



# FOOD SCIENCE

with Dr Wei Zhang

## Talking points

### KNOWLEDGE

1. Which three foodborne pathogens is Wei studying?
2. How many infections does *Salmonella* cause every year in the US?
3. How many people die from foodborne illnesses every year across the world?

### COMPREHENSION

4. What are the three reasons that leafy green vegetables are particularly problematic for food safety?
5. Of the three foodborne pathogens that Wei is studying, which is the most dangerous?
6. Which groups of people are most at risk of having a severe reaction to a *Listeria* infection? Why do you think this is?

### APPLICATION

7. What food science question would you investigate as a food scientist? If you had the chance to consult Wei, what questions would you ask him to help you get started on your research?

### ANALYSIS

8. What is the problem with the current method of treating leafy green vegetables for pathogens?
9. How does power ultrasound technology help to reduce pathogens in food, and what are the advantages of this method?

### EVALUATION

10. What steps do you take to be food safe? How often do you wash your fruit or vegetables before eating them? Having read Wei's article, is there anything you will do differently from now on?

## Activity

**Create a leaflet that explains food safety to people who might not know much about it.**

Research which pathogens (such as *Salmonella*, *Listeria*, *E. Coli* and any others) might be able to contaminate food. Make sure to include tips on where and how food should be stored to minimise the chances of contamination. What advice can you include to help people reduce their chances of catching a foodborne illness? Which groups of people need to be particularly careful? What are the symptoms to be aware of for each illness?

Try to make your leaflet as engaging, helpful and visually pleasing as possible, so that people are inclined to read it and more likely to follow your important advice!

## More resources

- The Institute of Food Technologists has a great 'Food Facts' series of videos on YouTube. These one to two minute videos cover a range of interesting food science topics such as packing a safe lunch, eating leftovers and explaining date-labelling on foods: [youtube.com/playlist?list=PL77-j5KK85RVwAgrQZl6uMcinmduZCKdQ](https://www.youtube.com/playlist?list=PL77-j5KK85RVwAgrQZl6uMcinmduZCKdQ)
- Read this blog on what experts predict food trends will be during 2023: [www.ift.org/news-and-publications/blog/2022/science-and-policy-team-forecasts-2023-trends](https://www.ift.org/news-and-publications/blog/2022/science-and-policy-team-forecasts-2023-trends)