, cake and ice cream pizzas just to name a few. The possibilities are endless!

Bake shops, caterers and restaurants now sell and serve a wide variety of choices.

## Using a Variety of Different Flours when Making Pizza Crust

When making pizza, many recipes call for white flour but a variety of flours can be used to make for a healthier pizza with a slightly different taste. But, in most cases white flour cannot be substituted completely and must be used in combination with another type of flour.

**All-Purpose Flour** is a blend of hard and soft wheat. It may be bleached or unbleached. It is usually translated as “plain flour” or “white flour.” All-Purpose Flour has 8% to 11% protein (gluten). All-purpose flour is one of the most commonly used and readily accessible flour in Canada. Flour that is bleached naturally as it ages is labeled “unbleached,” while chemically treated flour is labeled “bleached.” Bleached flour has less protein than unbleached. Bleached is best for pie crusts, cookies, quick breads, pancakes and waffles. Use unbleached flour for yeast breads, Danish pastry, puff pastry, strudel, Yorkshire pudding, éclairs, cream puffs and popovers.



*Veggie Pizza (pg. 54 in the Pizza Recipe Book)*

**Almond Flour** (Gluten Free) - Just a touch of this flour (about 1/4 of the flour mixture) is all you need to add moistness, a little binding, light almond flavor, and density to baked goods. It is especially good in pastry crusts, cookies and quick breads.

**Amaranth Flour** (Gluten Free) - Amaranth is an ancient grain and the word amaranth means “everlasting” in Greek. Amaranth contains more protein than any other gluten-free grain and more protein than wheat flour. You can substitute up to 20 to 25% of the flour used in your recipe with this flour.

**Barley Flour** (Low Gluten) is a non-wheat flour made from grinding whole barley. It is a popular alternative to wheat flour because, unlike many non-wheat flours, it contains some gluten. This flour has a mild but very slightly nutty taste. This flour also has slightly fewer calories and more than four times the fiber of all-purpose. By using barley flour instead of all-purpose flour, you triple your fiber intake. When making yeast bread recipes (such as many pizza crust recipes), there is not enough gluten in barley flour to properly develop the bread, and it is recommended swapping only one quarter



of all-purpose flour for barley flour in yeast bread recipes. It is great in quick breads and pancakes.

**Bread Flour** is white flour made from hard, high-protein wheat. It has more gluten strength and protein content than all-purpose flour. It is unbleached and sometimes conditioned with ascorbic acid, which increases volume and creates better texture. Bread flour has 12% to 14% protein (gluten). This is the best choice for yeast products.

**Buckwheat Flour** (Gluten Free) - It is packed with nutrients, readily available, easy to work with and has a nice nutty flavor.

**Cake Flour** is a fine-textured, soft-wheat flour with a high starch content. It has the lowest protein content of any wheat flour, 8% to 10% protein (gluten). It is chlorinated (a bleaching process which leaves the flour slightly acidic), sets a cake faster and distributes fat more evenly through the batter to improve texture. When you're making baked goods with a high ratio of sugar to flour, this flour will be better able to hold its rise and will be less liable to collapse. This flour is excellent for baking fine-textured cakes with greater volume and is used in some quick breads, muffins and cookies. If you cannot find cake flour, substitute bleached all-purpose flour, but subtract 30mL (2 tablespoons) of flour for each cup used in the recipe.

**Chickpea Flour** (Gluten Free) is also known as garbanzo flour, gram flour, and besan and is made from dried chickpeas ground into a flour. Used in many countries, it is a staple ingredient in Indian, Pakistan and Nepal cuisines. You can use this flour as an egg substitute in vegan cookery. You can substitute up to half the amount of all-purpose flour called for in a recipe with chickpea flour. It is also very easy to make your own chickpea flour by processing dried chickpeas in your blender or food processor.

**Coconut flour** (Gluten Free) - It is ground from dried, defatted coconut meat. It is high in fiber and low in digestible carbohydrates. It has a very light coconut flavor. Coconut flour can replace up to 20% of the flour in a recipe, but you will need to add an equal amount of liquid (oil) to compensate as this flour soaks up the liquid. You will also need more eggs - usually double the eggs (or more).

**Corn Flour** (Gluten Free) - It is a powdery flour made of finely-ground cornmeal and is milled from the whole kernel. Corn flour comes in yellow and white and is used for breading and in combination with other flours in baked goods. White corn flour is used as a filler, binder and thickener in cookie, pastry and meat industries.

**Instant Flour** is granular and formulated to dissolve quickly in hot or cold liquids. It will not work as a substitute for all-purpose flour. It is used primarily in sauces and gravies.

**Millet Flour** (Gluten Free) - Millet is one of the oldest foods known and possibly the first cereal grain to be used for domestic purposes. Millet flour is most commonly used in desserts and sweet breads largely because of the grain's naturally sweet flavor. When substituting for wheat flour, it is usually best to start with about a 3-to-1 ratio of wheat to millet.

**Oat Flour** (Gluten Free) - This flour tends to make baked goods more moist than wheat flour. It is made from ground whole oats. It is very easy to make your own oat flour. Just place the dried oats in your blender and grind. 1 1/4 cups rolled oats makes 1 cup oat flour.

**Organic Flour** is used in the same way as regular flour.

**Pastry Flour** also is made with soft wheat and falls somewhere between all-purpose and cake flour in terms of protein content and baking properties. Pastry flour (also known as cookie flour) has a protein (gluten) of 9% to 10%. Use pastry flour for making biscuits, pie crusts, brownies, cookies and quick breads. Pastry flour makes a tender but crumbly pastry. Do not use it for yeast breads (such as pizza crust). Pastry flour (both whole-wheat and regular) is not readily available at supermarkets, but you can find it at specialty stores and online. You can try to mimic it by using a two to one ratio of all-purpose flour to cake flour.

**Pumpernickel Flour** (Low Gluten) - This flour is made from coarsely-ground whole rye berries. It is the rye equivalent of whole wheat flour. Pumpernickel breads tends to be dense, dark and strongly flavored.

**Quinoa Flour** (Gluten Free) is one of the most nutritious grain flour available. Quinoa is considered a grass/seed and not a grain. This powerful little seed is a great addition to any diet, but is an ideal solution for those following a gluten free, vegan or vegetarian diet. You can substitute this flour for 1/2 of the all-purpose flour in many recipes or completely replace wheat flour in cakes and cookie recipes. This is an expensive flour to purchase.

**Rice Flour** (Gluten Free) - Rice flour is a form of flour made from finely milled rice. This flour can be made from either white or brown rice and can be used interchangeably. White rice flour is lighter, milder and easier to digest than wheat flour. Some people find white rice flour to be slightly gritty but many find it preferable to bean flours. It is great as a thickening in sauces. You can also make your own rice flour. Just place rice of your choice (white or brown) in your blender and process until it forms a powder.

**Rye Flours** (Low Gluten) - There are light, medium and dark coloured varieties of rye flour. The color of the flour depends on how much of the bran has been removed through the milling process. Rye bread may be a better choice than wheat bread for persons with diabetes. Because rye flour is low in gluten, a general rule suggests substituting 1/3 of the amount of rye with wheat flour to ensure the bread will rise properly.

**Self-Rising Flour**, sometimes referred to as phosphated flour, is a low-protein flour with salt and leavening (baking powder) already added. It is most often recommended for biscuits and some quick breads, but never for yeast breads (like pizza crust). Exact formulas, including the type of baking powder used, vary by manufacturer. Recipes that call for self-rising flour do not call for the addition of salt or leavening agents.

**Semolina Flour** is used in making pasta and Italian puddings. It is made from durum wheat, the hardest type of wheat grown. The flour is highest in gluten. When other grains, such as rice or corn, are similarly ground, they are referred to as "semolina" with the grain's name added, i.e., "corn semolina" or "rice semolina." There are difference grades.

**Sorghum Flour** (Gluten Free) is a very good substitute for wheat flour in many recipes, especially if combined with other, more denser, flours.

**Soy Flour** (Gluten Free) is made from ground soy beans. Full-fat and low-fat soy flours work best in sweet, rich, baked goods like cookies, soft yeast breads and quick breads. Soy flour can be substituted approximately 10% to 30% of the wheat or rye flour in your recipes.

**Spelt Flour** (Low Gluten) is one of the most popular and widely available of alternative baking flours. The full name of spelt is *Triticum aestivum* var. *spelta*. *Triticum* denotes that it is of the wheat family but the fats are more soluble and the nutritional content is higher than traditional wheat flour. People who have issues with wheat digestion but who are not on a gluten-free diet, will often do well with spelt. Spelt flour has a nutty and slightly sweet flavor similar to that of whole wheat flour. It does contain gluten and is a popular substitute for wheat in baked goods.

**Tapioca Flour** (Gluten Free) - It is also known as tapioca starch. It is a starchy white flour with a slight sweet flavor. This flour is made from the starch extracted from the South American cassava plant. This flour helps bind gluten-free recipes plus improves the texture of baked goods. This flour is also an ideal thickening agent. Use tapioca for thickening a wide variety of baked goods, sauces, and desserts. This flour can also be used to replace corn starch (use 30mL (2 tablespoons) tapioca flour for each 15mL (1 tablespoon) corn starch).

**Teff Flour** (Gluten Free) - Teff is an ancient and intriguing grain, tiny in size yet packed with nutrition. It is simple to prepare and similar to millet or quinoa in cooking. Teff is a great addition to your diet for nutrition, taste and variety. It is higher in protein than wheat and has a high concentration of a wide variety of nutrients, including calcium, thiamin and iron. Since the grains are so small, the bulk of the grain is germ and brand. It is very high in fiber and is thought to benefit people with diabetes as it helps control blood sugar levels. Teff is excellent in making dark breads and rye breads.

**Whole-Wheat Flour** (Low Gluten) is also called graham flour. It is made from the whole kernel of wheat and is higher in dietary fiber and overall nutrient content than white flours. It does not have as high a gluten level, so it is often mixed with all-purpose or bread flour when making yeast breads.

## BEFORE THE NEXT MEETING

Try one of the following activities at home.

1. Create your own variation of a pizza. Let your imagination run wild! Or research on the Internet or look through cookbooks to find a non-traditional pizza recipe that isn't listed in the Recipe Book. Make sure that it is something that you yourself will want to eat. Record your recipe in your Record Book. If you are adventurous, try making your recipe. Take a picture of the finished product and put the picture and any comments from friends or family in your Record Book as well.

### AND/OR

2. Visit a local bake shop and/or grocery store and see if they offer any types of non-traditional pizzas or if it's possible to special order any of these treats. Record your findings in your Record Book.



*Making Pizza Pinwheels*

## **DIGGING DEEPER**

### **For Senior Members**

Prepare one of the following types of pizza. Document the steps by either taking pictures or bring dough to the next meeting to demonstrate how to make either a double-crust or a calzone style pizza. The recipes can be found in the Recipe Book. These recipes can be a little tricky so don't hesitate to ask for help.

#### **Making a Double Crust Style Pizza**

For everyone who loves pizza crust, here's the perfect pan for you. Take pizza to the next level when you add a second crust on top. Take classic pizza toppings and sandwich them between layers of tender, thin pizza crust. Double delicious!

#### **Making a Calzone Style Pizza**

Calzones are characteristically made from pizza dough and stuffed with meats, cheeses and vegetables. Traditional calzone dough consists of flour, yeast, olive oil, water and salt.

As a rule, calzones are usually stuffed with cheeses such as ricotta, mozzarella, Parmesan, Provolone or a type of regional cheese. The dough is folded into a half-moon shape, then sealed with an egg wash mixture or formed into a spherical shape and baked or fried. After cooking, calzones might be seved with marinara sauce or topped with a combination of garlic, olive oil and parsley.

## ACTIVITIES

### Activity #6 – Judging

**Instructions** – Depending on what type of pizza item you are judging, you will want to discuss some criteria the members should consider:

- Crust - colour, texture, doneness
- Sauce - appeal, taste (depends on the size of the group), coverage on pizza
- Toppings - variety, appearance
- Equipment - cleanliness, ease of use, practicality

Lay out four similar food items so everyone can see them. Using the Judging Card, found in the Record Book, have members judge pizza related items based, writing down their placing of the items and their reasons for their placings.

Have senior and/or experienced members give oral reasons for their choices.

**Materials/Resources** – Put together a class of different pizza items. This activity could be repeated with various pizza related items. Some suggestions include:

1. Cook a pizza and cut a slice from it at varying times in the cooking cycle, being sure to let one overcook as well. This would be a way of teaching members when to judge when a pizza is done.
2. Have similar pizzas cooked by different individuals and determine a judging criteria of what makes a good pizza with the club.
3. Judge a class of pizza pans or pizza cutters and determine what makes a good one.

**Discussion/Comments** - Discuss the importance of judging in regards to assessing quality.

A set of reasons is meant to compare the differences in the items that were judged. Your reasons explain why you placed the class the way you did. The most important reasons should be first and the least important last. Make sure you aren't just describing the articles. You must compare them. Try to have a least two or three points for each comparison. This will ensure that you stay within any time limits. As you gain confidence and experience, you may wish to add more reasons.

## MEETING 4: REGIONAL & INTERNATIONAL PIZZA

### Objectives

- Learn about types of pizza that are served outside of Canada
- Learn about types of pizza that are served outside of North America
- Try making a kind of pizza that members haven't had before

### Roll Calls

- What is the strangest ingredient you've ever had on pizza?
- Name an ingredient you would not want on your pizza
- Have you ever had pizza when travelling in another country? If so, what toppings did it have?

### Sample Meeting Agenda – 2 hrs. 20 minutes

Welcome, Call to Order & Pledge		5 min
Roll Call		5 min
Parliamentary Procedure	Minutes & Business	10 min
Public Speaking/Judging Activity	Activity #7 – What Does Food Mean To You? (instructions found at the end of this meeting)	20 min
Topic Information Discussion	Discuss Regional and International Pizzas and Pizza Trivia	15 min
Public Speaking/Judging Activity	Activity #8 - World Pizza (instructions found at the end of this meeting)	15 min
Activity Relating to Topic	Activity #9 - Choose and prepare a recipe(s) from the Meeting #4 listing in the Recipe Book.	60 min
Wrap up, Adjournment & Social Time!		10 min
At Home Challenge	Prepare one of the recipes listed for Meeting #4 and record the results in the Record Book.	

**NOTE:** Depending on the time required to prepare the chosen recipe(s) from the Recipe Book, the activities may need to be reversed on the agenda.



## Topic Information



*Chicago Style Thin-Crust Pizza*

Many cities, regions and countries have their own style of pizza. Remember, pizza is any meal that is cooked on bread. Here's a quick look at what toppings are put on pizza in other cities and countries.

*Chicago-Style Deep Dish* – Who ever heard of putting the cheese on the crust and the sauce on the top of the pizza? This is a style that Chicago pizzerias have become known for and it produces a surprisingly different tasting end product!

*New York-Style* – This pizza is characterized by having a puffy, bread-like, outer crust which quickly tapers down to a very thin, crisp middle. The crust is usually dark brown and somewhat charred in appearance. No pans are used in the cooking process. The pizza is assembled on a pizza peel and then placed directly on the oven deck to cook.

*Amsterdam* – Our Dutch friends have cross-bred pizza with hot dogs. A popular pizza order here is called the “Double Dutch.” It includes double cheese, double onions and double beef.

*Australia* – Throw another shrimp on the barbie pizza, mate. And maybe some pineapple too.

*Brazil* – Hard boiled eggs and peas on your pizza pie? Why not?

*China* – Many pizzas here have a thousand island dressing base. Also, if you like eel sushi, maybe you'll like eel pizza. Maybe.....

*Costa Rica* – They love coconut. If pineapple is great on pizza, why not coconut?

*France* – A popular combination is known as the Flambee and has bacon, onions and fresh cream. There is also a dessert version with apples, cinnamon and sweet liqueur.

*Georgia* – Khachapuri, a traditional Georgian dish, looks like a calzone crossed with an egg sandwich. The dough is stuffed with cheese then topped with an egg and some butter.

*Germany* – Breakfast and pizza at once is a good idea. A sunny side up egg on your pizza is a great way to wake up. Also popular are asparagus pizzas.

*Hungary* – Called ‘Langos’, Hungarian pizza is a piece of deep-fried flat bread that is topped with sour cream, meat or garlic butter.

*India* – Pickled ginger and lamb seems a little strange on pizza, but it's loved by

everyone there. Chicken tikka pizza is also popular and it sounds amazing.

*Italy - Naples* – When most people think of pizza, they probably think of Neopolitan-style pies with their thin crusts topped with tomatoes and mozzarella cheese. Sometimes a few basil leaves are added on top.

*Italy – Rome* – Pizza Bianca, is a “white pizza” that is famous on the streets and in the pizzerias of Rome. It is a dressed-down version of the Neopolitan and features neither of pizza’s two traditional toppings – cheese and tomato sauce. Instead it features thin dough drizzled with olive oil and coarse salt which is then baked and sliced before serving.

*Italy – Sicily* – In Sicily, the pie is topped simply with some cheese, olive oil and breadcrumbs before being baked and is called a Sfincione (Sicilian Pizza).

*Korea* – Sweet potato pizza is fantastic.

*Lebanon* – Manakish, is typically served cold and uses flatbread typically topped with za’atar, a spice mixture containing thyme, sesame seeds and sumac. It might also have cheese or meat on it.

*Japan* – They love squid and Mayo Jaga (a combination of mayonnaise, potatoes and bacon). The “Mega Pizza” is loaded with toppings and is served with maple syrup and ketchup on top.

*Pakistan* – Curry is such a popular dish here, of course it’s on pizza!

*Russia* – Mockba (a blend of sardines, tuna, salmon, mackerel and onions) is a popular pizza topper. Also, red herring is quite a popular topping.

*Spain* – The Spanish version of pizza, called ‘Coca’, can include toppings such as egg, fish, vegetables, fruit, meat and cheese.

*Sweden* – Their “Hawaiian” pizza has bananas, ham and curry powder on it.

*Turkey* – Known as ‘Lahmacun’ which means ‘meat and dough’, this pizza is dough topped with either minced beef or lamb. Other common ingredients include onion, herbs and tomatoes.

*Venezuela* – Corn and goat cheese are a surprising variation on pizza.

#### FUN FACT

In Scotland, they deep fry pizzas.  
Source: [www.telegraph.co.uk](http://www.telegraph.co.uk)

#### FUN FACT

The biggest pizza commercially available in the world is the Giant Sicilian pizza from Big Mama’s and Papa’s Pizzeria in Los Angeles, California. It is 135cm by 135cm (54 inches by 54 inches) and requires 24 hours notice to have this pizza delivered.  
Source: [www.guinnessworldrecords.com](http://www.guinnessworldrecords.com)

## Pizza Trivia

- The top ten pizza toppings in Canada are:

1. Pepperoni
2. Mozzarella
3. Mushrooms
4. Cheese blend
5. Green peppers
6. Onions
7. Bacon/back bacon
8. Ham
9. Pineapple
10. Italian sausage



Source: [www.canadianpizzamag.com](http://www.canadianpizzamag.com)

- Buying local is becoming more important to consumers. In 2010 and again in 2011, local food topped the Canadian Restaurant and Foodservices Association's Canadian Chef Survey as the top dining trend of the year. There is also a trend toward people looking for more natural and fresh ingredients.
- Kids under 13 years old and adults between the ages of 25 and 24 are Canada's biggest pizza eaters.
- The most pizza boxes held in one person's hands at one time is 70.
- The world's largest round pizza, which also happened to be a gluten-free pizza, was created by five Italian Chefs in 2012. The total weight of the pizza was 23,299kg (51,257 pounds). It took the five chefs over 48 hours baking the dough in over 5000 batches. The 44m (131 foot) pizza contained:
  - 9000kg (19,800 lbs.) of flour
  - 3030kg (10,000 lbs.) of tomato sauce
  - 4000 (8,800 lbs.) of mozzarella cheese
  - 676kg (1,488 lbs.) of margarine
  - 250kg (551 lbs.) of rock salt
  - 91kg (200 lbs.) of lettuce
  - 25kg (55 lbs.) of vinegar

Source: Guinness World Records [www.guinnessworldrecords.com](http://www.guinnessworldrecords.com)

## BEFORE THE NEXT MEETING

Try one of the following activities.

1. Research on the Internet or through cookbooks to find an International Pizza recipe from a country not listed in the Reference Manual. Record the recipe in your Record Book. If you are adventurous, try making the recipe and record the results of what those who ate the pizza thought of it.

### AND/OR

2. Stores and restaurants in Canada are starting to carry a wider variety of pizzas from other countries. When visiting the grocery store or a restaurant, make notes of pizzas that are different than those typically offered in Canada. Record your findings in your Record Book.



*Chicken Alfredo Pizza (pg.20 in the Pizza Recipe Book)*

## DIGGING DEEPER

### For Senior Members

Prepare one of the following types of pizza. Document the steps by either taking pictures or bring dough to the next meeting to demonstrate how to make either a New York or Chicago style pizza. The recipes can be found in the Recipe Book. These recipes can be a little tricky so don't hesitate to ask for help.

#### New York-Style Pizza

The first pizzeria is the U.S., Lombardi's, opened on Spring Street in New York's Little Italy in 1905 and it didn't take long for other *pizzaiolos* to follow suit. The trademark New York-style pizza is its thin, crispy, hand-tossed crust with a puffy, bread-like outer crust, topped with a light tomato sauce and mozzarella cheese.

Because no pizza pans are used in the cooking process, the pizza is usually assembled on a pizza peel and then placed directly on the oven deck to cook.

In order to simulate the deck of a commercial pizza oven, you should purchase a pizza stone (or unglazed quarry tiles) to allow you to cook the pizza without using a pan. The hot stone draws moisture out of the crust which allows it to become crisp on the outside while remaining bread-like on the inside. Pizza stone are widely available and somewhat expensive. Better (and cheaper) are unglazed quarry tiles. Quarry tiles can be found wherever ceramic floor tiles are sold (1cm to 1.25cm (3/8" to 1/2") thick tiles will suffice). If you decide to go with quarry tiles, just make certain that the tiles you choose are unglazed and are made of only natural red clay (i.e. be sure that no harmful chemicals were used in the manufacturing process). Place the stone/tiles on the lowest oven rack.

#### Chicago-Style Deep Dish Pizza

The defining characteristic of Chicago's particular brand of pizza is its crust. Baked in a pan, each pie has a thicker crust that can rise up to 7.5cm (3 inches) high along the edges. Toppings, which often include meat and cheese, are then layered under a chunky tomato sauce.

#### Chicago-Style Stuffed Spinach Pizza

With this pizza, the filling is completely sealed inside a dough shell. Tomatoes and cheese are placed on the top shell during the last few minutes of cooking which allows the top crust to brown before the toppings are added.



## ACTIVITIES

### Activity #7 – What Does Food Mean to You?

Using the worksheet, found in the Record Book, go through the sheet word by word (it is likely best to have a leader (or youth leader) read out each word and have members think about it for a minute) and have members write down the first word that comes to mind. Make sure to have members spread out if possible so they aren't looking at each other's papers.

Once the list is complete, review some of the group's answers and see how one word can evoke a lot of different thoughts and memories.

### Activity #8 – World Pizza

Using the following website link, have each member take the World Pizza test challenge:

[http://www.ecokids.ca/pub/eco\\_info/topics/landuse/world\\_pizza/index.cfm](http://www.ecokids.ca/pub/eco_info/topics/landuse/world_pizza/index.cfm)

Depending on the age of members, leaders may need to assist.





## MEETING 5: WHAT IF I CAN'T EAT REGULAR PIZZA?

### Objectives

- Learn why not everyone can eat regular pizza.
- Learn about different dietary needs that some people have.
- Learn how to make pizza using different ingredients to accommodate dietary needs.

### Roll Calls

- Name one reason someone might not be able to eat regular pizza.
- Name a type of nut that may cause an allergic reaction.
- Name a grain that can be part of a gluten-free diet.

### Sample Meeting Agenda – 2 hrs. 5 minutes

Welcome, Call to Order & Pledge		5 min
Roll Call		5 min
Parliamentary Procedure	Minutes & Business	10 min
Topic Information Discussion	Discuss Food Allergies and Dietary Restrictions	20 min
Public Speaking/Judging Activity	Activity #10 – Managing Food Allergies (instructions found at the end of this meeting)	15 min
Activity Related to Topic	Activity #11 - Choose and prepare a recipe(s) from the Meeting #5 listing in the Recipe Book.	60 min
Wrap up, Adjournment & Social Time!		10 min
At Home Challenge	Prepare one of the recipes listed for Meeting #5 and record the results in the Record Book.	

**NOTE:** Depending on the time required to prepare the chosen recipe(s) from the Recipe Book, the activities may need to be reversed on the agenda.

## **Topic Information**

It's not only important for pizza to look and taste good. It's also important what it does inside your body after you've eaten it. In the past, people with dietary restrictions and allergies may not have been able to enjoy pizza. For some people, they couldn't eat the crust because it contained gluten. For others that were lactose-intolerant, they couldn't have cheese. There are numerous dietary restrictions and allergies that caused people to have to make an alternative choice instead of eating pizza.

There is currently no cure for food allergies so allergic individuals rely on a strict avoidance diet as well as symptomatic treatment of conditions (e.g. using an epi-pen). Eight foods are responsible for more than 90% of food allergies and while some people only suffer these allergies in childhood and outgrow them, some people have the allergies for life. Those eight foods are:

- Peanuts
- Tree nuts (such as almonds, pecans and walnuts)
- Milk
- Eggs
- Soy
- Wheat
- Fish (such as bass, cod and flounder)
- Crustacean shellfish (such as crab, lobster and shrimp)

Because of the many dietary restrictions and allergies today and the fact these seem to be on the increase and that there is now more awareness surrounding these challenges, there are now many alternatives on the market so that everyone is able to enjoy pizza in some format.

### **Gluten Free Diets**

A gluten-free diet is a diet that excludes the protein gluten. Gluten is found in grains such as wheat, barley, rye and a cross between wheat and rye called triticale.

A gluten-free diet is primarily used to treat celiac disease. Gluten causes inflammation in the small intestines of people with celiac disease. Eating a gluten-free diet helps people with celiac disease control their signs and symptoms and prevent complications.

Some people who don't have celiac disease also may have symptoms when they eat gluten, however. This is called non-celiac gluten sensitivity. People with non-celiac gluten sensitivity may benefit from a gluten-free diet. But, people with celiac disease *must* be gluten-free to prevent symptoms and disease-related complications.

### ***Allowed foods:***

Many healthy and delicious foods are naturally gluten-free:

- Beans, seeds and nuts in their natural, unprocessed form
- Fresh eggs
- Fresh meats, fish and poultry (not breaded, batter-coated or marinated)
- Fruits and vegetables
- Most dairy products

It's important to make sure that they are not processed or mixed with gluten-containing grains, additives or preservatives. Many grains and starches can be part of a gluten-free diet such as:

- Amaranth
- Arrowroot
- Buckwheat
- Corn and cornmeal
- Flax
- Gluten-free flours (rice, soy, corn, potato, bean)
- Hominy (corn)
- Millet
- Quinoa
- Rice
- Sorghum
- Soy
- Tapioca
- Teff

Always avoid all food and drinks containing:

- Barley (malt, malt flavouring and malt vinegar are usually made from barley)
- Rye
- Triticale (a cross between wheat and rye)
- Wheat

Avoiding wheat can be challenging because wheat products go by numerous names. Consider the many types of wheat flour on supermarket shelves – bromated, enriched, phosphate, plain and self-rising. Here are other wheat products to avoid:

- Durum flour
- Farina
- Graham flour
- Kamut
- Semolina
- Spelt

Source: <http://www.mayoclinic.org/healthy-living/nutrition-and-healthy-eating/in-depth/gluten-free-diet/art-20048530>

## **Lactose (Dairy Products) Free Diets**

There are various reasons why someone might not have dairy products in their diet. Some may have a lactose intolerance, some may be allergic while for others it is a lifestyle choice.

Lactose is a sugar primarily found in cow's milk that requires the digestive system to break it down into more simple sugars. Lactase is the required enzyme that digests the lactose so that the body can absorb the sugars. If the body doesn't produce enough lactase, the body will not be able to absorb the sugar and will cause inflammation and irritation in the gut.

Some crust recipes contain dairy products so it is always best to check before consuming pizza as to what ingredients have been used when making the crust.

Pizzas can be topped with dairy-free cheese such as soy cheese or rice cheese. But, be aware that milk-free cheeses don't melt quite like dairy-rich cheeses will. Aged cheeses, such as Provolone, tend to have a low lactose content and can be a good option for people who need to minimize lactose in their diets.

### Diabetic Diets

Eating pizza isn't an easy treat for people with diabetes. Not only is it an inconsistent food – it comes in many different sizes and thickness, with different toppings and varieties. But, even more importantly, its effects have a tendency to rise a person's blood sugar level hours after they have eaten pizza.

Unfortunately, the very ingredients that make pizza so delicious often contribute to its challenges. That tasty crust is primarily made of flour – usually white (without any of the fiber of whole grain) – and thus is nearly entirely carbohydrates. Many tomato sauces contain sugar, an additional source of possible blood-sugar-raising carbohydrates. The layer of cheese can also be full of fat, which may slow down digestion and affect sensitivity to insulin – part of the reason pizza may cause blood sugar to spike hours after eating it. The same is true of likely high-fat toppings like pepperoni or sausage. Lastly, most people don't stop at one slice.

Source: <http://diabetes.sanofi.us/dear-diabetes-why-pizza-is-so-difficult/>

So, can a diabetic enjoy pizza? With a few changes, yes they can. The following tips will allow diabetics to still eat pizza:

- *Limit pizza intake and portion size.* Consider trying to eat pizza once or twice a month and limit portions to one or two slices
- *Choose healthier pizza options:*
  - try rounding out the meal with a veggie-filled salad and some fruit
  - choose thin crusts over thick or pan pizzas
  - choose whole wheat pizza crust
  - go light on the cheese and meat choices
  - choose fruits and vegetables such as tomatoes, mushrooms, broccoli, pineapple, onions and/or peppers
- *Make your own pizza.* By making your own pizza, you have more control over the toppings. You can make the dough and tomato sauce yourself (see the Recipe book for recipe ideas) and choose healthy topping options.

#### FUN FACT

There are more than 8000 pizza restaurants across Canada.

Source: [www.canadianpizzamag.com](http://www.canadianpizzamag.com)

Remember, the body's reaction to foods such as pizza varies from person to person. Depending how a person's blood glucose responds to pizza, they may need to adjust portion sizes accordingly. Concerns or questions about including pizza in your diet should be discussed with a doctor or nutritionist who specializes in diabetic nutrition.

Source: <http://www.diabetesmonitor.com/resources/ask-the-expert/can-a-diabetic-eat-pizza.htm>

### **Nut Free Diets**

With a peanut or tree nut allergy, even a tiny amount ingested or inhaled could cause an allergic reaction. Some of the places that nuts are found, such as nut butters and nut bread, are not surprising. Others, like sauces and gravies, might be.

While most pizzas normally do not contain nuts, some fruit pizzas might. If you are allergic to peanuts, you might also need to avoid tree nuts like walnuts and almonds. The same goes if you are allergic to tree nuts. You may need to avoid peanuts. Talk to your doctor to be sure.

Tree nuts include:

- Almonds
- Brazil nuts
- Cashews
- Chestnuts
- Filberts
- Hazelnuts
- Hickory nuts
- Macadamia nuts
- Pecans
- Pine nuts
- Pistachios
- Walnuts

Source: <http://www.webmd.com/allergies/guide/nut-allergy>



## BEFORE THE NEXT MEETING

Try one of the following activities.

1. Conduct a survey among friends and family. Ask if they have any food allergies or food restrictions. If they say yes, find out how long they have had this condition and what foods they can no longer eat. Record your findings on the chart found in the Record Book.

**OR**

2. Make a list of aged cheeses that are low in lactose. Which of these cheeses would be best for using as a pizza topping? Record your findings in your Record Book.



*Tomato & Feta Vegetarian Pizza*

## DIGGING DEEPER

### For Senior Members

Eating at restaurants for someone with a food intolerance, restriction or allergy can be a real challenge. Many restaurants are now offering more options but it is still up to each individual to do their homework before eating out.

Either using the Internet or by visiting pizza restaurants in person, determine what options they have for someone who can't eat traditional pizza. Visit a local grocery store(s) and determine what options they offer. Create a list of available options and try to determine what the best course of action (other than making homemade pizza) would be for someone who is not able to eat traditional because of any of the following reasons:

1. Celiac Disease (require a gluten-free option)
2. Lactose-Intolerant
3. Diabetic

Record your findings in the Record Book and be prepared to present your findings at the next meeting.

## ACTIVITIES

### Activity #10 – Managing Food Allergies

Give each member a Managing Food Allergies worksheet (found in the Record Book). Depending on the group, have members work individually, in pairs or as a group led by the leader (or youth leader) to work through the sheet.

Then, using the Answer Sheets (also found in the Record Book), review and correct the answers on the worksheet.

To help with this activity, if possible, have packaging from some of the food items listed to help members work through the activity sheet.

## MEETING 6: PIZZA SIDE DISHES & EXTRAS

### Objectives

- Discover other dishes that could be served alongside pizza.
- Learn how to prepare and organize activities for hosting a pizza party.
- Prepare for the Achievement Program.

### Roll Calls

- What is one new thing you learned by taking The Pizza Project.
- Name one side dish you could serve when serving pizza.
- Name one benefit to eating healthy pizza.

### Sample Meeting Agenda – 2 hrs. 20 minutes

Welcome, Call to Order & Pledge		5 min
Roll Call		5 min
Parliamentary Procedure	Minutes & Business	10 min
Topic Information Discussion	Discuss hosting a Pizza Party and what is involved.	10 min
Public Speaking/Judging Activity	Activity #12 – choose one or more of the Pizza Party Activities listed in this section to try with the group. Extra activities also appear in the Record Book.	20 min
Topic Information Discussion	Add to the list of activities that could be done at a Pizza Party. Make plans for the Achievement Program.	20 min
Activity Related to Topic	Activity #13 - Choose and prepare a recipe(s) from the Meeting #6 listing in the Recipe Book.	60 min
Wrap up, Adjournment & Social Time!		10 min
At Home Challenge	Get ready for the Achievement Program!	

**NOTE:** Depending on the time required to prepare the chosen recipe(s) from the Recipe Book, the activities may need to be reversed on the agenda.

## **Topic Information**

So, you're thinking of having a pizza party? Great! Throwing your own pizza party is an excellent way to get friends together.



But what are you going to have on your menu besides pizza? The choices are endless. Plan the perfect pizza party by having a variety of food items to choose from that complement your pizza meal. Keep in mind any dietary restrictions of your guests and plan accordingly.

*Pizza Pinwheel (pg.#128 in the Pizza Recipe Book)*

Depending on the type of party, pizzas could be made ahead of time or purchased, or guests could make their own individual pizzas. To do this, the dough should be made ahead of time and the sauce and toppings should be ready to be put onto pizzas so guests don't spend their entire time making pizza.

Depending on the age of guests, activities should also be planned and can have a pizza-related theme. The following activities are suggestions for your next pizza party.

## **Pizza Toss Game**

### ***What You Need:***

- Large sheet of brown cardboard (approx. 60cm across)
- Yellow felt (almost 60cm by 60cm)
- Brown, red and green squares of felt (or other "topping" colours, at least 30cm by 30cm)
- Velcro strips (can be found at craft, fabric or business supply stores)
- Hot glue gun
- Dry beans or rice
- Black permanent marker

### ***Instructions:***

1. To create the pizza target board, cut the large sheet of brown cardboard into a giant circle at least 50cm across. Then, cut out a circle of yellow felt with a diameter that is 5cm less than the circle of cardboard.
2. Glue the circle of felt to the centre of the cardboard. The small portion of brown cardboard visible will appear as the crust of the pizza with the yellow circle inside being the cheesy centre.

3. Use a permanent marker to draw line on the pizza to divide it into slices.
4. Ask 4-H members (or party guests) what kind of toppings the pizza should have. Cut each topping in its shape out of the felt in pairs of two (i.e. for each piece of sausage, cut out two round ovals, a front and back side).
5. Hot glue the matching pieces of felt together around almost every opening, leaving only a small hole to fill each topping with beans. Fill a small amount of beans into each felt topping to add weight to the topping as it is thrown. Once the beans have been added, glue up the hole so that each piece of felt is sealed.
6. When each topping is finished, glue Velcro strips onto the outside of each topping. Put a strip of Velcro on both the front and back of each topping.
7. When each topping is complete, hang the pizza pie up on a wall, or prop it up, and ask participants to stand a few feet away. Have them air to toss their desired toppings onto the pizza.

Challenge participants to see if they can land a topping on each different slice or maybe right in the centre. The objectives of each round can be varied to make the game more or less difficult (i.e. distance from the pizza, areas on the pizza to have pizza toppings lands, etc.)

Source: [www.education.com](http://www.education.com)

## Pizza Game

Have the group form a circle with their chairs facing inward. Have everyone sitting in the circle state the name of a pizza topping. Everyone has to name something different. Tell everyone to remember their pizza topping. Then have someone from the circle volunteer and remove their chair. Hand a towel to the volunteer. They are “it”

“It” must tag any person that is standing up before he/she sits back down in his/her chair. The person who is “it” calls out a pizza topping. Then the person who has that pizza topping has to stand up, state their pizza topping, state a different pizza topping and sit back down in their seat. Then the new pizza topping stands up, states his/her pizza topping and another pizza topping name and so on. These people must say their pizza topping name, another pizza topping name and sit down before the person who is “it” tags them with the towel. If the person gets tagged before he/she sits down, then they are the new person that is it.

The one rule is that the person who is “it” cannot attempt to hurt anybody or throw the towel. If people start memorizing the people with the pizza topping names, then it is time to stop the game.



## Pizza Memory Game

Have the group sit in a circle. The first person starts by saying “My name is \_\_\_\_\_ and my favourite pizza topping is \_\_\_\_\_. The second person then repeats the first person’s name and topping and then states their own name and favourite topping. The third person then states what persons one and two said and then adds their own name and topping. This continues around the circle with the list getting longer each time. When the circle gets back around to the first person, this person must repeat what the entire circle has said to end the game.

## Pizza Dragon

### ***What You Need:***

- Scarf (to be used as a tail)

Divide participants into groups of five to eight players. Players need to line up all facing the same direction. Each player needs to put their hands on the waist of the person in front of them.

The player in the front is the crust of the pizza. The people in the centre are the tomato sauce and the toppings and the last person is the cheese for the top of the pizza. The last person (the cheese) will be given a scarf to make a “dragon tail.”

The object is for the crust of the pizza to reach around to the back of the line to get the cheese for the top of their pizza. But, the cheese has to try and not be caught and the pizza cannot break up – everyone must remain with their hands on the waist of the person in front of them.

## Mine Field

### ***What You Need:***

- Blindfolds (for half of the group)

Participants are grouped in pairs. One person in the pair will wear a blindfold. The other person will be the guide.

Objects need to be scattered on the ground (this can be done indoors or outdoors). These are the “mines” in the mine field.

The object is to guide the blindfolded person through the mine field to retrieve the pizza on the other side of the field. One person will verbally guide his/her partner (the blindfolded person) through the mine field. The guide cannot touch the blindfolded person – they can only give verbal directions.

### Achievement Program Ideas/Suggestions

- Do a pizza making demonstration at a public event, in a mall, at a farmers market or any similar venue.
- Visit a seniors' home and cook a variety of pizzas for the residents.
- Participate in a fall fair. Contact the fair board and ask if they'll include a class for pizza in their 4-H exhibits section. Members will be expected to enter a pizza (or slice) that they've made themselves.
- Make a display about some aspect of pizza. The display should be self-explanatory although a representative from the club should be prepared to give a short commentary (2 to 3 minutes). All club members should contribute to the exhibit. Have the display at fairs, awards nights and any other event that would benefit from learning about 4-H.
- Organize and give a pizza demonstration for another club, Women's Institute, church group, etc.
- Sell pizza as a fundraiser at an event such as a Judging Competition, Go For The Gold competition, etc.

### Special Projects

These projects are done outside of meeting time and are for members interested in doing more – often senior members. It's up to you as the leader to decide if you will require members to complete a Special Project for club completion. Some ideas include:

- Interview a pizza restaurant owner and write a press release for the newspaper.
- Create a unique pizza recipe using non-traditional pizza toppings.
- Create a cost comparison chart of homemade pizza vs. restaurant purchased pizza.
- Create a video showing how to make pizza.

### Tour Ideas

- Visit any one of the following venues:
  - Dairy farm
  - Grocery store
  - Pizza restaurant
  - Cheese factory
  - Milk processing facility
  - Bake Shop
- Have guest speakers attend meetings to supplement the material in the Reference Manual. Speakers could include:
  - Dairy Educator
  - Milk Truck Driver/Grader
  - Pizza Chef
  - Dietician