1. Food Defect Action Levels have been set by the federal government to regulate what kind of food quality problem? Contaminants

2. What agency of the federal government regulates food additives and contaminants? FDA

3. What does the Delaney Clause Prohibit? Carcinogenic food additives

4. What food quality problem is likely to be greater with imported foods than with U.S. grown products? Pesticide residues

5. What controversial food product is the subject of an acrimonious food safety debate between the U.S. and European Union? Hormone-treated meat

6. What food is the leading cause of Campylobacter food poisoning? Chicken/turkey

7. What bacterial foodborne disease do symptoms appear most rapidly after eating contaminated food? Staphylococcus intoxication

8. Name a foodborne disease whose causative agent, unlike most foodborne disease pathogens, multiplies rapidly at low temperatures? Listeriosis

9. What is the "Danger Zone" in terms of the temperature range that will support the multiplication of food poisoning bacteria? 41º F - 140º F

10. What is the term used to describe the transmission of foodborne pathogens from one food item to another via equipment or workers' hands? Cross-contamination

11. For which two bacterial foodborne diseases is the infectious dose very low? Listeriosis and E. coli 0157:H7

12. What approach has the government taken for regulating pesticide levels on agricultural products? Setting "tolerance levels"

13. Is the risk of intestinal infections greater for food eaten at public establishments or in the home? Public establishments

14. Describe seven established principles of the Pathogen Reduction Hazard Analysis and Critical Control Points (HACCP) System:
   a. Analyze the hazard
   b. Identify critical control points (CCPs)
c. Establish preventive measures with critical limits for each control point
d. Establish procedures to monitor the critical control points
e. Establish corrective actions to be taken when monitoring shows that a critical
   limit has not been met
f. Establish procedures to verify that the system is working properly
g. Establish effective recordkeeping to document the HACCP system

15. List the most common sources of *Salmonella* exposure:
   a. eggs
   b. poultry
   c. other meats
   d. fruits & vegetables
   e. chicks
   f. exotic pets

16. Which age group has the highest rate of *Salmonella* outbreaks? **Individuals < 1 year of age**

17. What are some of the sources of exposure for *E. coli* 0157:H7?
   a. uncooked hamburger
   b. petting zoos,
   c. unpasteurized apple juice
   d. spinach & produce
   e. wading pools

18. What are some of the complications of *Escherichia E. coli* exposure?
   a. hemorrhagic colitis
   b. ischemic colitis
   c. red cell fragments
   d. renal failure

19. Is food irradiation a thermal or non-thermal method of reducing pathogens? **Non-thermal, often called "cold-pastuerization"**

20. The greatest impediment to wider application of food irradiation is:
   a. poor public acceptance
   b. lack of FDA approval
   c. known health effects
   d. lack of interested investors

21. Which of the following harmful food contaminants is least affect by a given level of
    radiation treatment?
   a. worms or other macroparasites
   b. bacteria
   c. molds and fungi
   d. toxins produced by microbes
e. viruses

22. Irradiation is not recommended as an appropriate way to kill living organisms in:
   a. milk
   b. ground meat
   c. poultry
   d. spices

23. The CDC estimates antibacterial resistance costs ______ per year in the U.S.
   a. 30 million
   b. 300 million
   c. 30 billion
   d. 3 billion

24. Has the importation of food increased or decreased in the U.S. since 1991? Increased

25. Is antibiotic resistance greater in industrialized regions or developing regions?
   Developing regions Why? Due to the availability of over-the-counter antibiotics in developing regions.

26. What are the seven facts associated with irradiation discussed in the video?
   a. Food is naturally contaminated
   b. Contamination can occur throughout the food system; from farm to fork
   c. Preservation of food reduces or eliminates bacteria
   d. Packaging helps maintain the condition of food
   e. Irradiation kills bacteria and other pathogens at predictable and logarithmic rates
   f. Irradiation has been approved for use by the FDA
   g. The irradiation process is controlled by regulatory safeguards

27. What can irradiation achieve?
   a. Eliminate or greatly reduce microbes
   b. Extends the shelf-life of foods and reduces waste
   c. Food remains fresh and/or raw

28. What are some of the limitations of irradiation?
   a. Cannot restore freshness to food
   b. Eliminate any undesirable chemical residues
   c. Address the problem of where bacteria originate
   d. Cannot prevent later recontamination

29. Identify how quantitative risk assessment can be used as a tool for emerging foodborne pathogens:
   a. Hazard Identification to determine an association between disease and the presence of a pathogen in food. Information may describe conditions under which the pathogen survives, grows, causes infection, and dies are documented.
b. **Exposure Assessment** to describe the pathways through which a pathogen population is introduced, distributed, and challenged in the production, distribution, and consumption of food.

c. **Dose-Response Assessment** is used to translate the final exposure to a pathogen population into a health response in the population of consumers. The differences in response among various susceptible populations are important features of this step.

d. **Risk Characterization** involves integrating the information gathered in the previous steps to estimate the risk to a population, or in some cases, a particular type of consumer.