

God is Protector Teacher's Topic Guide Year 8

Topic: Smoking, drugs and alcohol

Duration: 3 weeks

God gave His children the Israelites special health laws, including abstaining from eating certain meats that could carry disease. They were forbidden to eat animals that ate other animals, such as dogs, cats and eagles. The message we can take from this is to eat with common sense, and not to eat those foods which are bad for us. Using wisdom in this way is our protection from sickness.

Bible references

Exodus 15:26 If you pay attention to my commandments, I will put none of these diseases upon you. I am the Lord who heals you.

Psalm 91:1-6

Whoever dwells in the shelter of the Most High will rest in the shadow of the Almighty.

I will say of the LORD, "He is my refuge and my fortress, my God, in whom I trust."

Surely he will save you from the fowler's snare and from the deadly pestilence.

He will cover you with his feathers, and under his wings you will find refuge; his faithfulness will be your shield and rampart. You will not fear the terror of night, nor the arrow that flies by day, nor the pestilence that stalks in the darkness, nor the plague that destroys at midday.

Outcomes: Students will

- Understand the importance of eating at the table.
- Understand the components of a balanced healthy meal.
- Understand the disadvantages of random snacking compared to food planning.
- Identify healthy and not-so-healthy foods
- Design a healthy balanced meal.
- Study the negative effects of smoking, recreational drugs and alcohol and present research

Introductory discussion: Healthy food

What is a 'main meal' and when do we eat it?

When does your family come together for a meal?

What do you like about family meal times?

Why is it better to eat at the table rather than in front of the TV?

What do we mean by a balanced meal?

What are your family favourites?

What are 'processed' and 'unprocessed' foods?

Draw the family table.

Where does each member of the family usually sit?

Classify foods

Take a piece of paper and make two columns: plant foods and animal foods. Make a list of healthy foods in each group.

List and draw a healthy breakfast

Students can divide the paper into two columns. On one side, list or draw their usual breakfast. On the other side, they list or draw their ideal breakfast. (What changes could be made to make the breakfast healthier or more balanced?)

Snacking

When should we snack, and what is wrong with snacking for a long time? e.g. snacking while watching TV and snacking from the time we get home from school until dinner time.

Design a healthy school lunch

Discuss some different kinds of healthy foods to be included. Encourage students to think of foods other than sandwiches, e.g. raw vegetables and fruits

My personal eating plan

Students can take a personal record of the food they might eat in a typical day. They can suggest how they may improve their diet.

Interviews

Ask each student to prepare a questionnaire and then interview another class member to find out what this person eats and drinks in an average day. They can then write a report, outlining the good things about the person's diet, and also give some suggestions as to how the diet could be improved.

Discussion:

What is a balanced diet?

Why do I need balance in my diet?

Why do we need guidelines for eating?

How long can we stay alive without food/water?

Why must I eat a variety of foods?

What is the relationship between what I eat and my health?

How does smoking affect our health?

Why are people tempted to start smoking, drinking alcohol or taking drugs?

Properties of foods:

Students identify foods containing carbohydrates, proteins, vitamins, minerals, fats, fibre and water.

Discuss:

- what each of these does for our body.
- the amounts we need for good health.
- the problems caused by too much of one and too little of another.

Foods that make up a balanced diet

1. Coloured vegetables

The largest proportion of your daily food intake should be coloured vegetables, (about 40%). Choose a variety of colours.

2. Starchy carbohydrate foods

Your intake of these should be less than the coloured vegetables, (about 20%). These are foods like potatoes, rice and bread.

3. Protein foods

These are meat, fish, chicken, milk, lentils, eggs. Eat as much protein food as starchy food, about 20%.

4. Good fats

These are the fats found in natural foods like butter and coconuts. You can add about 10% to your food intake. You will be eating good fats in the other categories, especially the protein category.

5. Fruit

Eat two or three pieces of fruit daily. This makes up about 10%.

Good fats, bad fats

Discuss the difference between good and bad fats. Bad fats are the over-heated processed oils like margarine and vegetable oil. They are found in fast foods like chips, fried foods and pastries. They are also called trans-fats because the structure has been changed through over-heating.

Refined carbohydrates and complex carbohydrates

Discuss refined (simple) and unrefined (complex) carbohydrates.

Simple refined carbohydrates like white flour, bread, cakes, biscuits and sugary foods give us short bursts of energy and then we soon feel more tired than before, and hungry. They quickly get stored as fat and cause people to gain weight. Complex carbohydrates, like lentils, peas, beans and other coloured vegetables are used by the body at a slower rate and keep us going for longer without feeling hungry.

Draw a table of foods and their health properties:

- Students can draw up four columns: 1 - Carbohydrates for energy; 2 - Protein foods for building muscles; 3 - Good fats for energy; 4 - Fruits and vegetables to keep us healthy.
- In each column they can list/draw the foods with these properties.

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)
- **Sunlight** – 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**



Some definitions

Natural food: Also called 'unprocessed food'. These are foods directly from nature, such as fruit, vegetables, nuts, meat, fish and eggs. Some dried or tinned foods can be classified as natural foods if they do not have food additives, e.g. dried beans, lentils, rice, butter, milk, tinned tomatoes.

Fast food: Convenience food from outlets. Ready-to-eat foods such as hamburgers, hot dogs, fried chicken and chips. These have some nutritional value but contain ingredients that are not good for our health. Should be eaten rarely.

Food additives: Chemicals added to give artificial colour or flavour, or to preserve the food.

Processed food: These are foods that are changed from their natural state and sold in packets, cartons and cans. Some have nutritional value. Some have additives. Food labels should be checked and assessed for health benefits.

Junk food: food with no nutritional value and food that may be bad for our health. These include sweets, sugary foods, savoury snacks such as potato crisps, and soft drinks or imitation fruit drinks. Should be consumed rarely.

Beacon Media research cards: A balanced diet; Smoking, drugs and alcohol

Biographies: David Wilkerson; Jackie Pullinger

Values education Year 8

God is Protector

Responsibility

God provides protection for those who love and trust Him. However, he expects us to take responsibility for our own actions as well. We cannot expect Him to protect us if we do not act in a responsible manner.

Responsibility is...

- being reliable
- being accountable
- looking after myself
- looking after my possessions
- being in charge of the way I act
- doing the things I am meant to do

Activities

How could the following actions cause you to get sick or cause damage to your teeth?

- Staying up until midnight every night
- Eating plenty of junk food
- Drinking fizzy drinks and not water
- Not eating vegetables
- Smoking
- Drinking alcohol
- Taking drugs

Would you expect God to protect your body in these situations?

What does the Bible say about responsibility?

1 Peter 2:2 Grow up to be strong Christians.

Ephesians 5:8 Live as children of the light.

Art Year 8

God is Protector

Principles for good health

Biblical wall art text: Dear friends, I pray that you may enjoy good health and that all may go well with you, even as your soul is getting along well. 3 John 1:2

Make a “NEW START” poster

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Practical Science Year 8

God is Protector

Topic: A balanced diet

Pineapple enzyme

<https://www.education.com/science-fair/article/pineapple-enzyme/>

Many people love gelatin-based desserts. Many of us love pineapples too. Should you put them together? As many a gelatin-loving cook has discovered, certain fruits can change gelatin's ability to set. In this experiment, you'll discover what happens when gelatin meets pineapple.

Problem:

What happens to the gelatin when pineapple and gelatin meet?

Materials:

Fresh pineapple
2 bowls
Measuring cup
Kettle
Water
Spoon
Two quarters
2 containers of gelatin

Procedure

1. Mix the gelatin powder with warm or hot water according to the package's instructions.
2. Pour an equal amount of gelatin into each of the two bowls.
3. Add ten small chunks of fresh pineapple to one bowl. Keep the other bowl plain.
4. Put both bowls of gelatin in the refrigerator to set, and wait for several hours. Create a hypothesis, your best guess about what is going to happen. Do you think that the presence of pineapple will change the way the gelatin sets? Why?
5. After three or four hours, take the gelatin out of the fridge. What happened to it?
6. Compare the two bowls of gelatin. Place a quarter on top of each bowl, and wiggle the bowls. What happens to the quarter?

Results:

The gelatin with the pineapple in it gets very watery, while the gelatin in the other bowl ends gets firm. A quarter will sink into the liquid in the pineapple gelatin, but it will sit on top of the gelatin in the plain gelatin bowl.

Why?

Pineapples contain the protein-digesting enzyme called bromelain. Bromelain is also used as a meat tenderizer. In fact, some people are very sensitive to the enzyme and find that it makes their lips and tongue sore. This is because the bromelain is working to tenderize your tongue! Don't worry—once it gets to your stomach, there shouldn't be much of a problem.

Gelatin is made out of animal proteins, particularly collagen. When you add water to the gelatin, long chains of protein form, making an invisible protein “spaghetti”. Water gets trapped in the middle of these long chains, turning what should be a liquid into a semi-solid.

Since pineapple bromelain digests proteins, when the pineapple meets the gelatin, it begins to eat away at it. The long protein chains collapse, making everything watery again.

Try adding papaya, kiwi fruit, or figs to gelatin. Do you end up with the same problem? Here’s a hint: These plants also contain protein-digesting enzymes!

Practical Science Year 8

God is Protector

How greasy are your potato chips?

<https://www.education.com/science-fair/article/how-much-fat-potato-chips/>

Materials:

A bag of potato chips

A packet of savoury biscuits

Something to write with

Rolling Pin

Wax Paper, plastic wrap, or large sandwich bag

Graph paper

Tape

Window

Sunlight

Procedure

1. Place the chips on a sheet of graph paper. Record the amount of chips you put on the graph paper.
2. Lay the wax paper or plastic wrap over the chips.
3. Roll over the chips several times with the rolling pin, making sure they’re totally pulverized.
4. Remove the graph paper and throw away the chips. Tape the graph paper to a window pane.
5. Count the number of squares that are translucent from the grease. (Hint: make a mark in each square you’re counting. You can use a pencil, pen, or grease pencil if you’re marking the graph paper itself. Only count squares that are $\frac{1}{2}$ full or more. Record the number of squares you count.
6. Now do the same steps (1-5) with the savoury biscuits.

Results:

Records your results. Which contains the most fat? The potato chips or the savoury biscuits?

Thinking Skills

Year 8 Protector

<p>Smoking, drugs & alcohol 1</p> <p>Give 5 reasons why cigarettes are a bad idea.</p>	<p>Smoking, drugs & alcohol 2</p> <p>List 5 illnesses that healthy living can help you avoid.</p>
<p>Smoking, drugs & alcohol 3</p> <p>Create a poster to help people understand the dangers of smoking.</p>	<p>Smoking, drugs & alcohol 4</p> <p>What if ...</p> <p>alcoholic drinks were removed from the world?</p>
<p>Smoking, drugs & alcohol 5</p> <p>How would you help a person who wants to stop smoking or taking drugs, but they are addicted?</p>	<p>Smoking, drugs & alcohol 6</p> <p>Make some prescriptive dietary recommendations for a person with type 2 diabetes.</p>