Unit 2.1.9 and 2.1.10 - Ensuring a Safe Food Supply

Key Knowledge and Key Skills

Key Knowledge 2.1.9

An overview of the governance and regulation behind the setting and maintaining of food standards and ensuring a safe food supply, including labelling.

Key Knowledge 2.1.10

The characteristics and efficacy of food industry safety programs currently in place to reduce the risks of food contamination.

Key Skills 2.1.7

Explain the reasons for Australia's governance and regulation of food standards and food safety.

Key Skills 2.1.8

Describe food industry programs that prevent and address food contamination risks.

Key Skills 2.1.9

Undertake practical activities to analyse commercial food production in Australia.

Key Terms and Definitions

Adulteration refers to making some better or worse by adding something to it.

A **food standard** is a set of criteria that a food must meet to be deemed safe to eat.

The Food Standards Code

Food Safety Governance and Regulation

A critical aspect of producing food is to ensure the food that is produced is safe to eat and does not cause harm or illness to consumers. Food safety entails handling, preparation, and storage of food to prevent bacteria spreading from one surface to another and multiplying to dangerous levels.

It is estimated that there are 4.1 million cases of food poisoning in Australia each year. Of those 4.1 million cases, approximately one million people will visit a doctor, 31,920 will be hospitalised and 86 will die. Food poisoning can occur when bacteria on food or preparation equipment reach dangerous levels. Unfortunately, this can occur during any stage of the food system, including production, distribution, preparation, and food storage.

All people must be protected from unsafe food; however, some groups need more protection than others. Pregnant women, elderly people, young children, and people with reduced immunity are at risk of being affected by food poisoning more than the general population. It is estimated that one-third of Australian households have at least one member of those vulnerable groups. This is why having the knowledge and understanding of keeping food safe is important.

In Australia, all levels of government (federal, state, and local) are involved in developing and implementing legislation helps to keep food safe.

Food was scarce when Australia was first settled by Europeans, food was scarce. As a result, many ingredients were in short supply which led to some substances being added as “fillers” to food products. For example, grain was in short supply and consequently bakers added ash to bread to increase its volume. This adulteration lead to the first Australian food manufacturing regulations being issued by the Governor of Australia in 1801. These regulations regulated the composition and cost of bread, as well as the price of wheat.

A subsequent food Act was introduced in Victoria in 1863 to address the adulteration of food and drink. At this time, milk was often adulterated with water and other substances were sometimes being added to pepper, oatmeal, salad oil and even vinegar. Under the Act, the Victorian Board of Health was given the power to inspect, seize and destroy adulterated foods.

After Federation in 1901, all States were given the responsibility to regulate their food industries. Victoria introduced the Pure Food Act in 1905 in an effort to overcome food adulteration. Other states subsequently introduced similar legislation.

Watch this video about how honey is adulterated today: https://youtu.be/Z7M8R4350iw

Nowadays, the provision and supply of food is now regulated in Australia to ensure that food is safe to eat and consumers can make informed decisions about food. By 1980, the Commonwealth Model Food Act was developed. This Act regulated the preparation and sale of food, labelling, hygiene requirements and regulation, and enforcement of food laws. The Food Standards Code was introduced in 2002.

There are now three levels of government in Australia that regulate the food system: federal, state, and local.

Their main objectives are to:

1. Set food policy.
2. Develop food standards.
3. Ensure that food policy and food standards are introduced and followed.

By achieving these main objectives, food is kept safe for consumers to eat. These objectives prevent food poisoning and also enable consumers to make informed decisions about things like the origin of the food they choose to eat and its nutritional value.

The Role of the Federal Government

The following departments and agencies are involved in food safety at a federal level.

The Department of Agriculture, Water and the Environment	The Department of Health	Food Safety Australia New Zealand (FSANZ)
The Department of Agriculture, Water, and the Environment was established on February 1st, 2020. This department regulates laws relating to agriculture, the unique Australian environment, heritage, and water resources.	The Department of Health is a department of the Government of Australia charged with overseeing Australia's health system.	FSANZ is an independent statutory agency. FSANZ was established by the Food Standards Australia New Zealand Act 1991 (FSANZ Act).

These departments work together to develop food policies and food standards. Food standards are developed under the *Australia New Zealand Food Standards Code* and are administered by FSANZ.

A food standard is a set of criteria that a food must meet to be deemed safe to eat. The standards cover various aspects of food safety, such as the source of food, its composition, appearance, and what is considered fresh. They also state the type of additives permitted in food and state acceptable levels of bacterial content.

The Department of Agriculture, Water, and the Environment is responsible for inspecting and sampling imported food. It also administers relevant legislation, including the Food Standards Code at Australian borders.

Watch this video that outlines the role of FSANZ in Australia: https://youtu.be/XeMHXehEBHw

The Food Standards Code

The Food Standards Code is a collection of food standards developed by FSANZ. The standards focus on ensuring that food in the food system meets Australian safety and quality expectations.

Some of the regulations relate to:

- Food recalls;
- Health and hygiene obligations of food handlers;
- Labelling of packaged and unpackaged foods;
- Primary food production and food processing;
- The type and amount of substances, such as food additives, colourings and preservatives that can and cannot be added to foods; and
- The composition of foods.

Watch this video by FSANZ about food additives: https://youtu.be/njX0CgRS2_w

Watch this video by FSANZ about what a food recall is: https://youtu.be/cFT2M6WoYeE

Food Labelling

Food labelling regulations are part of the Food Standards Code. Food labelling regulations help to keep food safe and prevent food poisoning.

Visit this website to find out more about food labelling: https://www.betterhealth.vic.gov.au/health/healthyliving/food-labels

The Role of the State Government

State and territory governments are required to use The Food Standard Code to develop legislation. The state government and other agencies work together to ensure that food legislation is adhered to.

The Department of Health and Human Services (DHHS)

In Victoria, DHHS manages the *Food Act 1984***.** The Act is the key legislation that regulates the sale of food in Victoria.

The Food Act of 1984:

- allows the state to permit local councils to register food businesses;
- enables the Australia New Zealand Food Standards Code to be applied as law in Victoria;
- enables the establishment of emergency powers to deal with immediate food-related threats to public;
- ensures that food handled or sold in Victoria complies with the requirements set out in the Food Standards Code; and
- outlines offenses for breaches of the food laws and the penalties applied if a food law is broken;

Examples of violations include handling or selling unsafe food and providing false descriptions of food.

The DHHS provides safe food handling information and education to assist food businesses and people in the community in meeting the requirements of the Act. They also conduct food safety risk assessments, investigate incidents of food safety breaches and participate in the management of food product recalls.

The Food Safety Unit

The Food Safety Unit is part of the DHHS. The Food Safety Unit has a range of statutory functions outlined in the Victorian Food Act 1984.

These functions include:

- Approving and supporting food safety auditors to ensure that food related establishments implement food safety programs and comply with the Food Act and The Food Standards Code;
- Providing basic food handling education for food businesses and the general community; and
- Providing information and guidance to local councils and Environmental Health Officers (EHOs)

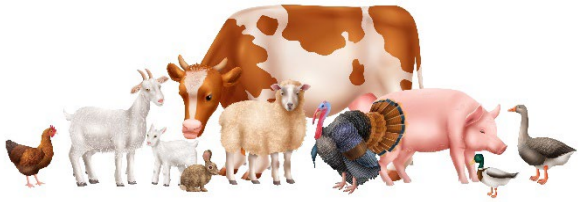
The Food Safety Unit also promotes and supports public health by developing food policies, participating in food safety working groups and committees, and collaborating with food businesses, consumers, educational institutions, and manufacturers.

Primesafe

PrimeSafe is a Victorian Statutory Authority that is responsible for regulating the production of a safe supply of meat, poultry, seafood, and pet food in Victoria. Under the *Meat Industry Act, 1993* and the *Seafood Safety Act, 2003*, all meat processing facilities and seafood businesses in Victoria require a license to operate. PrimeSafe must issue this license.

PrimeSafe is responsible for the following actions regarding food safety:

- Conducting audits to ensuring that registered food businesses comply with the Food Standards relevant to meat production;
- Ensuring animal welfare is maintained;
- Ensuring that all food businesses that produce poultry, seafood, and pet food are registered;
- Issuing of prohibition notices to meat processing facilities or seafood businesses that do not meet guidelines; and
- Random testing of fresh meat products to detect the use of sulphur dioxide. (Sulphur Dioxide is used to preserve meat and prevent discolouration. Under the Australia New Zealand Food Standards Code, only sausage and sausage meat are permitted to contain a certain amount of sulphur dioxide).



Dairy Food Safety Victoria (DFSV)

DFSV is a statutory authority responsible for ensuring dairy products are safe to consume. DFSV gains its powers from the *Dairy Act 2000 (Vic)* and the *Food Act 1984 (Vic).*

DFSV is responsible for the following actions in regard to food safety:

- The licensing of all dairy businesses operating in Victoria, including farms, manufacturing facilities, and retail stores.
- Ensuring that the registered dairy food businesses comply with the Food Standards relevant to dairy food production by conducting audits.
- Providing technical advice and support to licensees to help them meet the regulations enabling them to produce safe dairy food.
- Investigating complaints about dairy food, dairy manufacturers, and dairy wholesalers.
- Advising the Minister for Agriculture on matters relating to the administration of the Dairy Act.

Watch this video about DFSV: https://youtu.be/DaYYri4K6uQ

The Role of the Local Government

Local governments are responsible for food retail, manufacturing, wholesaling premises within their local government areas. Councils employ Environmental Health Officers to ensure that food-related businesses in their local areas meet legislative requirements.

The role of councils includes:

- Ensuring food safety programs are implemented and correctly followed;
- Inspecting businesses to ensure compliance with the Food Act;
- Investigating food complaints;
- Making enforcement orders against food businesses that breach the Food Act or the Food Standards Code;
- Providing advice and training for food vendors; and
- Registering and inspecting of food premises.

Watch this video about the role of an Environmental Health Officers: https://youtu.be/fS0h7ovR-R8

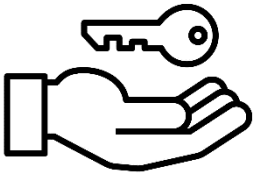
Watch this video about food safety issues that local councils deal with: https://youtu.be/FyQeiPOAC1o

Starter Activity One

Food Safety Escape Room Challenge

Teacher Notes: Read out the following instructions to students.

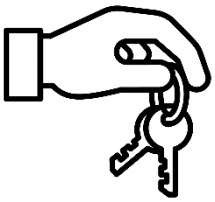
Your team has been locked in a virtual escape room, and to escape, you must uncover information about specific food safety incidents or outbreaks in Australia. Each incident or outbreak holds a clue that will help you unlock the next challenge (that I will give to you). Work together to research and find the answers to the following questions.



Challenge 1:

Clue: "Botulism Outbreak"

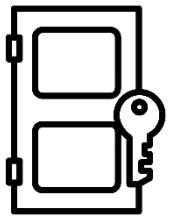
Question: Research and provide details about a botulism outbreak that occurred in Australia. Describe the food involved, the affected individuals, and the consequences of the outbreak.



Challenge 2:

Clue: "Salmonella Contamination"

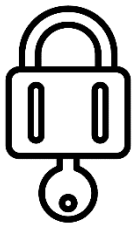
Question: Investigate a recent case of salmonella contamination in Australia. Identify the specific food product that was contaminated, the source of contamination, and the actions taken to manage the outbreak.



Challenge 3:

Clue: "Listeria Outbreak"

Question: Uncover information about a notable listeria outbreak in Australia. Discuss the food product implicated in the outbreak, the vulnerable populations affected, and the steps taken to prevent further spread.



Challenge 4:

Clue: "E. coli Contamination"

Question: Research an incident involving E. coli contamination in the food supply chain. Provide details about the affected food product, the origin of contamination, and the measures implemented to address the issue.

Final Challenge:

Clue: "Critical Thinking Challenge"

Question: Reflect on the food safety incidents or outbreaks you researched. Discuss the common challenges and complexities faced in ensuring food safety in different incidents. Analyse the role of regulations, risk communication, and consumer awareness in preventing and managing such incidents.

Written Activity One

15 Quick Questions

Read the online text at this link: https://foodstudies.com.au/courses/unit-2-1-9-2-1-10-ensuring-a-safe-food-supply/

Answer these questions:

1. What is adulteration and how does it relate to food?

2. What is a food standard?

3. What are the main objectives of the federal, state, and local governments in regulating the food system?

4. Why is it important to protect vulnerable groups from unsafe food?

5. How did the issue of food adulteration lead to the introduction of food regulations in Australia?

6. What is the Food Standards Code and when was it introduced?

7. What are some of the aspects covered by the Food Standards Code?

8. How do food labelling regulations contribute to food safety?

9. What is the role of the Department of Health in ensuring food safety?

10. What is the role of the Food Safety Unit in Victoria?

11. What is PrimeSafe and what are its responsibilities in food safety?

12. What is the role of Dairy Food Safety Victoria (DFSV) in ensuring food safety?

13. What are the responsibilities of local governments in regulating food safety?

14. How do federal, state, and local governments work together to ensure food safety?

15. How do food safety regulations and standards contribute to consumer protection and informed decision-making?

Written Activity Two

Food Safety Scenarios

In small groups, analyse the food safety scenarios below.

After analysing the scenarios, share your findings with the rest of the class.

Scenario 1

You visit a local restaurant and notice that the staff members handling food are not wearing gloves and do not wash their hands properly. The kitchen area appears unclean, with food debris and dirty utensils scattered around. The food is not stored at the correct temperatures, and the refrigerator seems to be malfunctioning.

Answer the following questions in your groups:

a. What are the improper food handling practices and their potential risks to food safety in the scenario?

b. What are the food safety hazards in this scenario?

c. What are the potential consequences of these hazards?

d. What are some solutions to ensure food safety in this restaurant?

Scenario 2

You come across a packaged food product in a supermarket that claims to be gluten-free, but upon closer inspection of the ingredient list, you notice the presence of wheat flour. The product is also missing any allergen warning labels.

Answer the following questions in your groups:

a. What are the implications of misleading labelling and its potential risks to consumers?

b. What are the specific hazards associated with mislabeled products?

c. What are the potential consequences of consuming a mislabeled product?

d. What are some solutions to ensure food safety and accurate labelling?

Scenario 3

You visit a local farmers' market and notice a vendor selling raw milk without any warning labels or information regarding potential health risks. The milk is stored in unrefrigerated containers and has been sitting in the sun for several hours.

Answer the following questions in your groups:

a. What are the potential risks associated with the sale and consumption of raw milk?

b. What are the specific food safety hazards related to the sale of unpasteurised raw milk?

c. What are the potential consequences of consuming raw milk without proper safety measures?

d. What are some solutions to ensure food safety in the sale of raw milk?

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Written Activity Three

Aussie Incidents and Outbreaks!

Research a food safety incident or outbreak that has occurred in Australia in recent years.

Answer the following questions:

1. Provide an overview of the incident, including the type of food, affected individuals, and any notable consequences.
2. What were the main causes or contributing factors to the food safety incident or outbreak?
3. What were the immediate actions or likely immediate actions taken to address the food safety incident or outbreak?
4. What are the long-term consequences of the incident or outbreak on the affected individuals, businesses, and the food industry as a whole?
5. Reflect on the challenges and complexities involved in ensuring food safety in the incident you researched. How do factors such as food production, distribution, handling, and consumer behavior contribute to these challenges?
6. Discuss the role of regulations and standards in preventing food safety incidents and outbreaks. How do these incidents shape the development and enforcement of food safety policies and regulations in Australia?
7. Investigate the strategies and measures implemented to prevent similar incidents from occurring in the future. What changes were made in terms of regulations, industry practices, or public awareness campaigns?
8. Consider the role of technology and innovation in enhancing food safety practices. How can advancements in food testing methods, traceability systems, or data analytics contribute to preventing and mitigating food safety incidents?

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Written Activity Four

Find it on a Food Label

Select one of the food labels from your pantry at home or one of the food labels provided by your teacher.

Use the information at this website to circle the following information:
https://www.betterhealth.vic.gov.au/health/healthyliving/food-labels

1. what the food is
2. manufacturer's details
3. nutrition information panel
4. ingredients lists
5. weights and measures of product
6. date marking
7. directions for use and storage
8. country of origin
9. allergens and additives
10. nutrition and health claims.

Discussion Questions:

1. What are three ingredients listed in the product? Why does the order of ingredients matters and how it can impact the product's composition.
2. What is the use-by date mentioned on the food label, and why is it important to check it? What might happen if you do not check the use-by-date?
3. Are there any allergen warnings on the food label? If so, which allergens are mentioned? Why are allergen warnings important for individuals with food allergies or intolerances? Why is it important to avoid cross-contamination for people with allergies or intolerances?
4. Look at the ingredients list. Are there any additives or preservatives listed? If so, identify them and discuss their purpose. What are your thoughts on the use of additives and preservatives in food products and their potential effects on health.
5. Are there any nutrition or health claims made on the food label? What are they and how accurate are they? How might these claims impact consumer perceptions and food choices?
6. What other packaging or marketing claims are on the food label? Do these claims increase the likelihood of you buying the food product? What are your thoughts on the transparency and reliability of these claims?
7. Look for any symbols or logos on the food label (e.g., organic, non-GMO). What might these symbols mean and how could they impact your food choice?
8. Are there any potential allergens mentioned that you or others may need to be aware of? What challenges might be faced by individuals with food allergies and the importance of clear allergen labeling?
9. Imagine you have specific dietary restrictions or preferences (e.g., vegetarian, gluten-free). Can you identify any potential challenges or benefits of consuming this product based on the food label? Discuss how food labels assist individuals in making suitable choices according to their dietary needs.
10. Reflect on the overall nutritional value of the product. Would you consider it a healthy choice? Why or why not? Discuss the key nutrients, such as fats, sugars, and sodium, and evaluate their impact on health when consuming the product.

Practical Activity One

Detecting Adulterated Food

Food adulteration, the act of adding inferior or harmful substances to food products, poses a significant threat to consumer health and safety. Adulterated food items can be found in various forms, including powdered substances, dairy products, oils, spices, and even fresh produce. As consumers, it is essential to be aware of these practices and equipped with the knowledge to detect potential adulteration.

In this experiment, we will explore simple tests that can be conducted to identify adulterated food items. By performing these tests, we will gain insights into the presence of common adulterants and assess the purity of different food products.

Aim

The aim of this experiment is to familiarize students with simple tests that can be conducted to detect adulteration in common food items. By performing these tests, students will learn how to identify potential adulterants and assess the purity of food products.

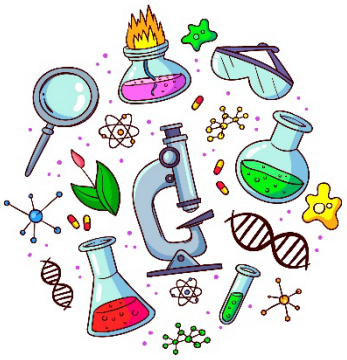
Materials:

Various food items suspected of adulteration (e.g., flour, milk, vegetable oil, spices, fruits, and vegetables) Iodine solution pH paper or pH strips White paper Test tubes or small containers	Water Coin or spoon Refrigerator Safety goggles Apron or lab coat

Safety Requirements:

1. Wear appropriate Personal Protective Equipment (PPE), such as safety goggles and lab aprons.
2. When working with chemicals like iodine solution, follow proper handling procedures. Avoid direct contact with the skin and eyes. If any chemical comes into contact with the skin or eyes, rinse thoroughly with water and seek medical attention if needed.
3. Ensure a clean and organised workspace. Avoid cross-contamination by using separate containers and utensils for each food item being tested.
4. Dispose of waste materials, such as used food samples and chemical solutions, according to proper waste disposal guidelines provided by your school or local regulations. Consult with the Science Technician. The Science Technician will have knowledge of the proper waste disposal procedures to ensure compliance with local regulations and to promote safety and environmental responsibility. It is important to adhere to these guidelines to handle any potentially hazardous substances and dispose of them in an appropriate manner.
5. Handle food items with clean hands and maintain proper hygiene. Do not consume any food items used in the experiment, as they may have been contaminated during testing.
6. Conduct the experiment under the guidance and supervision of a teacher, instructor, or responsible adult. They can provide additional safety instructions and ensure proper handling of materials.

It is essential to prioritise safety at all times during the experiment. If you have any specific concerns or questions regarding safety, it is recommended to consult with your teacher or the Science Technician before proceeding.



Procedures:

Starch Test Procedure:

1. Take a small quantity of the food item suspected of adulteration (e.g., flour, spice) and place it in a test tube or a small container.
2. Add a few drops of iodine solution to the container.
3. Observe the color change.
4. If the solution turns blue or violet, it indicates the presence of starch, suggesting possible adulteration.

Synthetic Coloring Test:

1. Take a small sample of the food item (e.g., powdered drink, confectionery) and rub it on a white paper using a coin or spoon.
2. Observe the color transfer onto the paper.

   If an unnatural color appears, it suggests the presence of artificial color.

Adulteration in Milk:

1. Take a small quantity of milk in a transparent glass.
2. Add a few drops of iodine solution to the milk.
3. Observe any color change. If the milk turns blue, it suggests the presence of starch, indicating possible adulteration.

Or

1. Alternatively, add a few drops of milk to a test tube containing water and shake it vigorously.
2. Observe the froth and residue left.

   Excessive frothing and the presence of soapy residue indicate the possible presence of detergents.

Purity of Vegetable Oils:

1. Take a small amount of vegetable oil in a glass container.
2. Place the container in the refrigerator for a few hours.
3. Observe whether the oil solidifies partially or completely.

   If it does, it suggests the presence of other oils in the mixture, indicating possible adulteration.

Pesticide Residue Test:

1. Take a small quantity of the food item suspected of pesticide residue (e.g., fruits, vegetables) and mix it with water in a container.
2. Dip a strip of pH paper or pH strip into the mixture.
3. Observe the color change on the pH paper.

   An alkaline or acidic reaction indicates the possible presence of pesticide residue.

Results:

Record the observations and results obtained from each test below:

Starch		Synthetic Colouring		Milk		Vegetable Oils		Pesticide Residue	
Is it adulterated?		Is it adulterated?		Is it adulterated?		Is it adulterated?		Is it adulterated?	
Yes	No	Yes	No	Yes	No	Yes	No	Yes	No

Analysis of Results:
Discuss the significance of each test and the implications of adulteration in food products.
Starch test:
Synthetic Colouring test:
Milk Test:
Vegetable Oils Test:
Pesticide Residue Test:
Conclusion:
Summarise the experiment's findings, highlighting the importance of detecting adulterated food

Practical Activity Two

Deliciously Nutritious: Design, Create, and Package your Perfect Frittata!

For this activity, you will be making a frittata—a nutritious and versatile dish that could be served in a café or at the supermarket as a take-away lunch.

Develop your own healthy frittata recipe by adding or substituting different vegetables, herbs, or spices to the recipe below.

Frittata for Two

Ingredients:

4 eggs
¼ cup milk
Salt and pepper to taste
1 tablespoon olive oil
½ small onion, diced
1 cup chopped vegetables of your choice
½ cup grated cheese

Instructions:

1. **Preheat** the oven to 175°C conventional and 160°C fan-forced.
2. In a medium bowl, **whisk** the eggs until well beaten.
3. **Add** the milk and **season** with salt and pepper. **Whisk** again to combine.
4. **Heat** the olive oil in a non-stick oven-safe frying pan over medium heat.
5. **Add** the diced onion, and **sauté** for 2-3 minutes until they start to soften.
6. **Add** the chopped vegetables of your choice and **cook** for an additional 2 minutes until they are slightly tender.
7. **Pour** the whisked egg mixture over the sautéed vegetables in the pan. **Stir** gently to distribute the vegetables evenly.
8. **Cook** the frittata on the stovetop for 3-4 minutes, or until the edges start to set.
9. **Sprinkle** the cheese evenly over the top of the frittata.
10. **Transfer** the pan to the preheated oven and **bake** for about 10-12 minutes, or until the eggs are set and the cheese is melted and slightly golden on top.
11. **Remove** the frittata from the oven and **allow** it to cool.
12. **Cut** it into wedges and **serve** warm or **allow** it to cool and **package** with your product.

Designing the Food Package:

Create an eye-catching package for your frittata.

1. Go to this link to download a template to make a box: https://www.templatemaker.nl/en/giftbox/
2. or https://www.homemade-gifts-made-easy.com/gift-box-templates.html
3. Use the blank sheet of paper or cardboard to create your package.
4. Draw and colour the package design that reflects the nature of your frittata and its healthy attributes.

   Consider using different colours, images, and creative elements.
5. Add a clear and catchy product name to the package.
6. Include the following mandatory labeling information on your package:
   - what the food is
   - manufacturer's details

- nutrition information
- ingredients
- weights and measures of product
- date marking
- directions for use and storage
- country of origin
- allergens and additives
- remember to use only accurate nutrition and health claims.

Reflection Questions

Answer the following questions:

1. Why is it important to accurately label food products?

2. How did you use creativity in designing your food package?

3. What nutritional information did you find interesting or important to include?

4. How can attractive packaging influence consumer choices?

5. How can you apply the knowledge gained from this activity to make informed food choices in your daily life?

Practical Activity Three

Wholesome Harvest: Create Your Nutritious Quinoa Delight!

For this activity, you will be making a quinoa salad — a nutritious and versatile dish that is often served as a speciality dish in a café.

Quinoa Salad with Roasted Vegetables

Preparation Time: 45 minutes

Ingredients:

- 1 cup quinoa, rinsed
- 2 cups water or vegetable broth
- 1 small eggplant, cubed
- 1 zucchini, sliced
- 1 red capsicum, sliced
- ½ cup cherry tomatoes, halved
- ¼ to ½ red onion, finely chopped
- 2 tablespoons olive oil
- Juice of 1 lemon
- ¼ cup fresh parsley, chopped
- Salt and pepper to taste
- 100g chicken breast or firm tofu

Instructions:

1. **Preheat** the oven to 200°C or 180°C fan-forced.

To prepare the roast vegetables:

1. On a baking sheet, **spread** out the eggplant, zucchini, red capsicum, and cherry tomatoes.
2. **Drizzle** with olive oil, season with salt and pepper, and **toss** to coat.
3. **Roast** in the oven for 20-25 minutes or until the vegetables are tender and slightly caramelised.
4. **Remove** from the oven and **let** them cool for a few minutes.

To prepare the quinoa:

1. In a medium-sized saucepan, **bring** the water or vegetable broth to a boil.
2. **Add** the quinoa and **reduce** the heat to low.
3. **Cover** and **simmer** for about 15 - 20 minutes or until the quinoa is cooked and the liquid is absorbed.
4. **Remove** from heat and let it sit covered for 5 minutes. **Fluff** the quinoa with a fork.

To cook the chicken or tofu:

1. Lightly **season** the chicken or tofu with salt and pepper.
2. In a separate pan, **heat** a small amount of oil over medium heat.
3. **Add** the chicken or tofu and **cook** for about 5-6 minutes, or until lightly browned.

To assemble the salad:

1. In a large bowl, **combine** the cooked quinoa, roasted vegetables, red onion, and chopped parsley.
2. **Squeeze** fresh lemon juice over the mixture and **season** with additional salt and pepper to taste.
3. **Toss** everything together and gently **toss** to combine.
4. **Serve** the quinoa salad warm or at room temperature.

Image

HACCP Plan (Hazard Analysis Critical Control Point)

A HACCP (Hazard Analysis Critical Control Point) plan is a systematic approach to food safety that aims to identify, evaluate, and control potential hazards in food production, handling, and preparation. It is a preventive system designed to ensure the safety and integrity of food products by addressing biological, chemical, and physical hazards that may arise at various stages of the food process.

The HACCP plan involves several key steps. Answer the questions about the safe preparation of the quiona salad.

Step 1 - Hazard Analysis

Identify potential hazards associated with the ingredients and steps involved in making the salad. Consider biological, chemical, and physical hazards.

Step 2 - Determine Critical Control Points (CCPs)

Identify critical control points in the recipe where control measures can be applied to prevent or eliminate hazards.

Step 3 - Establish Critical Limits

Define critical limits for each CCP to ensure food safety.

What will you do to ensure the ingredients are received and stored correctly?

What will you do to ensure that the chicken and tofu is cooked correctly?

What will you do to ensure the salad is stored correctly?

Step 4 - Monitoring Procedures

What should you do to monitor that allergen information is checked and ingredients are stored correctly?

How can you monitor that the chicken is cooked to the correct internal temperature?

What tool can you use to measure the temperature of the salad during the cooling process?

Step 5 - Corrective Actions

What should you do if ingredients are mislabeled or unidentifiable? How can you ensure allergenic ingredients are stored separately?

What corrective action should be taken if the chicken does not reach the correct internal temperature during cooking?

If the salad is not cooling rapidly or at the proper temperature, what corrective actions can be implemented?

Step 6 - Verification Procedures

What procedures can be established to ensure the effectiveness of the HACCP system?

How can you regularly review records and logs to ensure critical limits are consistently met?

What can be done to conduct periodic audits and assess compliance with HACCP principles?

Step 7 - Record-Keeping

Why is it important to maintain accurate records in the HACCP system?

What information should be documented in temperature logs and records?

How can accurate record-keeping serve as evidence of adherence to food safety standards?

Discussion Questions:

1. Why is a HACCP plan important in food preparation?
2. How can you ensure proper cooking and avoid cross-contamination during food preparation?
3. How can you rapidly cool the prepared dish within the recommended time frame?
4. What are some potential hazards you identified in the recipe?
5. How can you apply the principles of HACCP in your everyday cooking practices?

Summary Activity

What is the main idea about this key knowledge and key skills?
Write two or three sentences in your own words.
What is the main objective of food safety governance and regulation?
What are the three levels of government involved in regulating the food system in Australia?
What are some of the regulations covered in the Food Standards Code?
What is the role of the Department of Health and Human Services (DHHS) in Victoria?
What is the role of local government in food safety governance and regulation?

What are the responsibilities of local governments in relation to food safety?
How does the Department of Agriculture, Water, and the Environment contribute to food safety?
What are some of the key components required in food labeling?
How are food policies and food standards developed in Australia?

Exam Preparation

Multiple-Choice Questions (5 marks)

Choose the response that is correct or that **best answers** the question.

1. What does FSANZ stand for?
    a. Food Safety Australia New Zealand
    b. Federal Standardization and Approval for New Zealand
    c. Food Standards and Administration of New Zealand
    d. Federal System for Australia and New Zealand

2. What is the purpose of the Food Standards Code?
    a. Regulate prices and imports
    b. Set food policies about advertising of foods.
    c. Set standards for the composition of various food products
    d. Develop legislation for state governments

3. Which government level is responsible for implementing the Food Act in Victoria?
    a. Federal government
    b. State government
    c. Local government
    d. Department of Health and Human Services (DHHS)

4. Which agency is responsible for developing food standards in Australia and New Zealand?
    a. Department of Health
    b. Food Safety Australia New Zealand (FSANZ)
    c. Primesafe
    d. Dairy Food Safety Victoria (DFSV)

5. The Food Standards Code regulate all of the following except:
    a. The types and amounts of substances that can be added to foods
    b. The maximum number of food additives allowed in a single product
    c. The specific brands of food additives that can be used in food production
    d. The colorings and preservatives that are prohibited in food products

Short Answer Questions (15 marks)

Question 1 (3 marks)

Define the term food safety and provide an example of how to practice food safety in the kitchen.

Question 2 (3 marks)

Explain why certain vulnerable groups require additional protection regarding food safety and provide an example of a vulnerable group.

Question 3 (3 marks)

Explain what the Food Standards Code is and provide an example of a regulation covered by the code.

Question 4 (2 marks)

Identify two main objectives of the federal, state, and local governments in regulating the food system.

Question 5 (4 marks)

Discuss the importance of food safety in the retail and manufacturing industry.