

activities



Nutrition



Nutrition Quiz

How many food groups are there? *Circle the best answer* 3 4 5 8

Can you name them?

From which group should we select the most servings daily?

What should we eat less of?

In which food group does bread belong?

Are all breads nutritious?

What is your best nutrient choice for energy?

- Fat
- Starch
- None of these

- Fibre
- Protein

Which of the following contain fibre?

- Beans
- Orange juice
- All of these

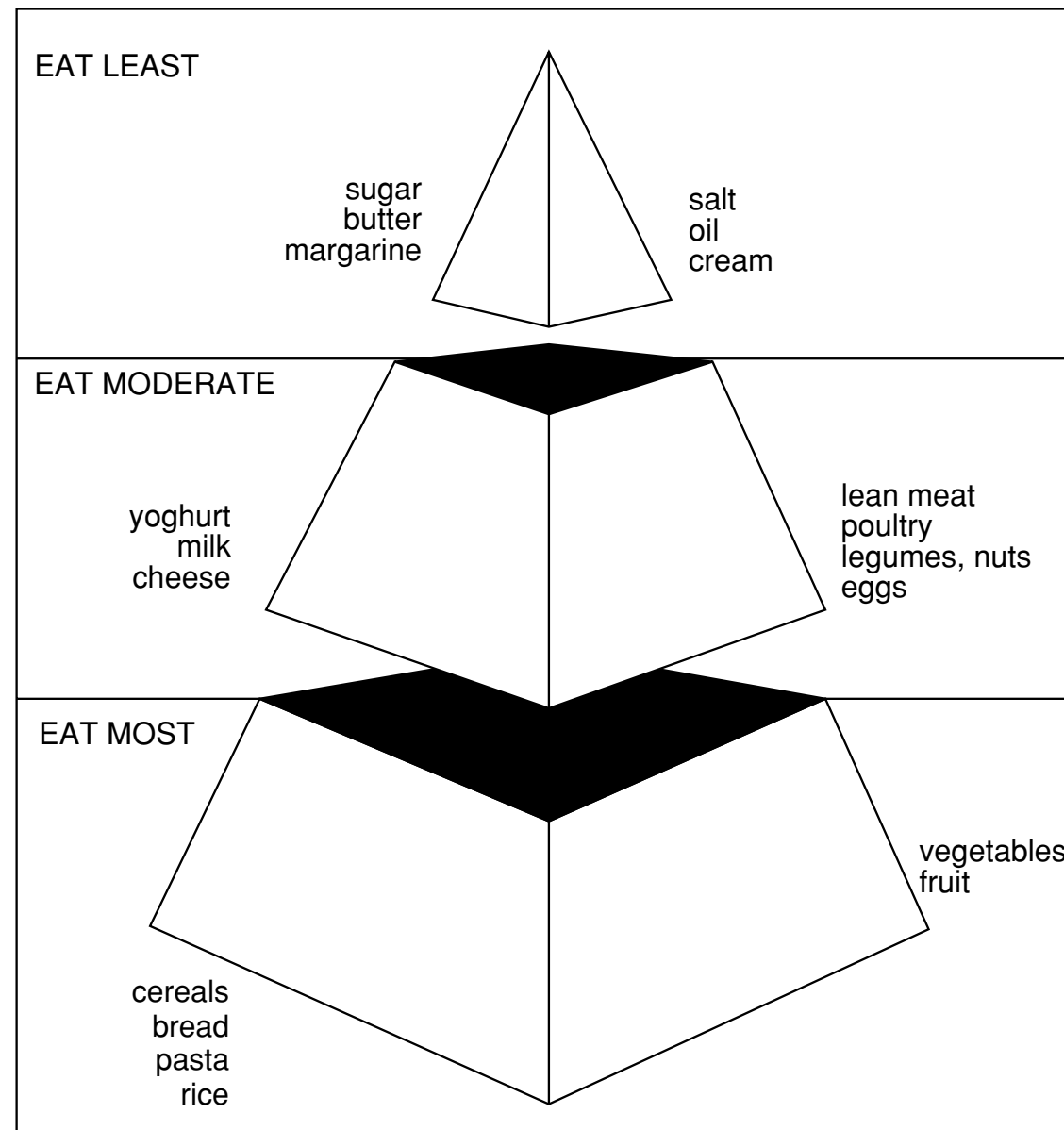
- White bread
- Whole wheat bread
- None of these

Name the main ingredient in most breads?

Which type of bread supplies calcium that is easily absorbed by the body?



Conduct a survey on school lunches eaten by class members. Collate preferences for sandwich fillings and types of bread and other lunch ingredients. Find out how school lunches measure up to The Food Guide Pyramid's serving suggestions. Develop a nutritious lunch that could be promoted at the school canteen or in the school's newsletter.





Investigate 'fast food'. Which types include large amounts of/some/no flour products? Are there any fast foods that meet the requirements on The Food Guide Pyramid?



With a friend analyse each other's diet for the last two days to determine whether your daily servings come close to what The Food Guide Pyramid suggests.



Debates are a lot of fun! Gather some friends or have a debate at school. Your topic is "Can 'man' live by bread alone?". Investigate this topic from different cultural perspectives. Look at the impact of food technology on society in the past, present and possible future. Good luck!



Testing for Nutrients

Record your results from the following tests under these headings:

FOOD	NUTRIENT TEST	OBSERVATION

Aim

To observe some kind of chemical change that shows a nutrient is present.

The Starch Test:

Materials

Petrie dish

Pipette

Pieces of bread

Iodine solution

Method

Place the bread on the petrie dish. Using the dropper add 3 or 4 drops of iodine solution on top of the bread.

Result

The bread should turn a black/blue colour. This means that starch is present.

The Sugar Test:

Materials

Test tube

1 teaspoon Bread crumbs

Benedicts reagent

3 mls water

Pipette

Bunsen burner

Method

Measure water in test tube and add bread crumbs. Mix very well. With a dropper add enough Benedicts reagent to give a good blue colour. Carefully heat to boiling point.

Result

If your solution turns a green/yellow or yellow/orange or orange colour sugar is present.

The Protein Test:

Materials

Test tube

1 teaspoon Bread crumbs

Sodium hydroxide solution

3 mls water

Pipette

Copper sulphate solution

Method

Measure water in test tube and add bread crumbs. Mix very well. With a dropper add 2 to 3 drops of sodium hydroxide solution. Be very careful. Add 3 to 4 drops of copper sulphate solution.

Result

If your solution turns a violet/purple colour protein is present.

The Fat Test:

Materials

2 Test tubes

1 teaspoon Bread crumbs

5 mls Water

5 mls Ethanol

Glass rod

Method

Place bread crumbs in a test tube. Add the ethanol to the bread crumbs. Crush the crumbs carefully with the rod and allow the bits to settle. Fill another test tube with water. Pour some of the ethanol solution into the water.

Result

If your solution turns a white colour fat is present.

The Vitamin C Test:

Materials

2 Test tubes

5 mls Water

1 teaspoon Bread crumbs

1 mls Dichlorophenol-indophenol solution (DCPIP)

Glass rod

Pipette

Method

Place bread crumbs in a test tube with the water. Crush the crumbs carefully with the rod and fill the dropper with the extract you have made. In another test tube measure the DCPIP. Add one drop of the extract to the DCPIP and shake. Repeat this procedure until DCPIP's blue colour disappears.

Result

If the blue colour disappears vitamin C is present.



What helps make me work?

Find out by matching the nutrients detailed in 'The Nutritional aspects of bread -I and II' and 'Nutritional aspects of bread and wheat-III' with these three headings: Body building and repair, Heat and energy, and A healthy body.



Design a poster that encourages young children or teenagers to eat and enjoy more bread. Display the posters in your school cafeteria or local dairy.