

Chapter 19: Constituents of Food

CAN YOU RECALL ? [PAGE 96]

Can you recall ? | Q 1 | Page 96

What is meant by diet?

SOLUTION

The food containing different constituents that we eat for our survival is called diet.

Can you recall ? | Q 2 | Page 96

For what purposes do we need food?

SOLUTION

We need food for growth, development of the body, and also for the proper functioning of the body.

Can you recall ? | Q 3 | Page 96

What are the different tastes that foodstuffs have? How do we experience these tastes?

SOLUTION

Sweet, sour, salty, and bitter are the main tastes. 'Hot' is not a taste, it is just the burning sensation of the tongue. We experience these different tastes due to taste buds present on the tongue.

USE YOUR BRAIN POWER ! [PAGE 96]

Use your brain power ! | Q 1 | Page 96

Why do we feel hungrier in winter than we do in summer?

SOLUTION

In winter, the weather is cool. We need more calories to keep our bodies warm. Therefore, we need more energy. To get more energy, there should be enough nutrients in the body. When we feel hungrier, we take in more food. More starch, sugars, and fats can give us more energy to keep our bodies warm. In the summer season, such a need is not there. Thus we feel hungrier in winter than we do in summer.

CAN YOU TELL ? [PAGE 96]

Can you tell ? | Q 1 | Page 96

What substances do we use to give our food a sweet taste?

SOLUTION

For giving a sweet taste to our food, we can use sugar, jaggery, honey, fruit juice, dates, ripe bananas, sugarcane juice, etc.

Can you tell ? | Q 2 | Page 96

Of the foods that we eat raw, which ones are sweet?

SOLUTION

Ripe fruits, honey, milk, sugarcane juice, jaggery are the food items that are eaten raw and are sweet.

USE YOUR BRAIN POWER ! [PAGE 97]

Use your brain power ! | Q 1 | Page 97

Threads get stuck between the teeth when we eat certain types of mangoes. Which kind of carbohydrate are they?

SOLUTION

The threads that get stuck between the teeth while eating certain types of mangoes are fibres.

CAN YOU TELL ? [PAGE 98]

Can you tell ? | Q 1 | Page 98

Why are boxes of fragile articles like TV, refrigerator, light bulbs, glasses, mirrors packed with corrugated cardboard, thermocol or bubble wrap?

SOLUTION

Fragile articles are most likely to break if proper packing is not done. In order to protect them and give additional support, corrugated cardboard, thermocol, or bubble wrap is used.

USE YOUR BRAIN POWER ! [PAGE 98]

Use your brain power ! | Q 1 | Page 98

Why do we use a padding of cloth under a mortar when we place it on the floor and pound something in it?

SOLUTION

While pounding the substance in a mortar, there could be jerks to the floor. The tiles of the floor can break. Therefore, padding of cloth has to be placed between the mortar and the floor to absorb these shocks or jerks. This offers protection to the floor.

CAN YOU TELL ? [PAGE 99]

Can you tell ? | Q 1 | Page 99

Suppose a wall is to be built. The cement, sand, water is all there but the mason says the most important material is still missing. What can that be?

SOLUTION

For the construction, rocks and bricks are required.

USE YOUR BRAIN POWER ! [PAGE 100]

Use your brain power ! | Q 1 | Page 100

Do we get all the different constituents of food from a meal that consists of a green veg thaalipeeth eaten with yoghurt?

SOLUTION

In the flour of thalipeeth there is mixed flour of rice, daals and pulses. This flour gives carbohydrates and proteins. While roasting the thalipeeth, oil or butter is applied to the fry pan. Thus even fats are present in it. If greens are added to the flour, there would be vitamins, minerals like iron and roughage added to the flour. Curds also provide proteins, carbohydrates, fats and vitamins. Hence meals consisting of green veg thalipeeth eaten with yoghurt is a complete meal with all the food constituents.

Use your brain power ! | Q 2 | Page 100

Which food constituents do we get from the ingredients used to make bhel?

SOLUTION

The kurmura in the bhel is a carbohydrate. The grams and peanuts are rich in proteins. The shev is made of gram flour and hence it also contains proteins. Since it is fried, there is a good content of fats too in it. Chutney made from dates have sugars and minerals like iron. Pudina used in bhel is rich in vitamins, minerals, and high in fibre content. If lemon or raw mango is used, the vitamin C content is also high. However, if bhel is purchased from a roadside shop, it may have microorganisms and contaminants and it can cause illness.

EXERCISES [PAGE 102]

Exercises | Q 1 | Page 102

What's the solution?

The body requires an adequate quantity of proteins.

SOLUTION

The body requires lots of proteins for bodybuilding. There is constant wear and tear on the body. That is also taken care of by proteins. Therefore, a large number of proteins should be in the diet. For vegetarian people, different daals, pulses, groundnuts, grams, paneer, tofu, soybean have to be included in the diet. For non-vegetarian people, fish, meat, eggs are excellent sources of protein. An everyday diet should include sprouted

pulses. The milk and milk products are also rich in protein, casein. Such a diet would give ample proteins along with vitamins.

Exercises | Q 2 | Page 102

Use your brain power!

Why are children told to drink milk every day?

SOLUTION

Milk has almost all the food constituents. It has carbohydrates, sugars, fats and proteins. It is rich in vitamins A, B and D. The calcium content of milk is also quite high. Milk is easy to digest. It gives energy. The growth and development of the body is faster when milk is taken in our everyday diet. Therefore children are told to drink milk every day.

Exercises | Q 3. (a) | Page 102

Give two sources of the following food constituents.

Minerals

SOLUTION

Minerals: Leafy green vegetables, fruits, sprouted pulses.

Exercises | Q 3. (b) | Page 102

Give two sources of the following food constituents.

Proteins

SOLUTION

Proteins: Paneer, eggs, fish.

Exercises | Q 3. (c) | Page 102

Give two sources of the following food constituent.

Starch

SOLUTION

Starch: Potato, sago, rice, bread.

Exercises | Q 4. (a) | Page 102

Fill in the blank.

_____ in our food give us the ability to resist diseases.

SOLUTION

Vitamins in our food give us the ability to resist diseases.

Exercises | Q 4. (b) | Page 102

Fill in the blank.

Calcium makes our bones _____

SOLUTION

Calcium makes our bones **strong**.

Exercises | Q 4. (c) | Page 102

Fill in the blank.

Foodstuffs that taste sweet contain various kinds of _____

SOLUTION

Foodstuffs that taste sweet contain various kinds of **sugars**.

Exercises | Q 4. (d) | Page 102

Fill in the blank.

A diet that provides all the constituents of food in the right proportions is called a _____ diet.

SOLUTION

A diet that provides all the constituents of the food in the right proportions is called a **balanced** diet.

Exercises | Q 5. (a) | Page 102

Answer the following question.

Of what use are the sugars that we get from the digestion of starch?

SOLUTION

The sugars formed from the digestion of starch are burned slowly. While burning they release energy. The sugars thus act as fuels. This energy is used for different kinds of work. It also keeps the body warm.

Exercises | Q 5. (b) | Page 102

Answer the following question.

Name the sources of fibre in our diet.

SOLUTION

Bran in the flour of grains, whole grains, and pulses. fruits, vegetables, and especially their skin, sprouted pulses with their skins, green leafy vegetables are all sources of fibres in our diet.

Exercises | Q 5. (c) | Page 102

Answer the following question.

What are carbohydrates?

SOLUTION

The energy providing food constituents which consist of starch, sugars and fibres are called carbohydrates.

Exercises | Q 5. (d) | Page 102**Answer the following question.**

What is meant by malnutrition?

SOLUTION

If a person's diet lacks proper constituents of food for a long time, then this person does not get proper nourishment. Such a condition is called malnutrition.

Exercises | Q 6 | Page 102**Match the following.**

Column A	Column B
(1) Fats	(a) Jowar
(2) Proteins	(b) Oil
(3) Vitamins	(c) Bran of cereals
(4) Minerals	(d) Pulses
(5) Starchy foods	(e) Iron

SOLUTION

Column A	Column B
(1) Fats	(b) Oil
(2) Proteins	(d) Pulses
(3) Vitamins	(c) Bran of cereals
(4) Minerals	(e) Iron
(5) Starchy foods	(a) Jowar