



How can I prevent food waste and be a food boss?

Lesson overview

This lesson has been developed to revise student understanding of how correct food storage increases the longevity of food freshness and reduces the amount of food waste families produce. They will investigate different storage solutions and identify their effectiveness by conducting a challenge of managing their own (and as an option – their family's) food preparation, storage and waste saving approaches. The purpose of this is to highlight how they as individuals, and their families, can contribute to halving their food waste by 2030 (Australia's goal). This lesson and follow up discussion can be spread over a number of days or a week, allowing students to complete the at-home challenge and share their results with the class.

Learning intention

Students will:

- Identify how to avoid food waste using various solutions such as; planning ahead, food preparation techniques, correct storage and effectively using leftovers
- Articulate the effectiveness of these solutions in avoiding food waste
- Research the amount of food waste produced by Australians
- Be responsible for taking control of their food and food waste for a week

Resources

- Various storage containers and materials such as plastic, cardboard, paper bags, foil, zip lock bags, waxed paper, bowls
- Interactive whiteboard with internet connection
- Student worksheet
- Laptops, computers and/or tablets
- Whiteboard/butcher's paper for recording

Assessment

- Monitoring understanding throughout class discussion and questioning
- Collecting work samples
- Teacher feedback

Differentiation

Support: Teacher scaffolds tasks and questions to suit student ability, students work with others and adults to complete tasks.

Structured: Use small group instruction to help support students complete their research and create worksheet.

Extension: Students complete task independently, expanding their investigation to more than one food type or more types of packaging.

Australian curriculum links

Science

Science Understanding - Changes to materials can be reversible or irreversible (ACSSU095)

PDHPE

Personal, Social and Community Health - Plan and practise strategies to promote health, safety and wellbeing (ACPPS054)

Lesson introduction – 5 minutes



1. Discuss the concept of wasting food – i.e. Food waste definition is food that is intended for human consumption but end up in the landfill or recycling. Not just edible when it was thrown away. Thus, food that is discarded because of its expiry date is considered food waste too. Ask students to reflect on their household bins and how much food waste is being thrown out each week. Ask them to estimate how much food a household throws out each week and each year. Teacher Note – If parents and students feel comfortable, a great idea is to have a weekend food waste collection at home. The family keeps a diary to record the waste and even weighs their collection. This is an effective way of establishing a baseline before they become a food boss.
2. Read and discuss the information on the Love Food Hate Waste NSW site 'why save food at home' www.lovefoodhatewaste.nsw.gov.au

Main body of teaching – 30 minutes



3. Discuss some solutions to minimising food waste such as; eating leftovers, buying less, shopping with a list, eating what's in the fridge, and eating the skins of edible foods. www.healthline.com or www.sbs.com.au
4. Discuss how storage helps prevent food waste. As a class brainstorm specific food types and record where they think the best place to store them might be. List different foods and invite the class to vote as to where they should be stored and in what sorts of containers, e.g. bananas, strawberries, cereal, soft cheese, mushrooms, onions etc. www.cosmopolitan.com
5. Split the class into small groups and allocate storage ideas. Students are to research and provide the best solutions for keeping food fresher for longer. Students then report their findings back to the main group.
6. Read the storage tips on the Sustainability Victoria website www.sustainability.vic.gov.au and discuss how these compare to the class recordings and discussion. Discuss how students could broaden their approach. to avoiding food waste. Explore ideas such as meal planning (check the pantry and fridge, write a shopping list), only buying what you need, considering portion size (cooking/ preparation), storage and using leftovers.
7. Discuss the difference between avoidable and unavoidable food waste. For example, one common type of food waste is to discard potentially reusable foods such as broccoli stalks, and carrot or potato skins. Learn more here: www.healthline.com
8. Students then investigate the causes of food spoilage and how to slow the process down. For example:
9. Explore the various types of storage and packaging, such as foil, zip lock bags, waxed paper and discuss which food products are the most and least suitable for each type of packaging for common items such as lettuce, herbs, and bananas.
10. Discuss alternative solutions including packaging issues such as how much you buy, storage to keep it fresh, revive and re-use.
11. How can we use jars (e.g. storing herbs), glass or plastic containers? Why should we use different size containers? What are the moisture absorbing benefits of paper towel? Should we recycle existing packages or transfer to a different storage container, why?
12. Also discuss where the food is stored once it is packaged and how it can affect the lasting freshness of the food. Students record their ideas on their worksheet.

Main body of teaching – 25 minutes



13. Discuss the steps involved in buying, preparing, storing, consuming and throwing out of food in a week. Break ideas into tasks such as; writing a shopping list, checking the fridge and cupboards, planning ingredients, going shopping, storing food, making breakfast, lunch and dinner, using and storing leftovers, recycling and composting, packaging lunch to take to school. Give students the challenge to be their own 'food boss' for a week, managing every food decision. Link to the TV series 'Teenage Boss' on the ABC with Eddie Woo, where teenagers take control of the family's finances for a month. Please Note: Not all students will be able to have control over all aspects of food related activities, such as buying the food for themselves or their family. They may need to focus on actions that are feasible such as making their own breakfast and lunch, packaging lunch, recycling waste and storing food and snacks. It may also be beneficial to send home a note to parents asking for their support in the 'food boss' challenge and explaining what the students are being asked to do and how it is building students' responsibility and awareness.
14. On the worksheet, students write an action plan for their week, including an optional food budget, shopping list, and meal planning. Ideas for becoming a food waste boss could include:
 - Write a meal plan (leaving a night for leftovers or unexpected event)
 - Write a shopping list
 - Check the pantry and fridge before shopping & modify the meal plan if leftovers are to be used
 - Plan to help cook – considering how they would manage portion control
 - Put food away, read the label and use the tips they find to make sure it is stored correctly.

Plenary – 5 minutes



15. Students complete their 'food boss' challenge over a set period of time. Students keep a food waste diary of their meals and actions including records of food items, quantity, why it was purchased, the reason for any wastage and the cost of the wasted food. Students can give updates each day to their teacher and peers, or at the end. The take-home worksheet can be used as a simple food diary for the week, making extra copies. Alternatively, students might like to make a presentation of their week as a 'food boss' using photographs and slideshow software.

Home activity/extension task ideas



For home

Students take home the worksheet and begin their 'food boss' challenge, keeping a food diary and reflecting on the decisions they made throughout the challenge. Ensure you screen the exercise for suitability with the families in your class.

Extension

Watch the Love Food Hate Waste NSW video on fridge storage tips www.youtube.com

Extension

View the article 'What weekly groceries look like around the world' and reflect on their households purchases, budget and waste fstoppers.com