



The Project



Your Project challenge this season is to **investigate your food** and **find one way to improve its safe delivery to you**.

Some questions to consider while you investigate include: Where does your food come from? How is it grown? Where has it been? Who handled it? How did it get to your kitchen cupboard? Who protected it along the way? How did they prevent spoiling and contamination? How did they decide which food was good and which was spoiled or contaminated?

Once you know about the threats your food faces and who helps protect it, do some research?

What could go wrong? How could your food become contaminated or spoiled? How could your team help prevent one of those problems? How could your team protect or preserve your food?

Step 1: EACH Team Member

List all the food in your kitchen.

Step 2: Reduce EACH List

From **each** list created in step 1, the team member whose list it is picks 5 foods on their list.

For each of these 5 food items:

1. find out how each one is stored
2. find out how you got each one
3. Think about how each one was protected from contamination.
4. Think about how each one was protected from spoiling.
5. List the number of ingredients in each one

Step 3: Sort and Pick

Take all the list created in step 2 (there should be 1 list for each team member) and review all the items on all lists with the team.

Pick 1 item from all the items to be your team's food. This food will be the one your team will work with for your teams project. Pick an item that has less than 7 ingredients (so 1 to 6 ingredients) This is a recommendation, not a requirement.

Step 4: Research part 1

Use a variety of resources and keep a bibliography or list of your resources. Places to look are reports, books, magazines, and websites. You might also think about interviewing specialists. . Be prepared to share your information sources with the judges at events.

Your food's Journey

For your team's food, research the following about your food's journey:

1. The path your food took from its beginning (examples are: the ground, the tree, or the ocean, ...) to get to your table, or lunch box, or where ever you would eat it.
2. All the possible contamination and spoiling problems during its path.
3. How these problems are detected and prevented now.
4. Learn as much as you can about each ingredient in the food your team chose.
5. Find out about a professional who is working to keep your team's food safe.



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- a. Did a scientist, veterinarian, or engineer help in the growing process?
- b. Did an inspector check it?
- c. Who stored, shipped, preserved, or packaged it?
- d. Who tested it?
- e. Was a government agency involved?
- f. Who decides what is safe and what is not safe to eat?

The following are some possible questions to help you with your research.



Your Foods "Contamination or Spoiling Problem"

Research how and where your food could become contaminated or spoiled. This can be anywhere along your foods journey and any of your foods ingredients journeys.

Some places to look for problems (there are many more):

- Weed killers
- Pesticide
- Toxic waste
- Foreign object
- Stones
- Dirt

- Glass
- Metal
- A wrong ingredient
- Medicine from a sick animal
- Fungus

Step 5: Pick your project

Choose one problem from step 4 that your food faces. It is now your teams challenge to create an innovative solution that prevents or solves this problem.

The solution can be a new idea or an improvement on something already being done.

Be prepared to answer these questions at tournaments:

1. What is already being done by others to fix your team's problem?
2. What could be done?
3. What will it take to make your team's solution happen?



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4. How will your solution help protect your food?
5. Find at least one scientist, engineer, doctor, or other professional who is working on your team's problem.

A great solution might take all the imagination and ingenuity your team can muster. Don't overlook the simple solutions; it might seem so obvious that you wonder why the problem even exists.

Step 6: Share with Others

Tell others about the problem you researched and exactly how your solution can help. You choose how to share what you've learned. Give a talk. Create a website. Perform a skit. Make a comic book. Rap. Create a poster. Pass out flyers. Write a poem, song, or story.

But share your solution with others!

Think about who is helped by your solution. How can you let them know? Can you present your research and solution to lawmakers, doctors, engineers, or groups who already help with your problem? What's the best way to teach your audience about the problem and solution? Your presentation can be simple or elaborate, serious or designed to make people laugh while they learn.

Step 7: Tournament Presentation

Yes, this is a different presentation; this is something the team does to bring everything they have done into one presentation that is only 5 minutes long.

Create a presentation for the judges. Be sure it includes the following:

To be eligible for Project Awards your team must have a live presentation that:

- Describes the **contamination or spoiling problem** your team chose to research
- Describes your team's **innovative solution**
- Describes how your team **shared its findings with others**
- Uses media equipment only to enhance the live presentation

During your presentation, also be sure that your team:

- Describes the **food your team chose** and what you learned about that **food's journey** to your table
- Tells about **at least one** scientist, engineer, doctor, or other professional who is **working on the problem**
- Tells about the research your team did and the information sources that helped to define your problem and solution
- Can set up and complete your presentation in 5 minutes or less (**no setup time this year**)

Your presentation can include posters, slide shows, models, multimedia clips, your research materials—you are limited only by your team's creativity. Remember, you want to leave a lasting impression.