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In this lesson, students will begin their investigation into sugar and the different forms it takes. This will give students a base of information to use in the lessons that follow and build on their prior knowledge and experience.
You can adapt and adjust the content where necessary to support your students as they carry out their inquiries.

## Key competencies

Possible achievement objectives \& learning outcomes

## What you need

Key vocabulary

Thinking, relating to others, participating and contributing.

## Science: Level 2

Students will explore and act on issues and questions that link their science learning to their daily living.

Students will extend their experiences and personal explanations of the natural world through exploration, play, asking questions and discussing simple models.

## Learning outcome

Students will explore their knowledge about sugar and understand the difference between natural and added sugars.

Photo cards: Added sugar, foods and drinks containing only added sugar, foods and drinks containing only natural sugars, foods and drinks containing both natural and added sugars.

Words that are important to this lesson are: icing sugar, brown sugar, refined sugar, added (free) sugars, natural sugars. These can be defined and explored in context as you discuss the topic with your students.

## Learning opportunity

The purpose of this learning opportunity is to identify students' prior knowledge about the every day use of sugar. Their ideas can be collated and revisited during later modules to determine if they want to change any statements they made and to self-assess their learning.

1. Start by asking students about the different kinds of sugar they know about.

2 List their ideas on the board or a large sheet of paper.
3. Introduce the photo cards one by one and see if students can match the sugars with the names on their list. Are there any photos of sugars that they haven't listed?
4. With the students, carry out a quick Internet search to find a definition for any they have missed.
5. Ask the students to work in pairs and use the following questions to guide a five-minute discussion.

- How do these sugars look different? (colours, textures, stickiness)
- Why are there different types of sugar, like regular sugar and icing sugar?
(Sugar is used for different things, like icing cakes and as a sweetener in hot drinks)
- Why do the sugars look different? (They are made in different ways and come from different sources. For example, white sugar comes from cane, honey is produced by bees).

6. Explain to students these sugars are all known as 'added' or 'free' sugars.
7. Look again at the photo cards and see how each sugar fits with the definition.

Next, draw the table below on a whiteboard or flipchart.

| Added sugars | Natural sugars | Both added and natural sugars |
| :---: | :---: | :---: |

8. Ask students to place the photo cards that show added sugars in the appropriate column. (They all go in the 'Added sugar' column, even though they may come from natural sources).
9. Think about food and drinks that only have added sugar in them. Add the appropriate photo cards to the table.
10. Have students think about the name of the second column (Natural sugars) and about food or drinks that may belong there. These are foods and drinks that taste naturally sweet but have no added sugars in them. Look at the natural sugar photo cards and have students add these to the appropriate columns of the table.
11. Explain to students the foods and drinks that only have natural sugars are a healthy option to have every day. The foods and drinks that have only added sugars should be eaten occasionally, not every day.
12. Focus on the third column in the table - those foods that have both natural and added sugars. Brainstorm some of these and then add the photo cards to the table.

Definition: Added or free sugars are sugars that have been added to foods and drinks by the manufacturer, the cook or the consumer, plus sugars that are naturally present in honey, syrups and fruit juices.
13. Ask the students:

- Can you think of some other foods and drinks that include sugar? Where do they belong on the table? (For example, muesli bars and dairy food both contain natural and added sugars).

Reinforce the fact that children need healthy food most of the time. Foods and drinks that contain only natural sugars are good for us and should be included in our every day diet. Our bodies don't need any added sugar.
The World Health Organisation recommends children eat less than 5tsp of added sugar per day (less than 20g/day).
Water and plain milk are the best drinks for children as they have no added sugars.

## Reflect on the learning

This is the time to reflect on the learning outcomes for the lesson. Students can also talk about any ideas that are still unclear. When reflecting on this lesson, focus the discussion on the possible achievement objectives and learning outcomes. By asking key questions, allow students to articulate their learning.

Lesson 2 preview: How are added sugars produced? Ask some of the following questions to promote discussion and preparation for the next lesson.

- Where does sugar come from?
- How is it made?
- How was it made in the past?

Lesson 1:
Photo cards: Added sugars

| Raw brown sugar | Soft brown sugar | White refined sugar |
| :---: | :---: | :---: |
| Icing sugar | Golden syrup | Honey |



Maple syrup

Lesson 1:
Photo cards: Foods and drinks with added sugars only


Lesson 1:
Photo cards: Foods and drinks with natural sugars only

| Plain milk | Plain unsweetened yoghurt |
| :---: | :---: | :---: |
| Apple |  |
| Carrots |  |

Lesson 1:
Photo cards: Foods and drinks with both natural sugars and added sugars


Fruit jam

## How are added sugars produced?

In this lesson, students explore how added sugars are produced from raw materials such as cane and beet.

You can adapt and adjust the content of this lesson where necessary to support your students as they carry out their inquiry.

## K Key competencies

Possible achievement objectives \& learning outcomes


What you need


Key vocabulary

Thinking, using language, symbols and texts.

## Social studies: Level 2

Students will understand how time and change affect people's lives.

## Learning outcome

Students will understand how the production and use of sugar has changed over time and discuss the impact on people's well-being.

## Technology: Level 2

Students will understand that technology both reflects and changes society, the environment and increases people's capability to produce more and focus on other tasks.

## Learning outcome

Students will understand the impact that technology has had on the production and use of sugar.

- Photo cards: Cane and beets, sugar production, old and new, added sugar (from Lesson 1).
- Graphic organiser: Technology, then and now.
- Video clips (preview before lesson).

Words that are important to this lesson are: sugar cane, sugar beet, technology, tools.
These can be defined and explored in context as you discuss the topic with your students.

## How are added sugars produced?

## Learning opportunity

The purpose of this lesson is to help your students generate rich questions about sugar production, and to understand where sugar comes from and how it is manufactured. The lesson will also look at the impact of technology used in sugar production, and how this has changed over time.

1. Start by asking students if they can name some of the different types of sugars - natural and added, discussed in the last session.
2. Show the Photo cards: Added sugars from Lesson 1. Explain we usually buy these added sugars from a shop or supermarket. Ask:

- How does it get there?
- Does anyone know where sugar comes from?

Sugar has been produced in different ways over time. Determine if students know how sugar is made from sugar cane or beets. Students may also talk about where honey and natural maple syrup come from.
3. After the discussion, share the Photo cards: Cane and beets, starting with the cane plantation and the rows of beets. The students can talk in pairs. Ask:

- How might you get sugar from these plants? Which part of the plant might you use?

4. Explain that you're going to watch a video called The Sugar Trail 1920s, which tells the story of how sugar cane and beets were grown, harvested and processed to make sugar in the past (approx. 12 minutes). Explain that it is a silent movie, which was made in the 1920s.

## (- www.youtube.com/watch?v=wfPOcqTLxxw

As you watch the clip together, you can provide commentary to answer questions or explain some of the detail. You may wish to pause the video at certain points to allow time for reflection and thinking forward. Encourage students to read out the text when it appears, and to contribute ideas.

Definition: Added (or free) sugars are sugars that are added to foods and drinks by the manufacturer, the cook or the consumer, plus sugars that are naturally present in honey, syrups and fruit juices.

## How are added sugars produced?

5. After watching the video, ask:

- What technology, machines and tools were used to produce the sugar? (machete, horses, carts)
- What did you find interesting or surprising?

7. Instruct students to now independently complete the "Then" column of the Graphic organiser: Technology, then and now. They can write down or draw examples of the machines and tools that were used from the growing stage to production. Encourage them to check in with their peers if they need to discuss or clarify what they have seen.
8. As a class, use the information the students have recorded on the graphic organisers to discuss:

- How were sugar cane and beets grown?
- How were they gathered or harvested? What was done differently in each process?
- How were they used to make sugar?

9. Now share the Photo cards: Old and new, which depict sugar production from long ago. Be aware that both images show slave labour harvesting and processing the cane. Ask:

- What technology or machinery can you see in the pictures? (Wheels and presses are used to crush the cane, fires heat and reduce the juice from the cane to form crystalised raw sugar).

Allow time for students to add or change aspects on their Graphic organiser as a result of the discussion.
10. Now we are going to look at the ways we produce sugar from cane and beet today.

## - What tools and technology for growing, harvesting and producing sugar do you think will have changed?

Together watch some or all of the videos you previewed earlier:
Sugarcane Australia: Paddock to plate - designed for children. This video tells the story of sugar cane from planting through to processing into granules (approx. 5 minutes).

## (- www.youtube.com/watch?v=lovvMOv4vYQ

## How are added sugars produced?

Planting sugar beets in North Dakota. This short video shows beets being planted. As the Sesame Street video below starts at the harvesting stage, students need to see this first step so they can complete Graphic organiser 2 (approx. 1 minute 30 seconds).

## (D www.youtube.com/watch?v=E4Inj9hJdZU

Sesame Street: Sugar beets. This short clip shows how sugar beets are harvested and processed into sugar. It is accompanied by a song rather than a narrative, so you may like to watch it on mute and provide some commentary yourself (approx. 1 minute).

## (1) www.youtube.com/watch?v=KuZNSGdg2ms

As you watch each clip, you can pause to answer questions or explain some of the detail.
11. At the end of the videos, ask:

- What technology was used to produce the sugar? (Machines were used to plant cane and beets, harvest them, cut them up, mix them, spin them like a tumble dryer; chemicals were added).
- What did you find interesting or surprising? (The number of steps involved, adding chemicals).

12. Students can now independently complete the "Now" column of the graphic organiser. They can write down or draw examples of the technologies that were used from the growing stage to production. Encourage them to check with their peers if they need to discuss or clarify what they have seen.
Additional inquiries that students could undertake include:

- How is honey is produced?
- Where does maple syrup come from?
- How do we get fruit juice? (Juicing five oranges to make one glass juice)
- How have the amounts of sugar produced changed over time? (To show there have been huge increases).


## Reflect on the learning

This is the time to reflect on the learning outcomes for the lesson. Students can also discuss any ideas that are still unclear. Focus the discussion on the possible achievement objectives and learning outcomes. By asking key questions, allow students to articulate their learning.

Lesson 3 preview: Learn how much sugar is in food and drink. Ask some of the following questions to promote discussion, research, and preparation for the next lesson.

- What do food labels show us?
- Where do we find information about sugar on a label?

Lesson 2:
Photo cards: Cane and beets


Lesson 2:
Photo cards: Sugar production, old and new


Sugar production in the Caribbean, 1590s.


Sugar production in the Caribbean, 1800s.


Washing cane


Cane crushing machine


Recycling stalks into biofuel

Foundation

Lesson 2:
Graphic organiser: Technology, then and now

| Sugar cane | THEN | NOW |
| :---: | :---: | :---: |
| Grown |  |  |
| Harvested |  |  |
| Processed |  |  |
| Sugar beets |  |  |
| Processed |  |  |
| Grown |  |  |
| Harvested |  |  |

## Learn how much sugar is in food \& drink

In this lesson, students will investigate the sugar in foods they eat and how they can use this information to make healthier choices.

You can adapt and adjust the content where necessary to support your students as they carry out their inquiries.

Possible achievement objectives \& learning outcomes

Thinking, using language, symbols, texts and relating to others.

## Science: Level 2

## Participating and contributing

Students will explore and act on issues and questions that link their science learning to their daily living.

## Investigating in science

Students will extend their experiences and personal explanations of the natural world through exploration, play, asking questions and discussing simple models.

## Learning outcome

Students will understand the purpose of the nutrition information panel found on food products and be able to use them to make healthier food choices.

## Mathematics and statistics: Level 2 Statistics

Students will conduct investigations using the statistical enquiry cycle.

## Learning outcome

Students will use 'Problem, Plan, Data, Analysis, and Conclusion' to analyse the sugar content of various foods and convert the amount to a teaspoon equivalent.

## Learn how much sugar is in food \& drink



What you need

- Enlarged nutrition information panel and ingredient list showing sugar and common names for sugar listed.
- Photo cards: Food items (with and without nutrition information panels).
- Graphic organiser: Sugar detective
- Several real food items that children commonly eat with their packaging and nutrition information panel, such as a muesli bar, a weighed serving of breakfast cereal or a chocolate biscuit.
- White sugar and a teaspoon (1 tsp of sugar weighs about 4 grams).

Some of the words that are important to this lesson are: nutrition information panel, free sugar, added sugar, grams, serving, energy, protein, sodium, fat.
These can be defined and explored in context as you discuss the topic with your students.

## Learning opportunity

Allow students to investigate the sugar that is in foods they eat and how they can use this information to make healthier food choices.
The World Health Organisation recommends reducing the intake of 'free sugars' (which is added sugar, plus honey, syrups, fruit juices and fruit juice concentrates) to less than $5 \%$ of total energy intake. For a 10 -year-old child this equates to less than 5 teaspoons per day (less than $20 \mathrm{~g} / \mathrm{day}$ ).
This doesn't include natural sugars from things like whole fruit, vegetables and plain milk.
Water and plain milk are the best drinks for children as they have no free sugars.

1. Begin the lesson by holding up the enlarged nutrition information panel. Ask:

Do you know what this is? Where could you find one?

Note: All packaged foods are required by law to have this information listed clearly. Exceptions are herbs and spices, water, foods that are sold unpackaged, and foods made on a premise, such as bread made at the local bakery.
Detailed information about nutrition information panels:
(.) www.foodstandards.gov.au/consumer/labelling/panels/Pages/default.aspx

# Learn how much sugar is in food \& drink 

Further information on using nutritional panels to make healthy choices:
(.) www.heartfoundation.org.nz/wellbeing/healthy-eating/how-to-read-food-labels

- Does anyone know what the words on the nutrition information panel mean?

2. Allow the students to discuss the words on the panel (for example, energy, protein) and offer suggestions that you can record on the whiteboard. Explain that the panel allows us to check what nutrients a food item contains, and also to compare it with similar foods. Some of the terms on nutrition information panels are complex and you don't need to delve into these too deeply, for example, saturated fat, sodium.
3. Hand out the first set of Photo cards: Food items (without nutrition information panels). All of these products contain some sugar. Ask:

- Which do you think has the most? Which has the smallest amount?

4. First compare three 'like’ products here (for example breakfast cereals like fruit loops, wheat biscuits and coco rice cereal). Have students work in small groups to put the products in order of which contains the highest and lowest amounts of sugar.
5. Next, work with the second set of Photo cards: Food items (with nutrition panels).

Work with the students to again order the items with the product they think contains the highest and lowest amounts of sugar, this time using the amounts of sugar listed on the panels.
6. Compare the order of the photo cards from this activity with the group's photo card order from the first activity.
7. Discuss:

## - Which foods are in a different place in your orders? <br> - Which foods surprised you by the amount of sugar they contain?

8. Now bring out the real foods and their food labels. Have the students look at the nutrition information panels to identify how much sugar is in each, using the amount of sugar listed in the 'per 100 grams' column.
9. Convert the weight to teaspoons ( $\mathrm{ltsp}=4 \mathrm{~g}$ ) and measure the teaspoons of white sugar onto a small dish. Depending on time and the students' abilities, it may be simpler to do the conversions before the lesson and look at the amount of sugar per serve.
10. Talk about the pile of sugar compared with the product.

# - What would it be like to eat that pile of sugar? <br> - What would it do to your body? 

Note: Some students may talk about the effects of sugar on body size. Engage with this if it arises but note the purpose of these lessons is to make better choices to live a healthier life, rather than changing body size.

## Sugar detective

11. Give each student a copy of Graphic organiser: Sugar detective. Explain that they need to find five packaged products at home that contain sugar (foods and/or drinks). They can then write the name of the product and the amount of 'sugar per 100 grams' on the chart.
Note: Because serving sizes differ between products, using the 'per 100 grams' calculation is an easier way to compare the sugar content of two products.
12. The next day, have students work in pairs to calculate the teaspoons of sugar in these products. Ask if they were surprised to find sugar in some products or by the amount of sugar that was in a product.
13. As a class, find out which three products contain the most sugar per 100 grams. Measure the amount of white sugar ( 1 tsp of sugar weighs about 4 grams) to see what it looks like.
14. Revisit the discussion from lessons 1 and 2 about different names for sugar on food packaging. Together, make a list of some of the different names. Next, show the students the enlarged ingredient list. Explain that:

- the ingredients list shows everything that has been used to make the food or drink
- ingredients are listed in a descending order (the ingredient present in the greatest quantity listed first)
- if sugar is in the first three ingredients listed, then the product is usually high in sugar
- generally, the less ingredients listed, the less processed the food.


## Reflect on the learning

This is the time to reflect on the learning outcomes for the lesson and to signal the next lesson focus, where students will explore the different reasons that sugar is added to foods and drinks. Students can also talk about any ideas that are still unclear.
When reflecting on this lesson, focus the discussion on the possible achievement objectives and learning outcomes for the inquiry question. By asking key questions, allow students to articulate their learning.

Lesson 4 preview: Why is sugar added to food and drinks?
Ask students to think about this question. Most will suggest that the reason is to make the product sweet. However, in the next lesson they will discover sugar is added for a number of reasons.

Lesson 3:
Photo cards: Food items (without nutrition panels)



Coco rice cereal

Lesson 3:

## Muesli bar



## Cereal



Chocolate biscuit


Nutrition Facts

| Nutrient | Per Serving | Per 100 g |
| :---: | :---: | :---: |
| Calories | 90 | 470 |
| Fat | 3.4 g | 9.8 g |
| Saturated fat | 1.0 g | 2.9 g |
| Carbohydrates | 17.4 g | 49.7 g |
| Sugars | 6.6 g | 18.9 g |
| Sodium | 11 mg | 32 mg |
| Energy | 534 kJ | 1496 kJ |
| Protein | 2.7 g | 7.9 g |

## Nutrition Facts

| Nutrient | Per Serving | Per 100 g |
| :---: | :---: | :---: |
| Calories | 111 | 370 |
| Fat | 0.1 g | 0.3 g |
| Saturated fat | 0.1 g | 0.3 g |
| Carbohydrates | 24.3 g | 81.0 g |
| Sugars | 2.0 g | 6.5 g |
| Sodium | 0.5 g | 1.2 g |
| Energy | 471 kJ | 1570 kJ |
| Protein | 2.2 g | 7.3 g |

## Nutrition Facts

| Nutrient | Per Serving | Per 100 g |
| :---: | :---: | :---: |
| Calories | 84 | 494 |
| Fat | 5.7 g | 27.1 g |
| Saturated fat | 3.1 g | 14.8 g |
| Carbohydrates | 12.6 g | 60.0 g |
| Sugars | 6.4 g | 30.5 g |
| Sodium | 0.1 g | 0.4 g |
| Energy | 453 kJ | 8400 kJ |
| Protein | 1.5 g | 7.3 g |

Lesson 3:

## craphic organiser: Sugar detective

Look in the cupboards and fridge at home.
Check the nutrition panel on as many foods and drinks as you can.
How much sugar does each item have per 100 grams?
Bring your survey back to class to discuss your findings.

| Product | Amount of sugar per 100 grams |
| :--- | :--- |
|  |  |
|  |  |
|  |  |

## Lesson 4: Why is sugar added to food \& drinks?

In this lesson students will explore the various reasons that sugar is added to food and drinks. You can adapt and adjust the content where necessary to support your students as they carry out their inquiries.

## $<$ Key competencies <br> Possible achievement <br> objectives \& learning outcomes

0What you need


Key vocabulary

Thinking, using language, symbols and texts.

## Science: Level 2

Students will observe, describe and compare physical and chemical properties of common materials and changes that occur when materials are mixed, heated or cooled.

## Learning outcome

Students will understand that sugar has many uses, other than being used as a sweetener.

- Samples of jam and chutney
- Tin of fruit
- Teaspoons
- Active dried yeast
- Sugar
- Warm milk
- Fact files: Lasting longer, It's alive!

Words that are important to this lesson are: preservative, acidic, yeast.

## Learning opportunity

This learning opportunity will help students understand the different reasons for adding sugar to foods:

- sweetener
- bulking agent
- preservative
- flavour enhancer
- colourant
- thickener

These can be defined and explored in context as you discuss the topic with your students. You can find a lot of useful information about the functional properties of sugar in food.

## © www.srasanz.org/sras/basics-sugar/functionsuses-food/

1. To begin the lesson, look at the samples of jam and chutney. If possible, use commercial products so you can ask the students to investigate the nutrition information panels after the taste test. These two food products are high in sugar.

## - Do you think they taste the same?

2. Have several students try the jam and then the chutney, and report on what they taste. If there is time, allow other students to taste and compare opinions.
3. Now get the students to look at the nutrition information panels on the products and use the amount of sugar "per 100 grams" to compare the sugar content of both foods. If possible, use the teaspoon conversion (l teaspoon is about 4 grams) to show students the actual amount of white sugar in 100 grams of each food.

## - Why do you think there is so much sugar in the jam and the chutney?

Note: Students will probably suggest that sugar adds sweetness to jam. Jam usually contains more sugar than chutney, but fruit chutney still contains a lot of sugar, along with the natural sugars from the fruit. However, jam and fruit chutney taste very different. Jam is mainly sugar and fruit and will last a long time because of the preservative effect of the sugar. As well as needing sugar for its preservative qualities, chutney needs sugar to balance the sharp taste of other ingredients, such as vinegar and hot spices.
4. Have students research the other reasons for the added sugar, using the infographic, 'Why is there sugar in my food'?

## ( ) www.srasanz.org/files/1614/4697/0063/Why_is_there_sugar_in_my_food_FINAL.pdf

Depending on time and interest level, students could explore and discuss more reasons for adding sugar to food. Activities could include experiments, like how yeast works more efficiently when it has sugar to feed on, or how yeast rises and adds lightness to bread.

You can also include the experiment shown in the video as an option, so students can see the effect of sugar on yeast.

## (- www.youtube.com/watch?v=FYCICHVTOOM

Freezing fruit juice with no added sugar, some added sugar and lots of added sugar to see the effects on the frozen product (rock hard vs soft compared to soft and unfrozen).
For the above activities, students can work in groups with the Fact files: Lasting longer, and It's alive! Have them share the outcomes of their discussions with the rest of the class as a verbal description of how sugar is used or in written or poster form (diagram, step-by-step, mind map).

Lesson 4:

## Why is sugar added to food \& drinks?

## Reflect on the learning

This is the time to reflect on the learning outcomes for the lesson and to signal the next lesson focus, where students will explore what happens in our bodies when they eat sugar, and how our bodies use sugar. Students can also talk about any ideas that are still unclear.

When reflecting on this lesson, focus the discussion on the possible achievement objectives and learning outcomes for the inquiry question. By asking key questions, allow students to articulate their learning.

A teaspoon of dried yeast might not look alive...but it is! Yeast is a kind of fungus that is used to make bread. When you add it to warm water or milk, it starts to grow. If you add sugar, the yeast eats it and grows. As it does, it makes a gas called carbon dioxide and the bread dough starts to get bigger. This gas is what makes bread light and fluffy because it gets caught in the dough and leaves tiny holes. When the bread is put in a hot oven, the yeast dies, so the bread stops rising.

3. Kneading

2. Yeast + sugar + warm milk

4. Baked bread


Most jam is made from half fruit and half sugar. But if jam is made from fresh, sweettasting fruit, why does it need all that sugar?

When the jam and sugar is boiled, the sugar helps the jam to 'set' or become thick. Without the sugar, it's hard to get a firm jam that will stay on your toast!

All this sugar means that it's hard for bacteria to grow and spoil the jam. Most jam doesn't need to be kept in the fridge because it lasts a long time after it's opened without going mouldy. So, sugar in jam acts as a preservative.


## What happens in my body when I eat

 sugar?This lesson will help students understand how our bodies use sugar and the different effects of eating sugar.
You can adapt and adjust the content of this lesson where necessary to support your students as they carry out their inquiry.

## Key competencies

Possible achievement objectives \& learning outcomes

Thinking, self-management, using language, symbols and texts.

## Science: Level 2

Students will recognise that all living things have certain requirements so they can stay alive.

## Learning outcome

Students will begin to understand the process of digestion that begins with carbohydrates and how this is essential for the energy our bodies need.
Students will extend their experiences and personal explanations of the natural world through exploration, play, asking questions and discussing simple models.

## Learning outcome

Students will understand that we need energy to function and that sugar (a carbohydrate) in its many forms, provides the raw material for that energy.
Our bodies convert sugar into glucose and there are different parts of the body that play a role in this process.

- Photo card: Body diagram, with name cards
- Fact file: How carbohydrates are digested
- Graphic organiser: The sugar journey.

Words that are important to this lesson are: glucose, carbohydrate, energy, digest, digestive system, blood sugar, intestine.
These can be defined and explored in context as you discuss the topic with your students.

## What happens in my body when I eat

 sugar?
## Learning opportunity

Students will explore how our bodies process and use sugar. Do we actually need sugar? How much is a healthy amount?
Students will begin to understand how our bodies process the carbohydrate within food so that glucose can be released to provide the energy we need. Support students to become familiar with the ideas and the vocabulary involved.

1. To begin the lesson, touch on the concept of a balanced diet, which includes a range of food types and focuses on eating mostly foods and drinks that are close to how they are found in nature.
2. Discuss the concept that for a healthy diet we eat all kinds of whole and less processed foods, such as;

- vegetables and fruit
- grain foods and starchy vegetables
- legumes, fish, eggs, poultry and meat
- milk, yoghurt and cheese
- healthy oils, nuts and seeds.

You'll find information on the Heart Foundation's Healthy Heart visual food guide.
© www.heartfoundation.org.nz/healthy-living/healthy-eating/healthy-heart-visual-food-guide/about-the-healthy-heart-visual-food-guide
3. Ask:

- What things are not part of a healthy diet if we eat too much of them?
(Occasional foods such as sugary drinks, ice cream, biscuits, lollies).

4. Write the students' suggestions on the whiteboard.

## Fuelling our bodies

5. Explain that, like a car, our bodies need fuel. It's important for us to have the right kind of fuel for our bodies to work well and have the energy to learn, move, grow and play.
Imagine that your family is taking for a trip in the car and your mum or dad fills the car with diesel petrol instead of regular unleaded petrol.

# What happens in my body when I eat 

 sugar?- What do you think will happen? (The car won't run well, it will have less power and produce smoke).
- How is this like the way your body uses food for energy?
- What happens if you put lots of sugary food and drinks into your body's 'tank', instead of healthy food? (Your body won't run well. You may have a burst of energy, but it won't last long).

6. Look at the photo card Body diagram with the students. Ask them to work in small groups with a copy of the photo card and the cards showing the names of the body parts (mouth, brain, stomach and intestine, blood).
7. Ask students to place their cards in the correct place. Knowing about these organs and where they are in the body will help students to understand the part that each organ plays to digest food and provide energy to the body.
8. Afterwards, allow students to compare their results and make changes as appropriate.

## The digestive process

9. Tell the students that when we eat sugar our bodies digest and break the sugar foods down into smaller simple sugars (like glucose) quickly.
Other foods like pasta, rice, bread and fruit are also broken down to smaller, simple sugars. However, the digestion process usually takes longer and provides a sustained amount of energy when compared to free sugar, which is digested quickly and enters the blood stream quickly.
10. Share the Fact File: How carbohydrates are digested with the students. Talk them through the process, clearly identifying the organs they have named on the body diagram. Ask questions such as:
[^0]
# Fact file: How carbohydrates are digested 

| Key words | What happens? |
| :---: | :---: |
| Mouth | Your teeth grind up food. |
| Stomach and small intestine | Carbohydrate foods are broken down or digested into smaller simple sugars, which are used as fuel in the body. |
| Blood | The simple sugars (like glucose) then move from the intestine to the blood and are used by the body and brain for energy. |
| Brain and body | The cells of your body and your brain take the simple sugar (like glucose) they need for energy. |
| Liver and Muscle | Any extra sugar that is not used by the body or brain is then stored as glycogen in the liver and muscle, and then body fat. |
| Fat stores | Excess energy is stored as body fat. |

11. Give students copies of the Graphic organiser: The sugar journey which they can complete in pairs or small groups, showing the knowledge they've gained from the lesson.
Note: The World Health Organisation recommends that children eat less than 5 teaspoons ( 20 g ) of free sugar per day. Currently in NZ, children are having between 15-17 teaspoons of added sugar per day, about three times more than the recommendation. This works out to be on average 23 kg of added sugar per year, or the equivalent of a seven-year-old child eating their own body weight in added sugar each year! If you have time, you can show this visually by asking students to use teaspoons and two bowls. Have one student spoon the recommended 5 teaspoons into one bowl, and another spoon 14 teaspoons into the other, and together count up to 17 teaspoons as the extra five teaspoons are added.

## Reflect on the learning

This is the time to reflect on the learning outcomes for the lesson and to signal the focus for the next lesson, where students will learn how sugar affects our teeth. It is also a time for students to talk about any ideas that are still unclear.
In reflecting on this lesson, focus the discussion on the possible achievement objectives and learning outcomes for the inquiry question. By asking key questions, allow students to articulate their learning.

Definition: Free sugars are sugars that are added to foods and drinks by the manufacturer, the cook or the consumer, plus sugars that are naturally present in honey, syrups and fruit juices.

Lesson 5:
Graphic organiser: The sugar journey


Stomach and intestine


Liver and muscle stores

Fat Stores

Lesson 5:
Photo card: Body diagram

| Mouth | Stomach and <br> intestine | Blood | Brain |
| :---: | :---: | :---: | :---: |

## Sugar in drinks

In this lesson students will begin their investigation into the amount of sugar found in drinks. You can adapt and adjust the content where necessary to support your students as they carry out their inquiries.

## Possible achievement <br> objectives \& learning outcomes

Thinking, self-management, using language, symbols and texts.

## Science: Level 2

Students will explore and act on issues and questions that link their science learning to their daily living.

## Learning outcome

Students will know how to use a food label to determine the amount of sugar in a drink. They will understand that drinks like fizzy drinks, sports drinks and flavoured milks contain large amounts of sugar, while water and milk have very little or none.
Students will extend their experiences and personal explanations of the natural world through exploration, play, asking questions and discussing simple models.

## Learning outcome

Students will understand the purpose of nutrition information panels on food products and will be able to use them to make healthier food and drink choices.

## Health and Physical Education: Level 2

Students will describe their stages of growth and their development needs and demonstrate increasing responsibility for self-care.

## Learning outcomes

Students will understand that most drinks contain more sugar than the daily recommended amount and that water and milk are healthier options.

## Mathematics and statistics: Level 2 Statistics

Students will conduct investigations using the statistical enquiry cycle.

## Leaning outcome

Students will use 'Problem, Plan, Data, Analysis, and Conclusion' to analyse the sugar content of various foods and convert it to a teaspoon equivalent.

## What you need

- Infographic How much sugar is in that drink?
© www.hpa.org.nz/sites/default/files/images/How\  much\%20sugar\%20do\%20you\%20drink_a4.pdf
- Photo card: Drinking fizzy drinks
- Some empty bottles of sugary drinks such as fizzy drink, sports drink, flavoured water, flavoured milk, juice, cordial packets.
- White sugar, a teaspoon, and 4 or 5 small bowls
- Graphic organiser: Survey of favourite drinks


## Key vocabulary

Words that are important to this lesson are: natural sugar, added sugar, flavoured, balanced diet, artificial sweetener.
These can be defined and explored in context as you discuss the topic with your students.

## Learning opportunity

Students will explore how much sugar is in fizzy drinks, sports drinks, flavoured water, flavoured milk, juice and energy drinks. To ask 'Are these drinks a healthy choice?' Students will understand that these drinks contain a lot of sugar and are not an every day choice.

1. To begin the lesson, ask students the following questions:

## - Have you seen sugary drinks for sale in the supermarket or at your local dairy or petrol station?

- What types of drinks have you seen or tried?

2. Brainstorm the names of sugary drinks and write the students' suggestions on the board.

Make sure they have the complete list of the different types:

- Fizzy drinks (eg. Coke/Pepsi/Sprite/Fanta/L\&P/Mountain Dew)
- Sports drinks (eg. E2/Powerade/Gatorade/Loaded/G-force)
- Flavoured waters (eg. Pump/H2go/Homebrand)
- Flavoured milks (eg. Primo/Calci-Yum/Mammoth/Oke/Nippys)
- Juices and fruit drinks (eg. Just Juice/Fresh Up/Keri/Cordial/powdered sachets(eg. Raro))
- Energy drinks (eg. Mother/Demon/V/Red Bull/Lift Plus).


## Sugar in drinks

3. Show students empty drink bottles and talk about the different kinds of drinks, ensuring they know what a sports drink and an energy drink is and the difference between regular milk and flavoured milk.

- Why is sugar added in drinks? (for taste)
- Do you think these drinks have a lot of sugar in them?

4. Ask students to order the drinks from least, to most amount of sugar (comparing per 100 ml ).
5. Choose one of the empty sugary drink bottles and show it to the students. Ask:

## - How much sugar do you think is in this drink?

6. Point out the nutrition information panel on the bottle, which shows how much sugar is in each serving and per 100 grams. Remind students that the way to compare the amount of sugar between drinks is to read the amount from the 'per 100 grams' column.
7. Convert the amount of sugar per 100 grams to teaspoons ( $1 \mathrm{tsp}=4 \mathrm{~g}$ ).
8. Then measure the number of teaspoons of white sugar into the small bowl. For more information on using nutrition information panels to make healthy choices go to
© www.heartfoundation.org.nz/wellbeing/healthy-eating/how-to-read-food-labels/
9. Ask your students:

## - Does that surprise you?

- Can you tell that this drink has a lot of sugar in it by reading the label?

10. Support the students to understand that because fizzy drinks contain a lot of added sugar, they should be an occasional treat and not a regular part of a diet.
11. Next, ask a volunteer to choose another of the other empty drink bottles, convert the serving measurement on the nutrition panel into teaspoons, and then put this amount of sugar into another bowl.
12. Now have students pair up or get into small groups. Give them printouts of the infographic 'How much sugar is in that drink?' They can discuss the information in the chart and then report back to the class on what they observed and any questions they have about the information. You can also display the infographic on the classroom wall for students to refer to.
13. When the students have finished looking at the infographic, show the World Health Organisation recommended daily consumption of added sugar for children as $5 \%$ total energy intake for a 10 -year-old (no more than five teaspoons or 20 grams of added sugar per day).

## Sugar in drinks

14. Ask one of the students to put five teaspoons of sugar into an empty bowl to show this amount.
15. Now direct the student's attention back to the infographic and point to the soft drink.

- How many teaspoons of sugar are in this bottle of soft drink? (16)
- How does a soft drink compare with your recommended sugar intake for the day?

16. Support the students to work out that a typical soft or fizzy drink has three times the amount of added sugar recommended every day. Encourage them to do the maths and figure out approximately how the other drinks on the infographic (fruit juice, sports drink and flavoured milk) compare with this daily recommended amount.
Guide them to understand that most of these drinks on the chart have double or triple the recommended amount.
17. Explain that regularly having drinks with a lot of sugar causes tooth decay (learn more about sugar and dental health in lesson 7). This is a result of the large amounts of sugar in these drinks, which we know damages the enamel of teeth. All sugary drinks also contain acids that eat away at the tooth's enamel.
18. Show the students an empty bottle of water, then an empty milk bottle or carton.

- Which are the healthiest drinks?

19. Show students relevant materials on choosing water and plain milk:
(t) www.nutritionandactivity.govt.nz/nutrition/100-waterresources
© www.nutritionandactivity.govt.nz/sites/default/files/3\  0\%20NPA158\%20Water\%20and\%20plain\%20milk\%20 only\%20guide\%20for\%20Schools_FA_Online.pdf
Students may bring up 'diet' drinks as a healthier option as they don't have added sugar.
Explain:

- Water is the best drink for us all and plain milk is also a great choice.
- 'Diet' drinks are still not as good as water and plain milk because:


## Guide to becoming a

## water

 and plain milk only school```
Sugary drinks' are one of the most significant  causes of poor roal health and contribute to childhood obesity and type 2 diabetes.
Schools can provide healthy environments for
staff, students and their whanau, and being staff, students and their whanau, and being a
water and plain mik only school for students is water and plain mik
a great place to start.
```



100\% $\quad \begin{aligned} & \text { It's easy! Follow these three } \\ & \text { steps and use these practical } \\ & \text { ideas to help you get started }\end{aligned}$ steps and use these practical
ideas to help you get started>

- They taste sweet so they make us want more sweet foods and drinks.
- They are acidic and damage our teeth.
- Too much artificial sweetener can be bad for our bodies.

Lesson 6:

## Sugar in drinks

## Reflect on the learning

This is the time to reflect on the learning outcomes for the lesson, and to signal the next lesson focus for this module, where students will learn other ways that drinks are sweetened. It is also a time for students to talk about any ideas that are still unclear.

In reflecting on this lesson, focus the discussion on the possible achievement objectives and learning outcomes for the inquiry question. By asking key questions, allow students to articulate their learning.

Lesson 6:

## Amount of sugar in drinks



Types of drinks

## How does sugar affect my teeth?

In this lesson, students will explore the effects of added sugar on their dental health and discuss ways they can avoid damage.
You can adapt and adjust the content of this lesson where necessary to support your students as they carry out their inquiry.

Key competencies

## Possible achievement

 objectives and learning outcomesThinking, self-management, participating and contributing.

## Science: Level 2

Students will recognise that all living things have certain requirements so they can stay alive.

## Learning outcome

Students will understand that sugar added to food and drinks can harm your teeth.
Students will explore and act on issues and questions that link their science learning to their daily living.

## Learning outcome

Students will understand how sugar damages their teeth.

## Health and Physical Education: Level 2

Students will describe their stages of growth and their development needs and demonstrate increasing responsibility for self-care.

## Learning outcome

Students will understand how to follow a regular dental hygiene routine in order to have healthy teeth.

## Social Sciences: Level 2

Students will understand how people make choices to meet their needs and wants.

## Learning outcome

Students will understand that to maintain healthy teeth the best choice of drink is water or plain milk.

- Photo cards: Healthy teeth/unhealthy teeth
- Fact file: How sugar harms our teeth
- Graphic organiser: Taking care of your teeth
- Pencils, pens, crayons, glue
- Toothbrush
- Bee Healthy: 5 Tips to Keep You Smiling poster.


## How does sugar affect my teeth?

E
Key vocabulary
Words that are important to this lesson are:
Bacteria, acid, saliva, enamel, cavity.
These can be defined and explored in context as you discuss the topic with your students.

## Reflect on the learning

This is the time to reflect on the learning outcomes for the lesson and to signal the focus for the next lesson.
It is also a time for students to talk about any ideas that are still unclear.

## Learning opportunity

Students will build on the learning from previous lessons and explore how sugar affects their teeth.

1. In the last lesson we learned that some drinks contain a lot of sugar.

- How often should we have these kinds of drinks?
- What is the best drink to have?

2. We also learned that some foods are high in sugar.

- How often should we have these kinds of foods?
- What are healthier alternatives to those foods?

3. Show the students the first photo card 'Unhealthy teeth'. Prompt the students to describe what they see.

- What has happened to this child's teeth?
- What might cause this? (Too much sugar/not brushing their teeth regularly)
- Where do you think this child needs to go? (the dental clinic)

Definition: Free sugars are sugars that are added to foods and drinks by the manufacturer, the cook, or the consumer, plus sugars that are naturally present in honey, syrups and fruit juices. The World Health Organisation recommends a 10-year-old child eats less than 5 teaspoons $(20 \mathrm{~g})$ of added sugar per day ( $5 \%$ of total energy intake). Currently in NZ children are having between 15 and 17 teaspoons of added sugar per day.

## How does sugar affect my teeth?

4. Then show the second photo card 'Healthy teeth'.

- What kind of teeth does this child have?
- Why do you think they have such healthy teeth? (Doesn't have much sugar, brushes teeth regularly).

5. Emphasise to students that sugar can harm our teeth and cause tooth decay such as cavities, which will require a trip to the dental clinic.
6. Share the Fact File: How sugar harms our teeth with the students and discuss the diagram. Encourage students to share their experiences of visiting the dental clinic and having to have a filling to repair a cavity. Prompts could include:

- Who has had a cavity in their tooth?
- What happened?
- Did you know you had a cavity? How?
- What did the dental nurse do?
- How did you feel? Did it hurt?
- How can we avoid getting holes or cavities in our teeth? (brush teeth regularly)
- What is the best drink to have? (water)

7. Next, discuss the student's dental hygiene routine and write their comments on the board. You could also demonstrate with a toothbrush, showing a circular motion to brush your teeth, brushing front and back, and brushing the gums as well as the teeth.

- How often should we brush our teeth?
- When is the best time to brush our teeth?
- Where do we brush? (teeth, gums, and tongue)
- How do we brush? (circular motion)
- What do we use to brush our teeth? (toothpaste/toothbrush)
- How long should we brush for? (at least two minutes)
- What's another really important way of taking care of our teeth? (drink water rather than sugary drinks)


## Lesson 7:

## How does sugar affect my teeth?

8. Discuss the Bee Healthy poster, which you can find and print

## (1) www.beehealthy.org.nz/library/6499fale-a68c-43c8-9843-81lf57524bed.cmr

9. Remind the students also that they should visit the school dental clinic once a year.
10. Finally, give students a copy of the graphic organiser 'Taking care of your teeth' and ask them to look at each photo and write a sentence about how it relates to the way they look after their teeth.
11. Review the students’ sentences together. Conclude by encouraging students to bring water to school rather than juice, cordial, sports or energy drinks.

Lesson 7:
Photo card: Unhealthy teeth


Lesson 7:
Photo card: Healthy teeth


When you drink sugary drinks or eat foods high in added sugar, the bacteria in your mouth feeds on the sugar and produces acid.
If there is too much acid, it attacks the teeth and eats away the enamel. This can cause cavities (or holes).
enamel, decay (cavity)


Write a sentence about each picture. Describe how it relates to looking after your teeth.


## Howdoes advertising affect our sugar intake?

In this lesson, students will explore how companies' market food and drink products and how messages and packaging may have an influence on their choices.

- What is advertising, and what kinds of foods and drinks do you see in advertisements?
- What do we need to know about marketing messages in order to choose healthier food?
- What changes can we make to reduce the amount of added sugar we eat?

The learning opportunities in this module are suggestions. You can adapt and adjust the content as needed, to support your students as they carry out their inquiries.

## G Key competencies

Possible achievement objectives and learning outcomes

What you need


Key vocabulary

Thinking, using language, symbols and texts.

## English: Level 2

Students will show some understanding of how language features are used for effect within and across texts.
Students will show some understanding of how to shape texts for different purposes and audiences.

- Fact file: Ads are everywhere
- Graphic organiser: Who is it for?
- Examples of advertisements - three or four aimed at different age groups (younger children, teens, adults, older people) with features that can help identify the target audience.
- Magazines that contain advertisements.
- Ads for two products that demonstrate the child/adult focus, such as yoghurt aimed for kids (colourful, known pictures) and one for adults, a drink aimed for kids and one for adults (ensure that students are easily be able to identify which ones are aimed at children).

Words that are important to this lesson are: appeal/attract, packaging, products.

# How does advertising affect our sugar intake? 

## Learning opportunity

This learning opportunity explores advertising and the product packaging of food and how it is designed to appeal to children.

1. Explain to the students that you're going to talk about how companies tell people about the things they sell (advertise), and how some ads are made to attract children to particular products.
2. Have the students' brainstorm where they see ads, such as online, on TV, at the movies, in supermarket flyers and magazines, and on billboards and buses.
3. Show the students a selection of ads for different food products. If possible, include a range of media such as a supermarket flyer, online (search on YouTube) or TV ads, bus stop posters or billboards. For each ad, ask:

- What is this ad for?
- Does the ad make you want to buy this product? Why/why not?
- What words or pictures are on the product?
- Who do you think would be attracted by this ad and these words? (children, teens, adults, older people)
- Do you think this would be a good product to eat or drink? Why? (Taste/because it's healthy/because everyone else at school has it/because it looks fun to eat or drink)
- Just because the food company tells us it's healthy (saying it has wholegrains, is 'natural' or comes from whole fruit), does that mean it's actually healthy?

4. Point out the words, catch phrases and pictures that are used in each ad.

- Which things in the ad make you want to buy this product?

5. Next, talk about foods and drinks the students have seen advertised on TV or at the movies. List these on the board.

## - What ads have you seen? Are some of these ads made for children? What makes you think that?

6. Prompt the students to say why they think these ads appeal to children, for example, they come with a toy, the ad has a cartoon character.

- Do these ads make you want to buy the product? Why?


# How does advertising affect our sugar intake? 

7. Explain that companies use colourful, energetic pictures and words that appeal to your senses. Ads that are marketed at children often result in children putting pressure on their parents to purchase a product.

- When you're with a family member at the supermarket, what makes you look at things? What catches your eye?

8. Show the students a selection of product packaging, such as cereal boxes with free gifts or cartoon characters on the packaging.
9. In small groups, students can examine the junk mail and magazines to see if they can identify any ads or packaging illustrations for food and drink that are aimed at children.
10. They can then fill in the Graphic organiser: Who is it for? They should find three ads and cut and paste them into the spaces. Circle who they think the ad is for (child, teen, adult, older person) and write words or phrases from the ad that support their choice.
11. As a class, share the findings. What are the common words, characters, colours? Make a list of buzz words like super, natural, cool and exciting.

- Why are these words used?
- Are some words used only for one kind of buyer, such as teens?
- Why do you think we see movie and TV characters on ads and on packaging? (Kids like the movie so they want to get the products with pictures from the movie).

12. Now show the students the ads for the two products that exemplify the child/adult focus, such as fruit strings for kids (colourful, known pictures) and one for adults; a drink for kids and one for adults.

- Which do you think would taste better?
- Why do you think that?
- Which do you think might be healthier or better for us? And why?


## Reflect on the learning

This is the time to reflect on the learning outcomes for the lesson. It is also a time for students to talk about any ideas that are still unclear.

In reflecting on this lesson, focus the discussion on the possible achievement objectives and learning outcomes for the inquiry question. By asking key questions, allow students to articulate their learning.

## Lesson 8:

## Fact file: Ads are everywhere

Ads are all around us, we see ads on posters, billboards, buildings, shopping bags, supermarket flyers, TV, bus stops or buses.
Food and drink companies use different ways to persuade people to buy a product. The food in these ads always looks much better than the real thing.
Sometimes the food or drink product is advertised by a celebrity or a cartoon character to engage people and attract attention.

Many ads claim that their product is good for you, as well as being popular and delicious.

## Graphic Organiser: Who is it for?

Find three ads. Paste them into the spaces. Circle who each ad is for. What makes you think that? Can you tell whether this food or drink is healthy using the information on this advertisement?

child
teen
adult
older person
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adult
older person
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child
teen
adult
older person
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# Practical lesson: How can we reduce added sugar in our community? 

## Making changes in your class

Some activities to raise awareness of sugar and to help the class reduce their intake of sugar
Rubbish audit - collect all empty packets from lunchboxes for one week. At the end of that week you can:

- count number of packets (food and drink). Help students calculate how many packets were eaten on average per child over the week.
- look at the amount of sugar eaten 'per serve' and use this to work out how much added sugar was eaten (from packet foods and drinks) over the week in total.
- convert this amount to teaspoons and measure the number of teaspoons into a large bowl.
- create a display to show parents and/or create a news story/video reporting on the findings. Include a list of healthy foods and drinks to have instead.
- talk about ways as a class they can eat less added sugar and create a media report to show parents and/or at school assembly.
- reduce packet foods and drinks in lunchboxes and have more 'whole’ foods. Drink water only.
- change the class rewards if these are sugary food/drink related. Use non-food rewards where possible.
- make a poster of a healthy lunchbox and ways to have less added sugar. Children to take these home to share with parents/whānau.
Use the Heart Foundation 'Kids in the kitchen' lesson plan and recipe book to create some healthier snacks in class that students can also make at home. (Depending on resources and ability, the cookbook has simple recipes, such as smoothies, monkey rolls and fruit cups, or more complex recipes that require cooking).


## Making changes in your school

Some activities to raise awareness and reduce the sugar intake at your school:

- Look at the school's nutrition policy (if they have one) or brainstorm ideas for creating a school nutrition policy if they don't. If students come up with some realistic new rules or changes, they could write to the principal and/or the Board of Trustees with their ideas. Brainstorm how they could explain their idea and why they think it would be a positive change.
- If your school has a canteen or lunch order system, get a copy of the menu to see what foods and drinks are on offer. See if students can identify which products/options might be high in sugar (using the label reading information). They could investigate some healthy alternatives and write to the Board of Trustees with their ideas.
- Look at the school's fundraising activities. If they are selling chocolate, lollies or other high sugar foods or drinks, think about what other healthier alternatives are available. Would they work as well to raise money for the school? (Use the Heart Foundations 'Healthy Fundraising ideas for schools' resource to help with ideas)


## Practical lesson: How can we reduce added sugar in our community?

- Is your school water-only? If so, as a class develop some posters to promote water-only in your school. If not, brainstorm ways your school could become water-only. Write to the principal or Board of Trustees, or develop a media story to explain why you think this would be a good change. If possible, get students to present it to the principal or Board of Trustees.
- Raise awareness in your school community around added sugar and easy ways to eat and drink less sugar. Create some posters to put up around the school and to post to the school's Facebook page and website.


## Making changes in your community

- Develop a poster on ways to reduce sugar intake for students to take home and share with their families.
- As a class, brainstorm which food outlets in your community sell high sugar food and drinks (dairies, petrol stations, fast food restaurants).
- Ask which types of high sugar foods and drinks they sell and where they are positioned in the shop (at the counter/when you first walk in).
- Brainstorm possible ways we could get these shops to promote healthier choices.

To wrap up the learning in this module, there could be an opportunity to invite an expert or sports personality to visit the class and encourage healthy choices, especially in relation to sugar.

## Reflect on the learning

This is the time to reflect on the learning outcomes for the lesson and for students to talk about any ideas that are still unclear.
In reflecting on this lesson, focus the discussion on the possible achievement objectives and learning outcomes for the inquiry question. By asking key questions, allow students to articulate their learning.

This resource is brought to you by the Heart Foundation.

Heart Foundation, PO Box 17160, Greenlane, Auckland 1546 T 0800863375 F 095719190 E education@heartfoundation.org.nz


[^0]:    - Where does the journey start for food?
    - Where is your stomach? What does it do?

