Healthy Food: Teacher's topic guide

God is Wise Year 6

Spiritual awareness

We can ask God for wisdom concerning the best way to keep the body fit and healthy. We have a responsibility to ourselves, others and our Creator to make wise food choices and show self-control when faced with less healthy food and drink options. God has provided a wealth of healthy foods in His creation.

Bible references

Genesis 1:29 God created plant foods for our health

1 Corinthians 6:19-20 Do you not know that your body is a temple of the Holy Spirit within you, whom you have from God? You are not your own, for you were bought with a price. So glorify God in your body.

1 Corinthians 10:31 So, whether you eat or drink, or whatever you do, do all to the glory of God. Genesis 1:29 And God said, "Behold, I have given you every plant yielding seed that is on the face of all the earth, and every tree with seed in its fruit. You shall have them for food."

Genesis 9:3 Every moving thing that lives shall be food for you. And as I gave you the green plants, I give you everything.

1 Corinthians 9:27 But I discipline my body and keep it under control, lest after preaching to others I myself should be disqualified.

1 Corinthians 3:16-17 Do you not know that you are God's temple and that God's Spirit dwells in you? If anyone destroys God's temple, God will destroy him. For God's temple is holy, and you are that temple.

Proverbs 25:27 It is not good to eat much honey, nor is it glorious to seek one's own glory.

1 Corinthians 6:12 "All things are lawful for me," but not all things are helpful. "All things are lawful for me," but I will not be enslaved by anything.

Romans 12:1 I appeal to you therefore, brothers, by the mercies of God, to present your bodies as a living sacrifice, holy and acceptable to God, which is your spiritual worship.

Biography: Piri and Maki

Outcomes

Students will

Knowledge

- understand the food requirements for a healthy body
- appreciate the range of healthy food that God has provided
- discern between healthy and not-so-healthy food
- develop disciplined eating habits
- identify local and imported foods
- identify processed and unprocessed foods
- identify the primary source of processed foods
- classify foods according to certain food groups
- discover the causes of physical and chemical changes that occur when preparing food
- understand factors causing food deterioration

Skills

- classify food types
- research food value
- record and present information food for health

- pose questions about the chemistry of food
- prepare food
- observe chemical processes and changes to food such as formation of solids and liquids, dissolving of substances

Values

- appreciate natural foods, (foods from God's creation)
- appreciate the health benefits of natural foods
- be willing to be involved in preparing food and see the health benefits of home-made food as opposed to junk food and fast food

Key questions

Why should we eat a wide variety of plant foods?

What different coloured vegetables can you think of?

Why should we eat lots of different coloured vegetables?

What are vitamins and minerals and why are they important?

Why are green vegetables important?

What kind of food can prevent our body from working well? (sugar and junk food)

Which fruits grow on trees?

What is a fruit? (The part of the plant that contains seeds)

Where do potatoes, yams and carrots grow?

Can you think of any other vegetables that grow under the ground?

Can you think of any vegetables that are the stems of plants? (celery, asparagus)

Which vegetables are the flowers? (cauliflower and broccoli)

Which are leaves? (spinach, cabbage)

Which are seeds? (cereals)

What does a plant need in order to grow? (light, water, air, soil)

Activities

- Classify plant foods according to fruits, vegetables, herbs, seeds, (cereals).
- Make a collection of seeds we eat.
- Classify foods according to plant or animal sources.
- Classify foods according to processed or unprocessed.
- Classify foods according to nutritious, 'junk food' or in between. Devise a scale and show information on a graph.
- Recognize foods by playing identification games using sight, taste, touch and smell.
- Prepare some healthy food, following a recipe.
- Devise a menu for a balanced meal.
- Compile a cook book.
- Invent a new recipe.
- Observe physical and chemical changes that occur during food preparation e.g. changes from liquid to solid or solid to liquid, (melting, setting / solidifying), dissolving, rising, expansion.
- Find out places where different foods are grown and show these on a map.
- Read and analyze food packaging labels.
- Decide whether food advertisements are telling the truth.
- Design an advertisement or poster for healthy food.
- Investigate deterioration of food due to age or warmth and explore the growth of moulds on foodstuffs.
- Record and graph times for deterioration of foods left unrefrigerated.
- Compare use-by dates on packages.

- Measure masses and volumes of cooking ingredients; weight vegetables.
- Research and compare cost of foods.
- Grow some vegetables and/or herbs: record the growth rates; describe stages of growth.
- Grow a bean seed on the inside of a glass jar, covering it with a layer of paper towel. The seed goes between the paper towel and the glass. Keep the paper towel wet and expose the jar to light. Do the same experiment but place the jar in the dark. Will the seed germinate?
- Students can make a journal to show development of the bean seed, giving dates: when 'planted' between glass and paper towel; when the root appeared; when the shoot appeared; when first green leaves were seen. They can draw and describe the stages in the growth of the bean seedling.



the

- Classify fruits and vegetables: Students can group fruits and vegetables as follows: seeds; stalks; stems; roots; fruits; flowers; leaves.
- Grow new vegetables from old ones:

Carrots

- 1. Take a fresh carrot and three clear glass jars, each the same size.
- 2. Cut the carrot so that you have three different parts.
- 3. Place each of the parts in a jar of water. Label the jars 1, 2 and 3. Make sure that the jars have the same amount of water and sunlight.
- 4. Leave the parts in the water for a week or two until some shoots have appeared.
- 5. Children can keep a diary on observations. Which part of the carrot created new shoots?







Potatoes

The dark spots on a potato are the *eyes*. Potatoes left too long in the cupboard will have roots growing from them.

Experiment:

- 1. Cut two pieces from a potato, one with eyes and one without.
- 2. Place each piece in a jar of water, and leave them there for one week. Make sure both jars have the same amount of water.
- 3. Students can describe the results of the experiment. (Only the potato with eyes will grow shoots.)





• Game: *Play animal or vegetable?* One student thinks of a food that is animal or vegetable but does not disclose the food he/she is thinking about. e.g. a banana. Class members take turns to ask questions in order to guess the name of the food. The questions must be able to be answered 'yes' or 'no'. e.g. Is it animal? Is it red? Does it grow on a tree?

NEW START stands for:

- Nutrients are the parts of food that makes us grow, and stay healthy. Only healthy foods do this.
- Exercise at least half an hour every day
- Water 6 glasses a day, (not fruit juice or fizzy drink)

- **S**unlight for vitamin D for strong bones.
- Toxin-free avoid artificial food additives and avoid toxic chemicals in the environment
- Air get fresh air every day
- Rest don't stay up late
- Think happy thoughts and trust in God

Learning Connections

Art:

- Draw food plants, as you would find them growing in the ground. Label the edible part of the plant root, leaf, stalk, stem or flower. (A potato is a swollen underground stem called a tuber).
- Make vegetable prints: cut vegetables and print them onto paper. Use a dish-washing sponged soaked in paint for a stamp pad.
- Make a vegetable man or vegetable animal

Provide potatoes, carrots, spinach. Children can use toothpicks to put together pieces of vegetables, to form a character or an animal. Ask them to write a description of how they made it. e.g. "This is my vegetable man. I used a potato for the body, a piece of carrot for the head and spinach for the hair".

Assessment

What have I learned from the study of food... about God? about the Bible? About my responsibility to keep healthy?

Thinking skills: Food and nutrition

Research cards: Food advertising and processed food

Values education Year 6 God is Wise

Planning ahead

Wisdom is ...

- being organized with your affairs
- planning ahead

Discussion

Think about ways in which you would prepare for these things:

a) a family holiday

Make a list of the things you would need...

- for a summer camping holiday by the beach.
- for a holiday in the snow.

b) different kinds of weather

How do people prepare for bushfires? droughts? hot sun? floods? cold weather? snow?

c) earthquakes

How do people measure the likelihood of an earthquake in a particular area? How do people prepare for it? What precautions would be taken by town planners? What kind of buildings might be chosen in earthquake prone areas? How might an earthquake drill be carried out in a school? What preparations would be made by emergency services?

In order to prepare for the future we need to think ahead. Thinking ahead is being wise and responsible. It is opposite to being lazy. Laziness prevents us from being aware of the future. Can you think of ways in which you can be wise and responsible around the home?

What does the Bible say about laziness?

Proverbs 19:15 Laziness makes us sleepy.

Proverbs 6:6 The wisdom of the ant.

Proverbs 19:5 Warning against laziness

Matthew 6:19-21 Wisdom in storing up heavenly treasure.

Matthew 7:24-28 The wise and foolish builders.

Art Year 6

God is Wise

Healthy food

Biblical wall display and text: And God said, "Behold, I have given you every plant yielding seed that is on the face of all the earth, and every tree with seed in its fruit. You shall have them for food." Genesis 1:29

Painting and drawing

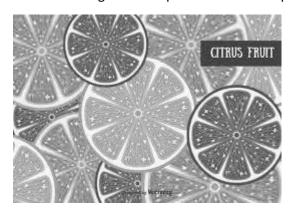
Still life drawings or paintings of fruits and vegetables.

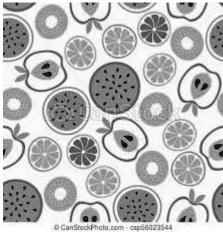


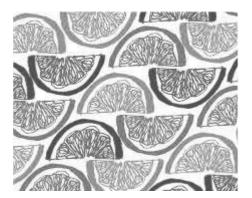


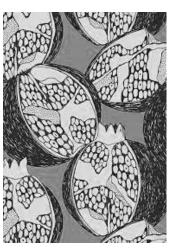
Printing, pattern and design

Use fruit or vegetable shapes as a basis for a pattern. Consider cross-cut sections as well.









Thinking Skills Wise Yr 6

Food and nutrition 1

Work out 10 things that this picture could represent in regard to food.

Food and nutrition 2

Design 5 unusual ways of encouraging young children to eat healthier food.



Food and nutrition 3

Name 10 healthy foods that you have NEVER eaten.

Food and nutrition 4

What if a single pill could replace your daily food intake?

Give 10 different consequences.

Food and nutrition 5

School canteens should not sell junk food.

Give 5 good reasons for this.

Food and nutrition 6

Predict a type of cooking appliance that will be used in family homes 100 years from now.

Draw it (if possible).



As a young man living in a village on Rarotonga, Piri had a bad reputation as a drunk and a trouble maker. He had gone to the mission school as a lad and had learned to read and write. But after he left school he got in with a group of young men who had found out from some Tahitians how to make orange beer from fruit growing in the bush. They got involved in drunken parties. Things got worse when the trading ships brought in other alcoholic drinks, and there were serious problems with bad behaviour amongst the young men. Piri was regarded as a ring-leader in the brewing of orange beer, and of course drinking it. So he was often caught and made to pay fines for law-breaking.

"We'll have to come down harder on these young fellows," the authorities decided. "Piri is one of the worst. We need to get him under control."

So Piri at the age of twenty became a target for the authorities, who kept a close watch on him.

"It's that missionary's fault," Piri muttered, "he's the one who turned the authorities against me. One of these days I'll get that man and kill him with my own hands!"

A day came when Piri had been drinking heavily. This was going to be Piri's day of revenge. He grabbed a garden spade and made for the missionary's house. Fortunately his friends saw what he had in mind and went after him with sticks and a rope. Piri had just reached the veranda of the house when they seized him and in spite of his struggles, tied him up with the rope. His friends took him away and kept him at the coast for a few days. When he had sobered up he began to think about his behaviour. "How stupid I've been to go on like that. The missionary did nothing to me yet I nearly killed him. It's the beer that made me so stupid. I promise I'll never drink another drop."

Piri went to see the missionary. "I'm sorry I've been behaving so badly," he began. "I can see that living the Christian way is the only thing that will help me."

"You're right, Piri," the missionary agreed. "You come to the worship services on Sundays and to the Bible classes through the week and you will learn to know God. Then you'll find out how He can help you live a good life."

Piri did this and became a strong Christian. His greatest desire was to tell those who weren't Christians the wonderful stories of Jesus. He entered the Training School on Rarotonga where he spent four years being prepared for work as a Bible teacher. At the end of that time the missionary came to him. "Piri, there is a group of Cook Islanders living in Samoa. They need someone to care for them spiritually. Would you and your wife like to go and be their Bible teacher?"

Piri and his wife agreed to go and they spent some time together there. But one day his wife became ill and never recovered. Piri was left alone to carry on the work in Samoa.

Meanwhile, far off to the west, in the New Hebrides (Vanuatu), a party of teachers had been left on Tanna to try to establish a mission station. This was one of the seven attempts to follow up the fatal visit of John Williams and his party to the New Hebrides in 1839. All the party except two of the teachers' wives had died of fever. Maki was the name of one of these women.

"I'm afraid of what they might do with us now our husbands are dead," Maki said to the other woman.

"Yes, so am I," she agreed. "The chiefs might fight over which one of them will take us. Then who knows what will happen to us?"

But a kindly old chief saw the difficulty they were in. "You two come home with me," he offered, "I'll look after you. You can be like my own daughters."

"Thank you so much," they said with great relief, "we'll be happy to live with you and care for you."

The women knew that the mission ship came to visit the out-stations regularly.

"I wonder if the ship will come today?' they would say each morning. Then, no matter how ill they were from fever, they would climb the hill at the back of the village to watch for the hoped-for sails to appear on the horizon. But day after day they returned disappointed to the village.

Then one day Maki was left alone, for the other widow died of fever. Maki waited two years and had given up all hope of ever seeing her home island again, when one day as she watched from her lookout on the hill; she could see a speck on the horizon. "Could that be the mission ship?" she wondered, "Perhaps I'll be able to go home after all."

She watched the ship approach and when she saw people being lowered into the small boat she rushed down to the beach to meet them.

"Oh! I thought you'd never come. I thought you had forgotten about us!" And she told them the sad story of their mission party. They, in turn, told her why she had to wait two years for the ship to come. "The ship has been to England and back since we left

your party of teachers here. We're sorry you had to wait here so long. We'll leave in the morning and take you home to your island, Mangaia."

The elderly chief who had guarded Maki so kindly was broken-hearted at losing his adopted daughter and ran beside her to the boat, weeping bitterly. Maki was grateful to him and thanked him for his care of her. Nevertheless she was so relieved to be returning home.

When they reached Samoa the ship's captain said to Maki, "You'll have to leave this ship here and wait for a smaller one to take you to Mangaia."

It was during this time in Samoa that Piri and Maki met. Maki never did get home to Mangaia as she married Piri and together they continued to serve the Cook Islanders in Samoa.

"I hear the missionary society is preparing to take a team of teachers to British New Guinea, (now called Papua New Guinea). They want to establish mission stations in villages all along the south coast." Piri had rushed home to tell Maki the news.

"I believe God wants me to go with them, Maki. I've always wanted to go to people who haven't yet heard about Jesus. Would you come with me, Maki?"

Maki was willing to go wherever her husband went, so Piri went to see the leaders of the missionary team, Mr. Murray and Mr. Wyatt Gill.

"Please will you take us with you in the team going to British New Guinea," Piri pleaded. For a long time my heart has been with the lost people of these other islands. Please may we join you?"

The two leaders were so impressed at the eagerness of Piri's request that they agreed to take them along with the five other couples in the group. The leaders explained to the team what the mission's plan was. "New Guinea has a long coast line on the south side. We will find villages where the people are willing to have you live with them and we'll leave you there to teach them about Jehovah God and Jesus His Son."

Piri and Maki were placed at Boera, a little distance north along the coast from Port Moresby. Unfortunately a number of the teachers became ill with malaria and other fevers. Some of them died, so the mission brought those who were left to live in Port Moresby. Piri and Maki encouraged the teachers.

"Always remember to pray," Piri would tell them. "And always remember that Jesus is very near. He will help you if you ask Him."

Piri frequently traveled around the coast westwards with the missionary James Chalmers on his many journeys, visiting the mission teachers and always searching for further villages where they could place teachers. He helped Chalmers by making friends with the village people who trusted him. Chalmers received a welcome because Piri was with him.

On one of his trips, Chalmers stopped at Boera, Piri's village, to spend the night. "The small boat is safe on the beach," Piri assured Chalmers. "The people here are trustworthy."

In the morning Chalmers went to his small boat to find the rowlocks were all missing. Piri and Maki happened to be on the beach.

"The rowlocks have been taken from the small boat, Piri," Chalmers told him. "How do you think we can get them back?"

Maki stormed through the village demanding the return of the rowlocks. "Whoever has those rowlocks had better bring them back at once or there will be big trouble," she threatened. But no one owned up.

Piri called the village chief and head men to a meeting in Piri's house.

"Those rowlocks must be returned," Piri told them quietly, "I want you men to go through the village and speak to everyone. You must bring them back."

The head men went to everyone, but still no-one produced any rowlocks. Piri grew angry.

"I told Mr Chalmers you people are honest, that you'd never steal anything. Now you've shown us I was wrong. Someone has stolen Mr. Chalmers' property and I want it returned at once. Every house will be searched thoroughly. No-one is allowed to leave the village until the rowlocks are returned."

Piri was so angry the people knew he meant what he said. Then, along came a village woman, the rowlocks in her hand. "I found these on a path in the village," she said, looking very guilty.

Everybody knew that wasn't true, but at least James Chalmers had his rowlocks back and could proceed with his journey. Piri and Maki were on a trip around the coast to Motumotu when Piri became ill. He recovered a little and said to Maki, "I think I am strong enough to travel back to Boera."

They set off in their canoe, deciding to travel to Port Moresby for treatment. But Piri died on the way. Only three months later Maki died. They rest side by side on the hill behind the village at Boera, two faithful servants of the Lord.

Adapted from: *James Chalmers, His Autobiography and Letters,* Richard Lovett, The Religious Tract Society, London.

Food advertising & processed food 1 Chemicals

The world around us is made of chemicals. All food is made of chemicals. Chemicals are the "stuff" that something is made from. Chemicals can be safe or unsafe. They can be helpful or harmful. They can be good or bad.

Man-made chemicals are the problem chemicals. They are often sprayed on the fruit or vegetables to keep the bugs away. These chemicals are not good for us so we should always wash our fruit and vegetables before we eat them.

Chemicals are added to processed foods, to make them last longer (preservatives), to make them look or taste better (artificial colourings and flavourings) or to change the texture. These are called food additives. We are told that all food additives are safe because they have been tested for safety. But the truth is, some food additives have a bad effect on the health of some people. Some children have allergies and other have their concentration is upset by certain additives. No one really knows what the long-term effects might be. Eating natural foods is always better!

- 1. What is a chemical?
- 2. Are all chemicals bad?
- 3. What are the three types of food additives?
- 4. What do these additives do to the food?
- 5. Name two foods that contain food additives.
- 6. How can we avoid eating food additives?

Food advertising & processed food 2 Food additives

Food additives are substances that are added to food. Here are a few of the most common food additives that may not be so healthy:

Preservatives:

Used to make the product last longer. Found in: bread, cakes and biscuits in vegetable oils, chips and fried foods in some fruity drinks and soft drinks in some sausages in processed meats like ham and bacon

Colours:

These are made from man-made dyes *Found in:*Sweets, icing, ice-cream, drinks

Flavours:

Used to make a product taste spicier or saltier Found in: instant noodles, savoury snacks, pies, take-away food, sweets, and drinks

Make a chart of processed foods. Make three columns with the three headings. Draw and label foods in each column.

Food advertising & processed food 3 My personal eating plan

Make up a personal plan for improving your diet for one week. Decide which foods you are going to cut out, or cut down on, and which foods you are going to eat more of. Remember to include drinks too. Write down your plan. Include the date. Review your plan after a week and write a report on how well you stuck to your plan.

This is what I plan to eat for: Breakfast:
Lunch:
Evening meal:
Snacks:
Drinks:
After one week I think that my diet over the last week has been:
the same as beforea little healthiervery healthy
I think my diet was healthier than before because OR I could have done better if I had

Food advertising & processed food 4 Food advertisements

Truthful lips endure forever, but a lying tongue lasts only a moment. Proverbs 12:19

Do you ever get the feeling that advertisements are trying to fool you? It is very easy to be tricked when you see picture of junk food. It makes us feel that we must have whatever we see in the picture.

We see food advertising on TV, on signs and posters all around us when we go to the shops.

However, commercials do not tell us about all the bad effects this junk food will have on our bodies. That is a deception. Deception is making something look good, when it is really not good at all.

The advertisements do not tell us about the bad effects of sugar and salt the bad fats. Sometimes advertisement will tell us that a food is healthy when it is really not-so-healthy.

We don't need to be deceived by misleading information. God has given us wisdom. We can think carefully about the information we hear, and say, "Is it really true?" Ask God for wisdom and He will give it to you. Try to find out who's telling the truth.

- 1. Where have you seen food advertising?
- 2. Make a poster to advertise one or more natural foods. Give some true information about the food on the poster.

Food advertising & processed food 5 Food advertisements: Are they telling the truth?

Some food advertising tells us that sugar will give us energy, but this is not the whole truth. Sugar gives us a spike of energy for a short time, then we suddenly have a drop in energy making us feel more tired than before.

Here are some junk food advertisements. Explain why they might be misleading. Explain how the words in the advertising are trying to tempt you into buying the product. Is it true? Why?





for people on the go!

Chocobars: "give you more energy" and "you really need them".

Lickety Pops: "more sugar. It's good for you".

Fizzo: "for people on the go".

Food advertising & processed food 6 Food advertisements: learning their tricks

Advertisements often try to trick people into buying products they don't really need. This is true about junk food. We don't need it. It is bad for our bodies and an absolute waste of money. If we want a delicious snack, then there are plenty of healthy snacks we can make to replace junk food.

Here are some of the things advertisers say to make you buy things:

- "Everyone else is buying one so you must get one too."
- "It tastes good."
- "It is good for you."
- "It is recommended by important people."
- "It gives you energy."
- "It will make you happy."
- "You get a lot for your money."
- "You need to buy it **now**."
- "You get a free gift if you buy one."
- "Buy one and get one free."
- "You deserve it."
- "Spoil yourself"

Here are some other methods that advertisers use to trick you:

- big packets but only small quantities
- close-up photographs to make you think that the item is bigger than it really is

Choose an advertisement that you have seen. Think about the tricks that have been used. Try to find anything about the advertisement that is not completely true or honest. Now write about the advertisements you have chosen. Draw the product.

Food advertising & processed food 7 Food Labels

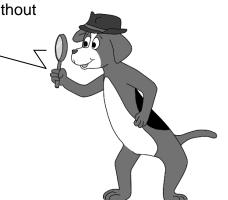
If we want to know the truth about the packaged food we eat, then we must find out what's in it. All processed packaged food should have a list of ingredients. We can read the labels to find out more about the ingredients.

Collect information from food wrappers and food packets. Look at the ingredients list. Write the name of the product you are investigating. Give comment on how healthy the food is.

Does it have any food additives?

Read the food labels and choose products without additives.

Name of product	Food additives
Rice	no
Biscuits	yes



Food advertising & processed food 8 Good fats, bad fats

Bad fats:

Fast food and junk food usually contains bad fat. Let's find out what bad fats are.

Vegetable oil in plastic bottles have been processed with heat. The oil then cools and gets heated again in cooking. These oils are not good for our health. We don't see the effects straight away, but over time bad fats can cause health problems.

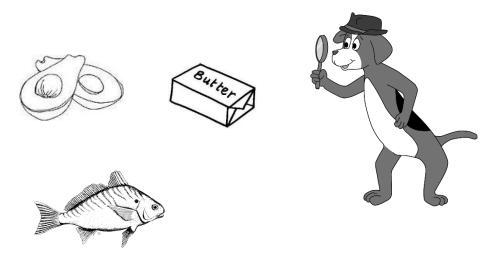
Margarine is another example of a heat processed oil and is a bad fat. However olive oil is an exception. It is a good oil because can withstand heat.

We find heat-processed vegetable oils in foods cooked in oil. Chips, crisps, deep fried foods and pastries are examples.

Good fats:

Butter, olive oil, coconuts, avocadoes, nuts, fish

Make a list of good fats and a list of bad fats.



Food advertising & processed food 9 White salt

White salt, used in most processed foods, is called refined salt, and contains no goodness. If we could get salt straight from the sea, that salt would contain minerals that are useful to our bodies.

Where do we find white table salt?

Apart form on the table, it's in potato crisps, most breakfast cereal, tinned foods, cracker biscuits, bought bread, tomato sauce, hamburgers, sausages, hot dogs and many other foods.

What can I eat instead?

Avoid junk food and processed foods and eat real food.

List some healthy foods that you could make or buy:



Food advertising & processed food 10 Sugar

Although this comes from natural sugar cane, it is no longer natural once it has been processed. This type of sugar is called refined sugar, unlike the sugar you would find naturally in a piece of fruit. People who eat a lot of sugar have less energy and can catch colds more easily.

Where do we find it?

Refined sugar is found in sweet foods and soft drinks. It is also added to many other foods, like tinned foods, sauce, bread, cakes and biscuits.

What can I eat instead?

Eat fruit in which there is natural fruit sugar. The body can use this type of sugar more easily.

Sugar comes from a plant called sugar cane. The stalk of the plant, which looks a bit like bamboo, contains a very sweet liquid. This is natural sugar and has nutrients. However, very few people eat sugar in this way.

The sugar we use as food today is a white crystal substance that can cause damage to our bodies because:

- People eat sugar in large quantities.
- Babies and toddlers are given sugary drinks, and they want to keep having it.
- People cannot stop eating it. (addicted)
- Sugar causes tooth decay.
- Sugar is the main cause of diabetes.
- Sugar weakens our immune system, so that we catch colds more easily.
- Sugar can make us feel tired.
- Sugar can cause people to gain weight.

Make a poster, "Eat less sugar" and give 4 reasons why.