



# Love Food Hate Waste

Secondary School Workshops  
Food Technology, Stage 4 and 5



## Introduction

On average, NSW households throw away collectively more than \$2.5 Billion worth of food each year, according to the Environment Protection Authority (EPA). That's the equivalent of one in five bags of groceries going straight to the bin which could be saved by better ways of managing our food shopping, cooking and leftovers.

Food is integral to our health and wellbeing, so the topic of food waste is significant and relevant for exploring with students. Learning how to reduce or eliminating our food waste and exclude food from landfill helps students to be part of the solution for sustainable waste management. It helps to build knowledge, skills and values that are necessary to act in ways that contribute to more sustainable patterns of living. Practical experiences about leftovers, portion sizes, shopping, food storage, food choices, landfill, composting and more will encourage students to consider the true value of food and empower everyone to take actions to be waste conscious.

## Activity Aims

- To actively engage students in learning about food waste.
- To develop students confidence and skills in their decisions regarding food waste avoidance and resource recovery.
- To provide knowledge and skills in healthy, sustainable food choices

## Key messages

- **Avoid food waste** i.e. take action for sustainable waste management. It is easy to make simple changes at home that can reduce food waste.
- **There is a significant “environmental footprint” of food wastage** that affects climate change, water, land and biodiversity. Food wastage represents a missed opportunity to improve global food security and to mitigate environmental impacts generated by agriculture. The environmental footprint of food wastage is measured through four main components: carbon footprint; water footprint; land use and degradation impact and biodiversity impact. It is assessed on the impacts of the whole life cycle of the product from growing through to the wastes generated.
- **Keep it coming around i.e. recycle your food and garden waste through home composting or the green lidded organics bin:** Close the loop on our organics by turning organic material collected from homes into nutrient-rich compost for local farms and backyard gardens.

## Curriculum Links – STAGE 4 and 5:

Objectives Students will develop:	Stage 4 Outcomes A student:	Stage 5 Outcomes A student:
6 - knowledge, understanding and appreciation of the significant role of food in society.	4.6.2 - recognises the impact of food and related activities on the individual, society and the environment.	5.6.2 - evaluates the impact of activities related to food on the individual, society and the environment.
<b>Food Technology Focus areas:</b> Food in Australia; Food selection and health; Food product development; Food equity		
<b>Practical Experience:</b> Practical experiences are used to develop knowledge and skills in producing and evaluating meals to reduce and avoid food waste.		
<b>Cross-curriculum content:</b>		
<ul style="list-style-type: none"> <li>• <b>Civics and Citizenship:</b> Students will develop a sound understanding of the nutritional, social and environmental roles of food and food products. In the focus areas ‘food selection and health’ and ‘food product development’ students will develop understanding that will allow them to become discriminating consumers of food products, enabling them to participate in society in an active and informed manner. In the focus area ‘food equity’ students will develop their understanding of inequities in food distribution on a global scale.</li> <li>• <b>Environment:</b> Students will develop an understanding of the ecological impact of food production, packaging and processing. The various ways in which environments influence access to and choice of food will be investigated through the study of the core ‘food preparation and processing’, and the focus areas ‘food in Australia’, ‘food product development’ and ‘food equity’. This will enable them to make informed decisions with regard to food and the</li> </ul>		

## Key knowledge

### Why does food waste matter?

Food management represents a major part of our environmental footprint. When we waste food, we waste everything that went into producing, processing, delivering and selling that food. Wasting food is wasting money, energy, resources and water. This in turn increases the environmental impacts on land, water and ecosystems.

There is also no good reason to throw out edible food while others are in need of food. Businesses that donate food to charity are being socially responsible but avoiding food waste is more beneficial to the community. Of course, businesses that cut food waste will reduce their costs; both for buying and then also for its disposal.

### Less food waste means less pollution

When food breaks down in landfill, together with other organic materials, it becomes the main contributor to the generation of methane, a gas 25 times stronger than carbon dioxide, our main greenhouse gasses. If we stop wasting food in NSW, the environmental impact would be the equivalent of taking 117,000 cars off the road. (NSW EPA) As well the breakdown of food waste in landfill releases nutrients and in a poorly managed landfill these can filter into the environment, polluting groundwater and waterways.

### What is food waste?

Unavoidable food waste is food that cannot be eaten e.g. bones, fat, skin, shellfish shells, tea bags and coffee grounds, egg shells, some fruit and vegetable peel, pips and stones. Unavoidable food waste can be put in the green lidded organics bin or home compost and worm farm. These are easy ways to prevent this food waste going to landfill and to recover the nutrients, returning them to soil as a fertiliser.

At home, avoidable food waste is edible food that is thrown in the bin, fed to pets or composted. Good food is often wasted because we buy too much, cook too much, or don't store food correctly. For businesses, avoidable food waste includes damaged stock and produce that isn't used before the 'sell-by', 'use-by' or 'best-before' date. This occurs due to inefficiencies in the food supply chain, poor handling and preparation, or incorrect serving sizes. Consumer expectation, picky purchasing and enticement into over purchasing also contributes to food waste e.g. the look or size of fruit, low prices and packaging.

### How can we reduce food waste?

1. Plan your meals – meal planning will save you time and money.
2. Check what you already have at home in the fridge and pantry, before going shopping.
3. Shop to a list and stick to it – less impulse purchases means less waste.
4. Store your produce correctly - for example keep your fridge between 3 and 4 degrees, use air-tight storage containers that are clear so you can see what's inside.
5. Measure your portion sizes according to the appetites in your family – don't make the portions too big unless you know you can manage the leftovers.
6. Love your leftovers – eat them the next day, reuse them in another recipe or freeze them for another time.

## Suggested activities to extend learning

- a) Conduct a food waste audit with the class - discuss what's avoidable and unavoidable food waste, and some suggestions for re-using the avoidable food waste (or how it could have been prevented).
- b) Give the students a household budget and plan meals around this - discuss meal planning, and incorporating leftovers.
- c) Work out the food miles, and nutritional value of a store-bought frozen chip (or fish finger) and compare it to homemade chips - discuss any waste associated with it.
- d) Write a class recipe book with favourite recipes from students that involve use of left overs or home garden produce.

## Source and Resources:

- <http://www.lovefoodhatewaste.nsw.gov.au>
- <https://humaneeducation.org/blog/2013/12-resources-teaching-food-waste/>

North East Waste is a group of local Councils that work together to look for opportunities and initiatives to reduce waste to landfill.

Find out more at [www.newaste.org.au](http://www.newaste.org.au)

