Food labelling
Considers the **Use by date** and the **Best before date** to decide if the food product is fit for human consumption.

**Prior knowledge and lesson preparation**
- Children collect a variety of empty food packages e.g. breakfast cereal boxes, coffee jars, dried fruit containers, milk containers, cream containers, cheese packaging, ice cream containers, etc.
- In groups of 3, children discuss how long different foods last before they are unsafe to eat. Share views in a class discussion.
- Discuss the terms **Use by date** and **Best before date**. Inform the children that these are called **date marks** and are found on all packaged items.

**Focus inquiry**
- Set up 2 display tables, Table 1 labelled **Use by date** and Table 2 labelled **Best before date**.
- In pairs, children locate date marks on the packaging and then place these items on the appropriate table.
- Children then draw conclusions about the possible difference in meaning of these terms based on the following guidance questions:
  - What do the separate food products have in common?
  - How are the food products usually stored?
  - What happens to the separate food products with the passing of time?
  - How long will the separate food products remain edible?
- Children then write their definitions for the meaning of each date mark and paste it on a sheet of paper under the headings **Use by date** and **Best before date**.

**Further inquiry**
- Discuss the responses and consider the accuracy of the various definitions offered by student pairs.
- Find two food items with the same **Use by date** and **Best before date**. (Items must be nearing this date.)
- Mark today’s date on the calendar. Identify the date marks on the packaging of the two items. Record these date marks on the calendar by colouring in the box in a different colour.
- Children predict what will happen to the food products once the identified dates pass their **Use by date** and **Best before date**.
- Children record their thoughts and observations about the food products leading up to the identified dates and draw conclusions about the outcomes.

**Healthy take-away!**
Create a **Use by date Alert Chart** for the home refrigerator. Examine the items in the refrigerator and record on the chart the names of the food products that will reach their **Use by date** within the next 3 days. Work with parents to dispose of all food products in the refrigerator that have already passed their **Use by date**. Discuss the benefits of the chart with the family.

**Australian Curriculum exemplary links**
**English:** *Literacy:* Interacting with others [ACELY1656, ACELY1788]
**Maths:** *Measurement and Geometry:* Using units of measurement, Data representation and interpretation [ACMMG019, ACMMG041]
**Science:** *Science Inquiry Skills:* Planning and conducting, Processing and analysing data and information, Communicating, Evaluating [ACSIS011, ACSIS233, ACSIS041] *Science as a Human Endeavour:* Nature and development of science [ACSHE034]

**General Capabilities**
Literacy, Critical and creative thinking, Numeracy, Personal and social competence

**Websites to support inquiry**
- **Video explaining Use by date and Best before date and food labelling**
  - [www.youtube.com/foodstandardsanz#p/u/1/dbqWWZHjwAk](http://www.youtube.com/foodstandardsanz#p/u/1/dbqWWZHjwAk)
- **Interactive label poster**

**Information for teachers**
- **Educational videos**
Understands why packaging is important in the transport and protection of food products and considers strategies to reduce/reuse/recycle packaging.

Prior knowledge and lesson preparation
- Children collect a variety of food packaging from home (eg potato chip packets, fruit juice boxes, egg cartons, canned food, plastic drink bottles, aluminium cans etc).
- In groups of 3–4, children discuss different packaging techniques for specific food products they are aware of and share with the class (eg egg cartons, cereal boxes).
- Using packages brought from home, children sort packages according to what they are made from (eg plastic, cardboard, glass).
- Children discuss possible reasons for different ways of packaging items (eg to protect foods, provide information, help sell, storage and transport).
- Create a class display of assorted packaged items (eg can of fruit, popcorn, cereal box, packaged supermarket meat, sliced bread). Children examine the food items and complete the Food packaging proforma on page 38.

Focus inquiry
- With a partner, children examine an egg carton to consider:
  > strengths and weaknesses of an egg carton design
  > how the design might be improved.
- Using cardboard, paper, cotton, tissue paper, tape etc. children design and construct packaging for one egg, so that when dropped, it does not break. Children record design stages and reasons for decisions made in a journal.
- Children share finished products and seek feedback via a class demonstration.

Further inquiry
- Children select a food product of their choice and design packaging for that food that meets the identified criteria.
- At the completion of the task, children pair up and appraise each others design.
- Children rate the food packaging on a scale of 1 to 5 and give reasons for their rating.

Healthy take-away!
Each year, millions of tonnes of food packaging end up in landfill sites all around Australia. Much of this waste could be recycled.

101 Uses for a Plastic Milk Container
Brainstorm ways we can re-use a plastic milk container. Use the internet for more ideas. Involve parents in this task.
After all suggestions have been collated, creatively present this information to others (eg poster, CD, movie).
Make this resource available to the school community. Challenge other classes to come up with a similar project.

Australian Curriculum exemplary links
English: Literacy: Interacting with others [ACELY1789, ACELY1656]
Maths: Measurement and Geometry: Using units of measurement [ACMMG037]
Science: Science Inquiry Skills: Planning and conducting, Evaluating, Communicating [ACSIS025, ACSIS213, ACSIS029, ACSIS038, ACSIS041]

General Capabilities
Literacy, Critical and creative thinking, ICT competence, Personal and social competence

Websites to support inquiry
ABC lesson ideas on packaging www.abc.net.au/schoolstv/food/ep7.htm
Packing a school lunch box—Nutrition Australia www.nutritionaustralia.org/national/packing-school-lunchbox
## Food packaging

<table>
<thead>
<tr>
<th>Name of food product</th>
<th>What the package is made from</th>
<th>How the package protects the food</th>
<th>Information provided on the package</th>
<th>Is it a good design? Why?</th>
</tr>
</thead>
<tbody>
<tr>
<td>eg Jar of tomato paste</td>
<td>eg Glass.</td>
<td>eg Keeps germs out, keeps the tomato paste fresh, can be stored in the fridge and re-used.</td>
<td>eg Ingredients list, Nutrition information panel, Mass, Use by date, name of product, Name/address of manufacturer/importer.</td>
<td>eg Yes, because it protects the food and is easy to store.</td>
</tr>
</tbody>
</table>

Name: ____________________________ Date: ____________________________
Applies information gathered from reading labels to makes changes to improve eating habits.

Prior knowledge and lesson preparation
- In groups of 3–4, children brainstorm the variety of snack foods known to them and discuss a common agreement for the meaning of the term snack.
- Group definitions are then recorded (e.g., something you eat between meals, something that keeps you going, something that is easy to prepare.)
- With a partner, children identify 5 snacks they like to eat and write each one on a small card. Make a continuum on the floor indicating Least healthy... Most healthy.

Focus inquiry
- Children position their cards (name of snacks) on the continuum line offering reasons for their positioning choice and receive feedback about the level of agreement from classmates.
- In pairs, children discuss what they think determines whether or not a snack is healthy and record a response that defines what a healthy snack is to share with the larger group. (Remind the children that many of the healthiest snacks are fresh and do not have a Nutrition Information Panel, i.e., fresh fruit and vegetables.)
- Seek class agreement to define a healthy snack (consider the role of fresh, unpackaged snacks and nutrients such as fat, salt, sugar, fibre, protein, vitamins and minerals).
- Brainstorm examples of snack foods that would fit the agreed definition and suggest ways to learn more out the nutrient content of packaged foods? (Revisit the Nutrition Information Panel activity.)

Further inquiry
- Children list all snacks consumed over a week and record the information gathered from some of the Nutrition Information Panels. Children then examine their snack record over the week, draw conclusions about their snacking habits and set goals for improvement.
- Using information technology, children graph information from the Nutrient Information Panels for one of their most healthy packaged snacks and one of their least healthy packaged snacks. Compare and interpret data. Children then display their work with explanatory captions.
- Investigate whether or not a physically active person needs more frequent or larger snacks than someone who is sedentary? Does a teenager need more frequent or larger snacks than a 5-year-old?
- Investigate Australian websites to find examples of healthy snacks and design an advertising campaign to promote healthy snacks. Organise a tasting day with the school canteen.

Focus inquiry
- Children position their cards (name of snacks) on the continuum line offering reasons for their positioning choice and receive feedback about the level of agreement from classmates.
- In pairs, children discuss what they think determines whether or not a snack is healthy and record a response that defines what a healthy snack is to share with the larger group. (Remind the children that many of the healthiest snacks are fresh and do not have a Nutrition Information Panel, i.e., fresh fruit and vegetables.)
- Seek class agreement to define a healthy snack (consider the role of fresh, unpackaged snacks and nutrients such as fat, salt, sugar, fibre, protein, vitamins and minerals).
- Brainstorm examples of snack foods that would fit the agreed definition and suggest ways to learn more out the nutrient content of packaged foods? (Revisit the Nutrition Information Panel activity.)

Healthy take-away!
Explain to parents the key features of a food label. Go shopping with your parents and examine labels to assist with purchasing healthier food items.

Australian Curriculum exemplary links
English: Literacy: Interacting with others [ACELY1656, ACELY1788]
Maths: Measurement and Geometry: Using units of measurement [ACMMG019, ACMMG041]
Science: Science Inquiry Skills: Planning and conducting, Processing and analysing data and information, Communicating [ACISIS011, ACISIS233, ACISIS012]
Science as a Human Endeavour: Nature and development of science [ACSHE034]

General Capabilities
Literacy, Critical and creative thinking, Numeracy, Personal and social competence

Websites to support inquiry
Information on food labelling
www.youtube.com/foodstandardsanz#p/u/1/dbqWWZhJwAk
Information for teachers—Food labelling
Food Cents program
Food labels for families

Appetiser!
Considerations for setting personal snacking goals:
- What foods could be replaced with healthier snacking options?
- What are some healthier snack foods?
- Make sure that snacking goals are realistic and achievable.
- Check progress every few days.
- Keep a daily record of snacks eaten and the time of day for a week.
- Review progress at the end of the week and modify goals if needed.
Critically appraises packaging techniques.

Prior knowledge and lesson preparation
- With a partner, children create a mind map of different materials used in packaging food in Australia. Next to each material, children suggest types of foods that might require specific types of packaging, offering reasons for choices.
- Children collect a variety of packaging examples prior to the focus inquiry described below.

Focus inquiry
- In groups of 3, children examine each packaging material. Rate each out of 5 in terms of:
  > ease of recycling
  > easy to transport
  > easy to store
  > strength/durability
  > attractiveness.
- Groups total the score and share their generalisations about the overall quality of packaging. Develop a spreadsheet to summarise conclusions.

Further inquiry
**Milk packaging.**
- In pairs investigate changes to the way milk has been packaged over the past 50 years. Prepare a timeline highlighting key dates and new innovations. Consider the rationale and impact of changes to packaging over time.
- Design a new milk container that is easier to open and handle and caters for an ageing population.

**Nude food!**
- Discuss the benefits of reducing packaging in school lunchboxes. Investigate strategies to allow for package-free lunch boxes
- Organise a wrapper-free or nude food lunch box day once a week. Invite other classes to join in.

**Appetiser!**
Packaging has a very important role to play in the food industry. It must:
- be able to contain, preserve and protect the product
- provide information about the contents of the package
- have the capacity to be recycled.
In Australia the major packaging materials used to package food are:
- glass
- metals (aluminium, steel)
- paper/board (cartons and corrugated)
- plastics (HDPW, PET, PVC, PP, PS).

**Healthy take-away!**
With your family discuss strategies for selecting foods and goods with less packaging and/or packaging that can be recycled (which is better for the environment).

**Australian Curriculum exemplary links**
**English:** *Literacy*: Interacting with others [ACELY1677, ACELY1709]
**Maths:** *Number and Algebra*: Real numbers [ACMNA158]
**Science:** *Science Inquiry Skills*: Planning and Conducting [ACSIS086]
**History:** *Historical Skills*: Historical questions and research, Chronology terms and concepts, Analyses and use of sources [ACHHS067, ACHHS083, ACHHS098, ACHHS102]

**General Capabilities**
- Literacy, Critical and creative thinking
- Numeracy, Personal and social competence

**Cross Curriculum Priorities**
- Sustainability

**Websites to support inquiry**
- ABC lesson ideas on packaging
  [www.abc.net.au/schoolstv/food/ep7.htm](http://www.abc.net.au/schoolstv/food/ep7.htm)
- Lesson activities on packaging, focusing on recycling
- Science Unit Package It Better
Analyses and compares the Nutrition Information Panel and the Ingredients list and compares food products within food groups.

Prior knowledge and lesson preparation
- In groups of 3, students discuss ways consumers can tell whether or not food products for sale in a supermarket or store are healthy or unhealthy. Share in a class discussion and draw conclusions about whether or not there are set requirements in place for businesses.
- Photocopy the Nutrition Information Panel (NIP) and the Ingredients list of at least 3 popular breakfast cereals. Include a healthier option for comparison.

Focus inquiry
- Through class discussion, revisit the negative effects that too much energy (measured in kilojoules), sugar, fat and salt, and too little fibre have on our health and wellbeing (refer pages 26–30 of The Australian Guide to Healthy Eating Background Information for Nutrition Educators in the Teaching support materials section of this kit).
- Using the proformas on p42, with a partner, students:
  > locate and compare sugar, fat, salt, and fibre per 100grams of each cereal.
  > examine the ingredients list to gain a greater understanding of what is in the food product.
  > using the information collected, students rank the 3 breakfast cereals.
- The 3 breakfast cereal boxes from which the NIPs were originally photocopied are then revealed to the class with the NIP and ingredients list hidden.

Further inquiry
- Students discuss, predict and record from which cereal box each NIP and ingredients list originated. Correct matches are then revealed and discussed (bear in mind cereal with added fruit eg sultanas will have more sugar than those without).
- Discuss and make generalisations about how food is marketed to the consumer? Is the information misleading?

Appetiser!
Eating breakfast cereal is often advertised as a perfect way to begin the day. The cereals are promoted as healthy products, full of necessary nutrients and goodness. However, some of the popular brands are high in sugar, salt and/or fat and low in nutritional value. It is important for parents and children to make informed choices when selecting breakfast cereals for their family.

Healthy take-away!
Share the outcomes of this activity with family members and analyse breakfast cereals at home.
# Rating breakfast cereals

<table>
<thead>
<tr>
<th>Breakfast cereal per 100g</th>
<th>Total fats</th>
<th>Saturated fats</th>
<th>Sugar</th>
<th>Sodium (salt)</th>
<th>Fibre</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cereal A</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cereal B</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cereal C</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Name .......................................................... Date ..........................
Encouraging students to make positive lifestyle choices, Burton School Campus is committed to providing community education.

Burton School Campus has always aimed to provide healthy food options through the canteen menu.

Early days saw the ‘Canteen Committee’ involved in a range of Department for Education and Child Development (DECD) special programs and initiatives to promote healthy eating. At the same time, the ‘Active Committee’ looked to support Physical Education throughout the school. Both committees worked quite independently and at that stage there was little community awareness of what was happening in the school. However, these two early groups contributed greatly towards the culture and ethos that is evident today.

One of the most significant developments occurred in 2005 and came from the insistence of the students. Concerned that some families were delivering junk foods to the school, the PASTA Group was born. The name PASTA originated from a Reception class, who determined that ‘PASTA’ stood for Parents And Student Teachers Association. The group is comprised of parent and grandparent representatives, who in the main, worked in the school canteen, students, who formally applied to join the group, SSOs and a teacher.

Once formed the group began the process of educating the school community as to the benefits of healthy eating.

Over the years this group has grown into a powerful, valued and well-respected committee and is a vital part of the life at Burton School Campus. Their initiatives over the six year period, have been many and varied and all been highly successful. Driven by students, with the support of adults, there has been real and positive change. The PASTA Group too, has changed direction and focus over the years, to meet the ever-changing needs of the school and its community.

Recent initiatives have included the further development of the school garden, a very successful lunch box workshop for parents/care-providers, weekly school assembly incentives and the involvement in the ‘World’s Biggest Picnic’.
Case Study

Burton School Campus
making a difference

In April 2010 vegetables grown in the school garden were used to make soup for the whole school. Visiting local chefs along with the PASTA Group, not only cultivated the produce and prepared the soup, but they also spread important health messages to the whole school community.

In April of this year, an innovative Lunch Box Workshop was held and very well attended by parents and care-providers. Practical ideas and information for parents to make healthier choices for their children’s lunch boxes worked well in a fun, informative and non-threatening session.

The school garden grows vegetables, fruit and herbs which are then utilized either, by the school canteen or used for special nutrition days and events.

The success of the day spoke for itself, not only with the large number of participants who attended, but also the fabulous lunches prepared utilizing a range of healthy food combined with interesting recipes and great presentation. Participants enjoyed and learned from the label reading sessions about the ‘traps’ associated with processed food. One appreciative parent shared her thoughts in the following message.

“At the present time the PASTA Group are working with local businesses to provide ingredients, for all students to make their own lunch culminating with the ‘World’s Biggest Picnic’.

Using a range of healthy ingredients the PASTA Group will work with students to make their own delicious roll/sandwich. A piece of fruit and a bottle of water will complete the delicious lunch and then students and staff will take their picnic rugs out to the school oval to share the community luncheon!

“The best thing I found was the label reading session. When I looked at the contents of the foods I was giving my kids for recess and lunch, I realized that what I’d been buying wasn’t good for them!”

“It was a real eye opener and now when I go to the shops I read the labels and check out the grams of salt and sugar and the fat content too. My mum had been telling me for ages that what I was buying wasn’t good for our family, but now I know myself what is healthy and what isn’t. We are all feeling better and the children are losing weight. They just seem happier. I’m happier too. I’m feeling so much better!”

The best thing I found was the label reading session. When I looked at the contents of the foods I was giving my kids for recess and lunch, I realized that what I’d been buying wasn’t good for them!”