

Jobs in your lunchbox

Processing food?

Technologies

- ACTDEK021
- ACTDEK022



Processing food?

Lesson overview

Students will develop an understanding of the reasons why we process foods. They will evaluate the difference between a range of products and rank them in order of the level of processing. They will identify the reasons why we process foods, the benefits of food processing and outline the basic steps in processing some common food items.

Australian Curriculum: Technologies

Design and Technologies

Year 5 and 6 - Investigate how and why food and [fibre](#) are produced in [managed environments](#) ([ACTDEK021](#))

Investigate the role of food preparation in maintaining good [health](#) and the importance of food safety and hygiene ([ACTDEK022](#))

Economics and Business

Year 5 - Influences on consumer choices and methods that can be used to help make informed personal consumer and financial choices ([ACHEK003](#))

Year 6 - The reasons businesses exist and the different ways they provide goods and services ([ACHEK011](#))

Resources

- Category cards
- Lunch box items
- Flow chart template
- Healthy food pyramid.

Tuning In

Each child is given one category card from the pack and must find the group of foods that they belong to. Discuss in your group what links your cards. Ask students to help create a definition of unprocessed, minimally processed and highly processed foods.

Whole class introduction

Most of the foods we eat have been processed in some way. Many different techniques are used to provide us with benefits such as minimising food health risks (e.g. food poisoning), preserving of large quantities, seasonal crops, increasing shelf life, increased variety and the manipulation or addition of certain vitamins and minerals important for good health. Some highly processed foods are considered detrimental to health and wellbeing but eaten in moderation, processed foods can provide an amazing range of flavours for us to enjoy.

Student Activities



Exercise 1: Processed foods continuum – Children are invited to bring in food and drink items from their lunchbox (or photos of items) and then sort them into a continuum from unprocessed to highly processed.

Place a sign on one corner of the room, unprocessed and highly processed on another corner. Provide students with sticky notes on which they can write their sandwich fillings so each individual ingredient can be placed on the continuum. Snacks and individual items can be placed on the line for visual effect.

Refer to the Healthy Food Pyramid and identify which foods are considered most healthy. Discuss as a class the reasons for this.

Exercise 2: Brainstorm in groups different ways foods are processed. Discuss as a class ideas that you hadn't included and add them to your brainstorm.

Key words: Freeze, chop, peel, dry, pulp, pasteurise (remove pathogens i.e. milk), ferment, gas (ripen bananas) pickle, can, mince, bottle, brew, juice, mill, mix, crush, bake, fry, cure, smoke, fortify (i.e. folate in bread).

Note: For this exercise, processing refers to foods modified in a factory setting rather than the preparation of food in the home kitchen.

Exercise 3: What are the benefits of processing foods?

Key words: preservation, food safety, taste, convenience, reduce effect of seasonal availability, combining tastes and textures, reduce waste, increase variety and interest.

Exercise 4: Complete a paddock to plate flowchart on a minimally processed food like milk or frozen vegetables and then research and present another flowchart on a food that is more highly processed like chicken nuggets or cheese.

Teacher note: Many examples of these processes can be found on the internet. It may be of benefit for students to watch a video and record into their flow chart before researching their own paddock to plate story.

Reflection

Explore careers in agriculture – Foods that are processed create a broad range of jobs for people who are turning plant and animal materials into products ready for consumers. At each stage of the process of getting food from paddock to plate, different people are involved. Add these people onto your flow chart i.e. truck driver, abattoir worker, food scientist, occupational health and safety officer, graphic designer.

HEALTHY EATING PYRAMID



Enjoy a variety of food and be active every day!



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Using the category cards.

We buy food in a number of different stages, from unprocessed all the way through to a highly processed stage. We may also buy food to process at home in our kitchen.

Create a definition for ‘unprocessed’, ‘minimally processed’ and ‘highly processed foods’.

There are other products that farmers grow, that we buy, that people don't eat. Some of these may be eaten by animals or used for other reasons and may have different levels of processing. These other products have been included in the category cards for you to discuss.

Reflection

Have you bought or grown any of these products? Have you processed any of these at your home?

Discuss who else is involved in processing food? What jobs do they do?

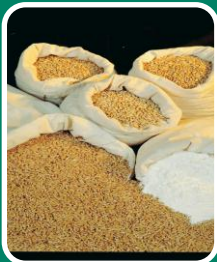
Teachers notes: We have provided labelled category cards for wheat products as a supporting tool. Cut out and hand out one unlabeled card to each student.

Ask the students to arrange cards in order, from unprocessed to highly processed for each product.



Unprocessed

(Wheat plants)



Minimally processed

(Grain and flour)



Minimally processed

(Hay)



Highly processed

(Noodle dough)



Highly processed

(Bread)



Harvested potatoes



Citrus salad



Fruit icy poles (including orange juice)



Chickens



Washed potatoes



Potato plants



Meat at the butchers



Raw sausages



Chicken meat



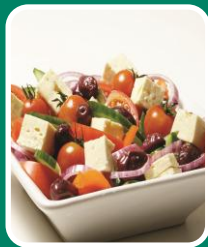
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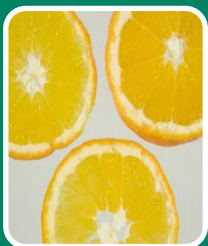
Tomato relish



Tomato plant



Tomato salad



Sliced oranges



Cooked sausages



Sheep



Sandalwood
trees



Sandalwood
trunks



Sandalwood
oils



Sandalwood
lotions



Yoghurt



Dairy cow



Milk



Chicken wrap



Bagged potatoes
(unwashed)



Yarn



Eggs



Woolen
jumper



Fleece or wool
from sheep



Picked tomatoes