

OHIO FFA FOOD SCIENCE CDE  
**CUSTOMER COMPLAINT LETTER –  
FOOD CONTAMINATION EXPLANATIONS**

Each participant will be given a representative consumer complaint letter received by a food processing company. After reading the letter, the participant must first determine if the letter describes a food quality or food safety problem then indicate whether the nature of the problem is primarily biological, chemical, or physical. The participant must then write a reply letter to the customer explaining the one or more steps the company will take to follow-up on the complaint.

**Food Quality vs. Food Safety**

Food Quality refers to the color, flavor, texture, and nutritional value of a food. When quality is compromised a food may: loose/change color, have less flavor, change in texture, and/or nutritional value may decline. Anything that causes a food to loose its appeal would be considered a “Food Quality” concern.

Food Safety refers to the possibility that an illness or injury may be caused by consuming a food. Anything in a food that would cause this would be considered a “Food Safety” concern.

**Three Categories of Food Contamination**

A contaminant is anything that can get into food that is not supposed to be there. Food contaminants fall into one of the three following categories:

- 1. Biological** - Biological contaminants include bacterial, fungal, viral, and parasitic organisms and/or their toxins.  
Spoilage Bacteria – Bacteria that cause changes to the taste, texture, and/or odor of a food. They will not likely pose a risk of making someone sick.  
Pathogenic Bacteria – Bacteria that lead to food-borne illnesses. A few of the common bacteria in this class are: *E. coli*, *Listeria*, *Salmonella*, *Clostridium botulinum*, and *Staphylococcus aureus*.
  
- 2. Chemical** - Naturally Occurring – Proteins associated with Allergens. Major allergens, which account for 90% of all food allergic reactions, are milk, egg, fish, crustacean shellfish, tree nuts, wheat, peanuts, and soybeans.  
Added – Pesticides, fertilizers, antibiotics, plant chemicals (cleaners, lubricants, sanitizers, adhesives, inks), and food additives (when they exceed legal levels)
  
- 3. Physical** - Items that become part of the food from the natural environment or contaminated during processing/packaging. Common types of physical contaminants include metal, glass, plastic, wood, jewelry, insect parts, dirt, stones, hair, seeds, etc.  
A physical contaminant is a food safety hazard when it has the potential to cause injury to a consumer. Examples include choking, cut mouth, broken tooth.