

Learning Project: Your Pizza Came From A Farm

(Support Materials)

Support Material for: A Pizza as Big as the Sun

A. History of Pizza

It is believed that the Greeks first made pizza in Italy between 730 and 130 B.C. A flat, round bread baked with oils, garlic, herbs, olives and vegetables, covered with cheese was made. A rim of crust around the outside was left to hold onto.



When Italians immigrated to the U.S.A. they brought the pizza idea with them. The first pizzeria was opened in New York City.

B. Pizza crust is made from WHEAT which has gone through many processes before becoming flour.

Farmers plant the small wheat seed in the fall of the year. This is called winter wheat, and it stays in the ground all winter, remaining dormant until spring when it begins to grow again. It is harvested by combines and taken by trucks to be sold.

Wheat plants consist of a root, a stem, long slender leaves and a grain head which has kernels inside. The wheat kernels are used to make flour and the stems are used as bedding for animals.

Wheat is used for many things. We will talk about wheat that is used to make flour. The wheat goes to a flour mill where it is cleaned, ground and other milling processes to become one of the many flours available. (Other grains such as oat and rye are used to make other types of flours).

Bakers like wheat flour because it has a protein called gluten. To make pizza crust; active yeast, warm water and oil are added to the flour. (The oil may be made from other seeds such as soybean, corn, safflower, etc.)

*** Do the wheat seed germination activity.

C. Tomato (pizza) sauce is made from tomatoes that are grown in soil.



Tomatoes were once thought to be poisonous because they belong to the Nightshade family. Toward the middle of the 19th century these untruths were dispelled and the tomato became one of the most popular foods. Tomatoes are really a fruit (because the seeds are inside) although we use it as a vegetable. It is one of the most popular foods grown (onions, potatoes and lettuce rank more popular).



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Tomato seeds require about 80 days developing into mature plants with ripe fruit. (If you are going to plant tomatoes in your garden they have usually been started in a greenhouse to insure they will ripen before frost). There are many types of tomatoes today. They are large and small, red, yellow or orange. Some are grown especially to be made into sauce, such as the paste tomatoes, which contain less water.

Tomatoes, onions, oil, herbs and spices are cooked together to make pizza sauce. A "tomato sauce" cooking project might be fun. Many families have recipes they use, you may want to try several of them and pick your favorite! You could buy "local" ingredients for the sauce at a Farmer's Market and even make your own dough.

- ***You could bring in a large variety of tomatoes and have students classify them.
- ***Ask what other products contain tomatoes? (Ketchup, spaghetti, soups etc.)

D. Cheese is made from cows' milk.

Cheese can also be made from milk of sheep, goats and in other parts of the world from camel, water buffalo, reindeer and horse milk. The most popular type of cheese for pizza begins as milk from cows.

The process of making cheese requires five basic steps after it leaves the cow.

1. The milk is heated, and then culture and rennet are added. This causes the milk solids to stick together forming a soft custard-like substance called curd.



- 2. The curd is then separated from the remaining liquid which is called whey.
- 3. The curd is treated differently for various types of cheese made. Pizza cheese is put into molds and put under pressure so it will hold together.
- 4. The cheese is put in a cool place to ripen. Different cheeses need to ripen in various ways and times.
- 5. Pizza cheese is then packaged, you find it many ways in the grocery store or at a local farm market; whole, shredded, string cheese, and sliced. You can get all your ingredients "locally" and make you own pizza right at home!

E. Pepperoni and sausage come from pigs (hogs).

A mother pig (sow) can have as many as 32 piglets in one year. The piglets drink milk from their mother until they are old enough to eat corn, soybeans and other grains so they grow healthy and strong. Their diet is monitored for good nutrition, with adjustments and additions when needed.

The pigs go to market in five or six months and weigh around 240-250 pounds each. Pigs may be sold at auction where they are purchased by people who use them for various types



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of meat we eat. Each pig is examined by the U.S. Department of Agriculture meat inspectors to make sure they meet every requirement to be sold. When pork is ground into sausage or pepperoni, special seasonings are added to give them the taste we enjoy on our pizza.

F. Mushrooms

There are about 3,300 species of mushrooms throughout the world. Only 3,000 types grow in the U.S. (2,000 are NOT poisonous). Mushrooms lack chlorophyll (the green substance most plants use to make food), but survive mainly by absorbing food material from their surroundings.



Did you know caves make ideal places for mushroom cultivation? This is because they have consistent cool and damp conditions.

G. Peppers and onions

There are numerous types of peppers and onions. Green peppers grow on small bushy plants. Their seeds are inside the pepper so technically they are fruit as tomatoes, but most people think of them as vegetables. Onions grow underground and are called bulbs. The onion has a long green top which can also be eaten. Both products can be grown in gardens or on a larger scale on farms. The choice is yours to make. You can make your own pizza from local ag products from crust to sauce and toppings, or modify that recipe with some purchased pre-made ingredients, or enjoy a pizza made with farm ingredients prepared for you!