Pizza and Pathogens
Lesson 4

**Required Materials**
- Three posters: nation, local and foreign
- Post-Its for students
- Optional video clip: Unrefrigerated foods in truck

**Preparation**
- Prepare three Post-Its for examples in discussion
- Label three posters with different titles of national, local and foreign
- Have web browser ready with optional video loaded

**Introduction**
Ask each student to get out their homework from last night. Explain that foods are generally broken down into local, national and foreign categories. Explain each category further if necessary.

Ask the students what category they think most food comes from. After they have made a prediction, pass each student a Post-It and ask them to write down the food item from their homework on it. They can do more than one if possible.

Let the students come to the board and place them in the write category.

**Discussion**
For the examples, use tomato or something other common vegetable or pizza topping that is easily found in a local setting. Use something like pizza dough for the national one, look in the grocery store and perhaps even bring it to class. Oregano can be used as a foreign sourced pizza ingredient. It is commonly found in pizza sauce.

Begin with local, check the Post-Its after they have placed them on the board. Do any seem odd or out of place? Address answers that are obviously wrong.

First, discuss the local ingredient. Explain that these can be many things, not just vegetables. Explain that even your mom’s jam from blackberries in the backyard is local. Show the students (You can draw on the board) that local food usually has a shorter farm to fork journey. It may even be the backyard to the kitchen table. Or a farmer’s field to a market to your plate.

Ask students if they buy local food. Point out some items on the Local poster if they seem of value to the conversation or it’s depth. Ask the students what some good things about local food are.

Say: Local food sometimes is cheaper for people, since it doesn’t cost money to ship it. Also, less steps of transporting between people might mean less bacteria on the food. Also, many chefs prefer local food because they can use it right at it’s peak, when it tastes the very best.
Extension Idea: Ask a local chef to come discuss this with your class, or even discuss the possibility of starting a small garden at school to taste test different types of food.

**Question**
Then ask which poster seems to have the most? Regardless of the outcome, say that in our country a lot of the food comes from the last two places: national and foreign.

**Discussion**
Use the national example to show students what this may include. Explain where the product came from, the type of transportation it used. Ask the students if it's journey could pose any additional contamination problems?

Ask if the students had ever experienced food left out on the counter for too long? Say that this problem is a similar issue for any food that is perishable (like pizza dough) and must travel to be sold somewhere distant.

→ Good place to add extension!

Ask students what are some good things about national foods. Point out that students have a greater variety when they shop thanks to foods being produced all over the country.

Say: But, what ingredient had to travel the longest time of all? Try to find this before you ask, but also you could address the students themselves and figure it out together.

Point out that this type of food must travel through air or sea most of the time. Introduce the pizza example of oregano, commonly used in pizza sauce. It comes all the way from Turkey, the world's biggest supplier of oregano.

Explain the number of miles it has to come to get into our pizzas. Ask the students how many stops the oregano made on its journey to America. Explain that presents many opportunities for contamination. Ask the students what some common ways of preventing contamination are. (See Lesson 3).

Point out that students (if they did do this) missed the biggest contaminator of all. Ask them if they can guess, then let them know that it's us! Tell them in the next lesson, we're going to see how even our homes can cause contamination, and that counts too.

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**Extension Activity:**

**Unrefrigerated Food in Trucks**
Watch the video before class to make sure the maturity level of your class is up for this interesting look into the transportation side of the food industry. If you need to, start and stop the video at the points you feel are best for your class. Give a brief explanation of the video before you start it.

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**Resources**

Video:  http://www.youtube.com/watch?v=ImXVqXKI_Qc