Are You Gonna Eat That?
Introduction to Food Science

FDA's New Food Safety Law https://www.youtube.com/watch?v=y_LSrgbXA_w
This video describes how preventing problems before they occur is critical given today's complex, global food supply and the emerging pathogens that are especially threatening to vulnerable populations.

"DR. X and the QUEST for FOOD SAFETY" VIDEO REVIEW QUESTIONS
https://www.youtube.com/watch?v=j8YfUEzBQ20

"DR. X and the QUEST for FOOD SAFETY" VIDEO REVIEW QUESTIONS
MODULE #1 - "Understanding Bacteria"

1. How do bacteria multiply? How fast can bacteria multiply?

2. **Dr. X talked about his 4 food safety weapons for fighting harmful bacteria; what are they?**

3. **What's the significance of O157:H7?**

4. Dr. X described the "baddest of the bad"; what was he referring to?

5. What does DNA have to do with bacteria?

6. **What does science have to do with food safety?**

7. **Whose responsibility is it to keep our food supply safe along the Farm-to-Table Continuum?**

8. **What effect does each of the 4 Cs have on bacteria?**

MODULE #2 - “Farm”

1. Why did Dr. Elsasser feed a baby chick bacteria?

2. What did you find interesting about Dr. Elsasser’s job?

3. We also met Dr. Patricia Millner, another scientist who conducts research for keeping food safe on the farm. What did she say about compost and how is it relevant to food safety on the farm?

4. How does Dr. Millner’s research benefit us?

MODULE #3 - “Processing and Transportation”

1. What's the relevance of cows, astronauts, and elephants to food safety and food processing?

2. What is pasteurization?

3. What is the time/temperature relationship?

4. How can an egg be pasteurized in the shell without cooking the egg or breaking the shell?

5. How can some types of milk stay fresh and safe without being refrigerated?

6. What prevents astronauts from getting foodborne illness in outer space?

7. What new ways of processing foods did Dr. Sizer talk about in the video?

8. What are the benefits of ultra high-pressure treatment over other forms of pasteurization?

9. Why can you use ultra high-pressure treatment with orange juice and not with a marshmallow?

MODULE #4 - “Retail and Home” - Part 1

1. Dr. X told us that supermarkets are "major 4 C territory." What did he mean by that?

2. Dr. X discussed the "cold chain." What is it?
3. How does the cold chain come into play in the supermarket?
4. What does Dr. X mean when he says, "The responsibility for food safety is literally in your hands"?

MODULE #4 - “Retail and Home” - Part 2

1. The Barkley family learned about the importance of washing their hands. What could have contaminated their hands before they sat down to eat dinner?

2. Why is hand washing so important both at home and in the retail setting?
3. Can you think of other things that you touch that contribute to the spread of bacteria?

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MODULE #5 - "Outbreak and Future Technology"

1. **What is PulseNet and what is its connection to DNA?**

2. **How is an outbreak detected?**

3. **Why is it important for public health officials to investigate foodborne illness outbreaks?**

4. **What happens when a nationally distributed food is implicated in an outbreak?**

5. **Do you think that all outbreaks are solved? If not, what factors could prevent scientists from solving them?**

6. **Why is it important to wash hands even when you don't feel sick?**

7. **What can you do to make sure your food is safe when you eat at fast-food restaurants?**