

2014 Iowa FFA Food Science CDE

Food Safety and Sanitation Section

In this segment of the contest, you will be given pictures/graphics to view in reference to common problems that exist within the food industry. Your task for each set of pictures and/or graphics are to: (a) identify the problem and (b) select the most appropriate solution to the problem. There will be five (5) sets of food safety and/or sanitation concerns with each question valued at 10 points for a total of 100 possible points.

Set #1:



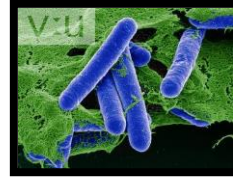
Question 1: These pictures most represent which of the following food industry concerns:

- a. Salmonella
- b. Listeria
- c. Rodent Control
- d. Campylobacter
- e. antibiotics in food

Question 2: In reference to the above pictures, what would be the solution to this food industry concern/problem?

- a. Increased regulations; over-use promotes emergence of resistant bacteria; and regulated usages to minimize residues in the human food chain.
- b. Always wash hands with warm, soapy water; if your hands have any kind of skin abrasion or infection, always use clean disposable gloves; and keep cutting boards clean
- c. Home canned products need to use higher level acids, follow strict hygienic procedures, and prepare foods using high temperatures.
- d. Thoroughly cook raw food from animal sources, such as beef, pork, or poultry.; Wash raw vegetables thoroughly before eating; and Keep uncooked meats separate from vegetables and from cooked foods and ready-to-eat foods.
- e. Sterilize raw foods at the plants, pasteurization, and improving safe food handling practices in kitchens

Set #2:



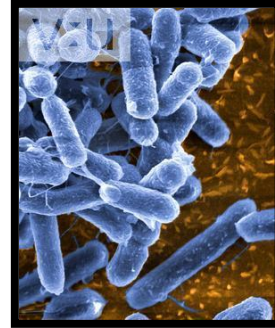
Question 3: These pictures most represent which of the following food industry concerns:

- a. E Coli
- b. Botulism
- c. Salmonella
- d. Listeria
- e. Staphylococcus

Question 4: In reference to the above pictures, what would be the solution to this food industry concern/problem?

- a. Sterilize raw foods at the plants, pasteurization of milk, and improving safe food handling practices in kitchens
- b. Thoroughly cook raw food from animal sources, such as beef, pork, or poultry.; Wash raw vegetables thoroughly before eating; and Keep uncooked meats separate from vegetables and from cooked foods and ready-to-eat foods.
- c. Drink only pasteurized milk, juice, or cider; wash fruits and vegetables under running water, especially those that will not be cooked; and cook all ground beef and hamburger thoroughly.
- d. Home canned products need to use higher level acids, follow strict hygienic procedures, and prepare foods using high temperatures.
- e. Do not eat raw or undercooked eggs, poultry, or meat.; avoid Cross-contamination of foods; and wash hands after contact with animal feces and/or reptiles.

Set 3:



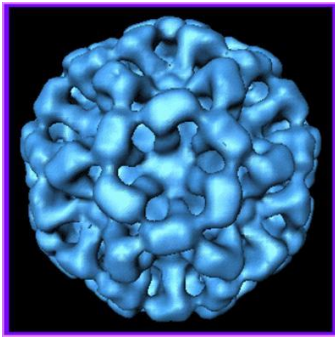
Question 5: These pictures most represent which of the following food industry concerns:

- a. botulism
- b. Staphylococcus
- c. parasites
- d. E Coli
- e. metal contamination in ground beef

Question 6: In reference to the above pictures, what would be the solution to this food industry concern/problem?

- a. Sterilize raw foods at the plants, pasteurization of milk, and improving safe food handling practices in kitchens
- b. Thoroughly cook raw food from animal sources, such as beef, pork, or poultry.; Wash raw vegetables thoroughly before eating; and Keep uncooked meats separate from vegetables and from cooked foods and ready-to-eat foods.
- c. Drink only pasteurized milk, juice, or cider; wash fruits and vegetables under running water, especially those that will not be cooked; and cook all ground beef and hamburger thoroughly.
- d. Home canned products need to use higher level acids, follow strict hygienic procedures, and prepare foods using high temperatures.
- e. Do not eat raw or undercooked eggs, poultry, or meat; avoid Cross-contamination of foods; and wash hands after contact with animal feces and/or reptiles.

Set 4:



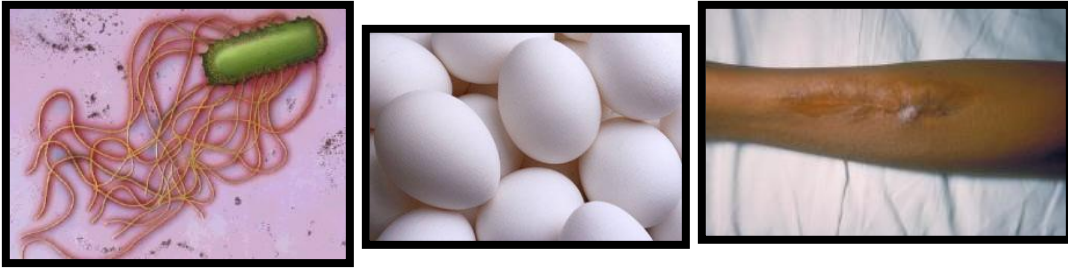
Question 7: These pictures most represent which of the following food industry concerns:

- a. Staphylococcus
- b. Listeria
- c. Cross contamination
- d. Norovirus
- e. Campylobacter

Question 8: In reference to the above pictures, what would be the solution to this food industry concern/problem?

- a. Wash hands and surfaces often; Cook to improper temperatures; and Refrigerate after two hours
- b. Do not eat raw or undercooked eggs, poultry, or meat.; avoid Cross-contamination of foods; and wash hands after contact with animal feces and/or reptiles.
- c. Carefully wash fruits and vegetables, and steam oysters before eating them; Frequently wash your hands, especially after toilet visits and changing diapers and before eating or preparing food; and Thoroughly clean and disinfect contaminated surfaces immediately after an episode of illness.
- d. Thoroughly cook raw food from animal sources, such as beef, pork, or poultry.; Wash raw vegetables thoroughly before eating; and Keep uncooked meats separate from vegetables and from cooked foods and ready-to-eat foods.
- e. Home canned products need to use higher level acids, follow strict hygienic procedures, and prepare foods using high temperatures.

Set 5:



Question 9: These pictures most represent which of the following food industry concerns:

- a. Employee hygiene
- b. Salmonella
- c. Botulism
- d. Staphylococcus
- e. Parasites

Question 10: In reference to the above pictures, what would be the solution to this food industry concern/problem?

- a. Do not eat raw or undercooked eggs, poultry, or meat.; avoid Cross-contamination of foods; and wash hands after contact with animal feces and/or reptiles.
- b. Carefully wash fruits and vegetables, and steam oysters before eating them; Frequently wash your hands, especially after toilet visits and changing diapers and before eating or preparing food; and Thoroughly clean and disinfect contaminated surfaces immediately after an episode of illness.
- c. Always wash hands with warm, soapy water; if your hands have any kind of skin abrasion or infection, always use clean disposable gloves; and keep cutting boards clean.
- d. Handle poultry carefully to prevent cross-contamination; utilize proper wrapping; and most egg products should be pasteurized.
- e. Thoroughly cook raw food from animal sources, such as beef, pork, or poultry.; Wash raw vegetables thoroughly before eating; and Keep uncooked meats separate from vegetables and from cooked foods and ready-to-eat foods.

Key:

1. E
2. A
3. B
4. D
5. D
6. C
7. D
8. C
9. B
10. A