



Wonder
Project

WHERE SCIENCE
TECHNOLOGY
ENGINEERING AND
MATHS COME ALIVE.

Health and safety guidance

The Ice Cream Challenge



Engineering
New Zealand
Te Ao Rangahau

The Ice Cream Challenge

Please read and understand pages 26 – 31 of the Ministry of Education’s [Safety in Technology Education resource](#).

Food preparation

- Wash your hands with hot soapy water and dry well with paper towels, a roller towel or a hand drier. If ākongā touch rubbish, their face or their hair, they must wash them again.
- All long hair should be tied back.
- Cuts or scrapes should be covered with plasters or gloves.
- All work surfaces and tools should be cleaned before and after use.

Food creation

- Ice cream should be tested with utensils, not fingers.
- Utensils should not be shared, or double-dipped.
- Food preparation surfaces should not be sat on.
- If ākongā need to sneeze or cough, they should step away from the food preparation area and wash their hands after.
- If ākongā feel sick, they should not touch any food, utensils or work surfaces.
- Allergies and medical conditions such as a dairy allergies, nut allergies or diabetes should be identified and monitored.
- If ākongā have allergies, dedicate one set of tools to their team and keep it separate from the other tools.
- Do not refreeze food that has thawed from frozen.

Ingredient storage and shelf life

- Food that requires refrigeration should be placed in the fridge within 2 hours of being made. Label food with its open date so you can track its shelf life.
- All containers should be cleaned before they’re used.
- Before any ingredients are consumed, make sure you check their expiration, use-by date and shelf life:

Ingredient	Storage		Shelf-life	
	Unopened	Opened	Opened	Unopened
Milk powder	Store in cool, dark place.	Store in a cool, dark place in an airtight container.	2–3 weeks.	Check expiration or use-by date.

Coconut milk powder	Store in cool, dark place.	Store in a cool, dark place in an airtight container.	6 months.	Check expiration or use-by date.
Long life cream	Store in cool, dry place.	Refrigerate below 4°C.	7 days if refrigerated.	Check expiration or use-by date.
Coconut cream	Store in cool, dry place.	Refrigerate below 4°C.	3 days if refrigerated.	Check expiration or use-by date.
Icing sugar	Store in cool, dry place.	Store in a cool, dry place in an airtight container.	Check expiration or use-by date.	Check expiration or use-by date.
Condensed milk	Store in cool, dry place.	Empty contents into an airtight container and refrigerate at 1–5°C.	5 days if refrigerated.	Check expiration or use-by date.
Coconut condensed milk	Store in cool, dry place.	Empty contents into an airtight container and refrigerate at 1–5°C.	14 days if refrigerated.	Check expiration or use-by date.
Salt (rock salt)	Store in cool, dry place.	Store in cool, dry place.	Check expiration or use-by date.	Check expiration or use-by date.
Flavours	Store in a cool, dark place away from direct sunlight.	Store in a cool, dark place away from direct sunlight.	Check expiration or use-by date.	Check expiration or use-by date.
Food colouring	Store in a cool, dark place away from direct sunlight.	Store in a cool, dark place away from direct sunlight.	Check expiration or use-by date.	Check expiration or use-by date.
Ice cream mixture (any form)	Store in a closed container and refrigerate at 1–5°C, or freeze at -18°C.		5 days if refrigerated. 1–2 months if frozen.	

Cleaning

- Rinse dishes before washing.
- Wash dishes in a dishwasher or in hot soapy water (55°C), replacing water frequently and providing rubber gloves to protect hands from heat.
- Wash work surfaces with hot water and detergent before and after use.
- Use clean tea towels to dry dishes, washing them after each use.
- Use separate cloths to dry work surfaces and dishes.

Risk assessment

Hazard	Risk	Likelihood	Management
Food safety rules not followed	Ākonga could consume unsafe food or expose themselves to bacteria and get sick.	Moderate risk.	Kaiako and ambassadors should take time to read and understand all food safety information before they start the challenge. The food safety poster should be printed and shared with ākonga before any ice cream is created to ensure they understand the rules.
Petri dishes opened after use	Ākonga could be exposed to bad bacteria and get sick.	Moderate risk.	Ākonga will be supervised by kaiako and ambassadors. The supervisors will ensure, as far as is reasonably practicable, that the ākonga are using the tools responsibly and safely – including not opening the petri dishes after use, and sealing and disposing of them appropriately. Dispose of any unused petri dishes after 3 months.
Equipment not kept tidy	Ākonga could trip over resources.	Low to moderate risk.	Any challenge resources should be kept neat, off the floor and in clear view.
General workshop hazards	Ākonga could be harmed when they use the tools required to create their ice creams such as electric beaters and other tools.	Minor injuries possible. Low risk of major injuries.	Ākonga will be supervised by teachers and ambassadors. The supervisors will ensure, as far as is reasonably practicable, that ākonga are using the tools responsibly and safely.

Incident procedures

Procedure to be followed in the case of any injury or near-miss incident.

Immediate response

1. Take steps to ensure the area is made safe and the other ākonga are removed from the surrounding area if appropriate.
2. Ensure first aid treatment is given and arrangements are made for emergency or medical care where appropriate.
3. Notify the event manager of the nature of the incident and the extent of injury.

After the incident

1. Determine whether the injury is classified as a notifiable injury under the Health and Safety at Work Act 2015. A good indication that the incident is a notifiable injury is if the victim needs to be admitted to hospital or an ambulance called.
2. If the injury is a notifiable injury, you must notify WorkSafe as soon as practicable.
3. Notify Engineering New Zealand that an incident has occurred and whether that incident has been reported to WorkSafe.

A note on photography

Unless there is a prior arrangement, we ask that you do not take photographs of the ākonga you are working with on your personal phone as we cannot ensure we meet our obligations under the Privacy Act to collect and store personal information securely. Personal information is considered as anything that can identify a person, even if they aren't named.