

FFDC's Signature Pizza At-Home Resource

Approximate Activity Time: 2 hours

Background

If you love pizza... you can thank a Canadian farmer! Almost all the ingredients in this delicious recipe can be grown and raised right here in Canada. Learn about the role Canadian Farmers play in the ingredients, discover some fun food science facts, make easy and delicious dough from scratch, top with your favourite local toppings, and enjoy your creation. What's not to love?

How to use this resource

1. Have students complete the "Pre-Baking Questionnaire" and discuss your answers. Or read over them as a group and have an open discussion.
2. Follow the recipe and begin making your pizza dough
3. Watch the short video on a simple way to knead your dough
<https://www.youtube.com/watch?v=wDk3vxQsFEY>
4. Share the "Fun Food Science Facts" and discuss
5. Roll out your pizza dough onto a parchment lined cookie sheet or pizza pan. Top with your favourite ingredients. Bake your pizza.
6. Share the "Fun Farm Facts" and discuss. Maybe do this while you enjoy your pizza!
7. Complimentary Resources

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FFDC's Signature Homemade Pizza Dough

One recipe fills one 17 inch x 11 inch cookie sheet – enough for ~ 4-5 people

Check out our video for step-by-step instructions: <https://www.youtube.com/watch?v=wDk3vxQsFEY>

Ingredients:

- 3 cups (750 mL) of white flour – *try Prairie Mills Flour from Elie MB for a local flour!*
- 3 tsp (15 mL) fast-action yeast
- ½ tsp (2.5 mL) salt
- 1 cup (250 mL) hand-hot water
- 1 TBSP (15 mL) canola oil plus additional canola oil for coating the dough

Directions:

1. Preheat oven to 350°F.
2. Before cooking anything, always **sanitize your food prep area** (See the “Complimentary Resource” section a guideline on an Easy and Effective Sanitizer) and **wash your hands** for 30 seconds.
3. In a large mixing bowl, combine 1 cup of flour with the yeast and salt. Make a well in the centre of the dry ingredients
4. Add water and oil to the well and slowly mix together until batter is smooth
5. Add 2 remaining cups of flour and mix
6. Knead the dough until smooth and no longer sticky ~15-25 minutes
7. Form dough ball and coat with a thin layer of oil to prevent dough from drying out
8. Cover dough and let rise in a warm place (suggested: on top of preheated oven or in a sunny window) until 2-3x expanded - ~20-30 minutes
9. Roll out dough onto a parchment lined cookie sheet
10. Add sauce and desired toppings
11. Bake for 20-25 minutes until cheese is melted and crust is baked through. Check on the dough at 20 minutes by lifting the base slightly to see if the crust is getting colour. Poke the crust to determine if it is starting to cook.
12. Cut into desired sized pieces (suggested: 3 x 5 for 15 fair sized square slices)

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Suggested Toppings **denotes local*

- Pizza sauce (or substitute your favourite marinara or tomato pasta sauce)
- Bothwell Mozzarella Cheese **Product of New Bothwell, MB*
- Loveday Mushrooms **Product of Winnipeg, MB*
- Maple Leaf Ham **Product of Winnipeg, MB*
- Maple Leaf Bacon **Product of Winnipeg MB*
- Winnipeg Old Country Pizza Pepperoni **Product of Winnipeg, MB*
- Fresh Toppings – onion, peppers, spinach, tomatoes, pineapple – you name it!
- Dried or fresh herbs – basil, oregano, Italian seasoning, etc

Customization Suggestions

- If your crowd is more particular or individual in their flavour profiles, make individual pizzas!
 - Take your large dough and cut it into 3-4 parts
 - Roll those into individual pizza crusts and customize your own way
 - Bake them on cookie sheets, or pizza pans as you normally would
 - Smaller pizza's make take slightly less long to cook all the way through
- If you crowd doesn't like rectangular pizza with square pieces, roll it out into 2 slightly smaller round pizzas on the cookie sheets!
- Brush canola oil infused with garlic and seasoning onto your crust to add some brown colour and crunch

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Fun Food Science Facts – Pizza Edition

1. Gluten

- Gluten is a protein found in certain grain products.
- The kernels of wheat actually have no gluten, but instead two precursor proteins called Glutenin and Gliadin.
- Gluten is formed when Glutenin and Gliadin are mixed (grinding the wheat into flour) and moisture is added (water in dough recipe)
- That's why as soon as you added the water the dough got sticky and eventually got stretchy like a rubber band
- Kneading your dough properly makes gluten stronger and more elastic allowing for gas retention and volume. This means you will have an airy/fluffy dough instead of a dense dough

2. Gluten Window

- A gluten window will form when a dough is fully developed. You can test this by gently stretching dough with your thumbs until it becomes translucent.
- If you can start to see light through the dough without it ripping, you have a fully formed gluten.
- It takes 25+ minutes of good kneading to get a fully formed dough. For a decent pizza dough, you do not need a fully formed gluten window but some really enjoy getting their dough to that level!

3. The common ingredients used in pizza are full of good nutrition and can help in achieving a balanced diet!

- Wheat grown in Canada is full of nutrients, fibre and antioxidants.
- Canola oil is a healthy fat rich in monounsaturated fatty acids and vitamin E
- Tomatoes are high in the antioxidant lycopene
- Canadian raised meat such as chicken, pork and beef, are high in protein, rich in vitamins and iron.
- Canadian dairy is high is rich in calcium, a mineral that our bodies cannot make on its own.
- In a slice of pizza, you are consuming carbohydrates, protein and lipids (fats) all of which are important to a healthy diet. The more veggies you add to your pizza, the more nutrients you are adding!
- Some even say a slice of cold pizza for breakfast is much more balanced than a bowl of sugary cereal as you are also getting protein and fats!

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Fun Farm Facts – Pizza Edition

Thank a farmer for your pizza! Almost every ingredient in this pizza recipe can come from a Canadian farmer! Let's check out some of those connections:

1. Wheat
 - Wheat normally planted in the spring and harvest in the fall
 - However some Manitoba farmers plant “winter wheat” are planted in the fall and harvested in summer or early fall
2. Canola
 - Invented at the University of Manitoba from a plant called rapeseed.
 - Dr. Baldur Stefansson and Dr. Keith Downey worked together to selectively breed out an acid that humans could not digest.
 - Canola stands for “Canadian Oil Low Acid”
 - Manitoban farmers produce 17-18% of Canada's total Canola
 - Canada produces the most Canola in the world
3. Meat Toppings
 - Deli meats often used to top pizzas could be made from meat produces on Manitoba farms
 - Our farmers work very hard to keep their animals safe, healthy and cared for.
 - Not only is it the morally right thing to do, but it is the law. Livestock (animal) farmers MUST follow laws put in place to protect animals and they do a mighty job following those laws.
4. Veggie Toppings and Sauce
 - Canadian and Manitoban Crop farmers grow a surprising amount of vegetables!
 - Tomatoes and Onions are among the most grown in Canada and are great additions to a pizza!
5. Cheese
 - Dairy products like cheese are a product of the hard work of dairy farmers.
 - Manitoba has over 250 dairy farms. Canada has over 10,000 dairy farms!
 - Dairy farmers are livestock farmers and MUST also follow laws put in place to protect animals and they do a mighty job following those laws.
 - It's easy to find Canadian Dairy in the grocery stores. Just look for the Blue Canadian Dairy logo
 - [More info on the Canadian Dairy logo](#)

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Complimentary Resources:

- Canola Eat Well's [DIY Salad Dressing](#)
- Agriculture in the Classroom, Canada's [Team Mustard Activity Book](#)
- [Easy and Effective Countertop Sanitizer Mixture](#)

Outside sources of information:

- Food and Beverage Manitoba <https://foodbeveragemb.ca/membership/meet-our-full-members/>
- The Real Dirt on Farming <http://www.realdirtonfarming.ca/>
- The Canadian Climate Advantage Diet by Manitoba Agri-Health Research Network
- Dairy Farmers of Manitoba <https://www.milk.mb.ca/>
- Dairy Farmers of Canada <https://dairyfarmersofcanada.ca/en/dairy-in-canada>

[Check out all of FFDC's At-Home Resources](#)

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