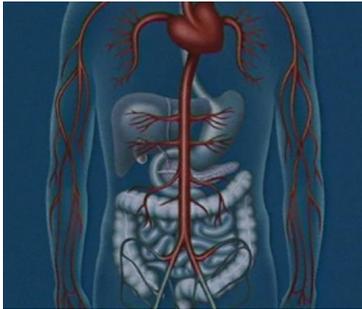


4.1.1 The role of the digestive system

FROM FOOD TO NUTRIENTS

The digestive tract has an essential function. It transforms the food we eat into nutrients. These nutrients then move into the blood in the body, to fuel all of its cells.



This allows the body to **build** and **maintain** itself, **protect** itself and **function** throughout its entire life – provided we eat a wide variety of food. This variety is important because different kinds of food contribute to the body in different ways.

TYPES OF FOOD

Some food groups, such as dairy products, help build and maintain the body. Such food is called **body-building food**.



Other kinds of food help us stay in good health; for example, fruit and vegetables that contain vitamins. These are called **body-protective food**.

Then there is **energy-giving food**, which allows us to walk or run thanks to the energy it provides to our cells. Bread and pasta are good examples.



DIGESTIX



DIGESTIX is one of the games associated with this online course. In this game, we see that it is more complicated to transform certain kinds of food than others. Clearly your teeth do not help you digest milk, but rice and apples are more complicated to digest. The more complex food is to digest, the more it needs to be transformed.

The organs of the digestive tract and its accessory digestive glands carry out these transformations. Each organ plays a very specific role, but all the organs work together to transform the food we eat, even the most complex food.

The role of the digestive system

The digestive tract converts food into...

- nutraceuticals
- nutrients
- medications

The digestive tract does not have any...

- organs
- glands
- bones

Milk is considered as a foodstuff which mainly...

- provides the body with energy
- protects the body
- helps build the body

Vegetables mainly...

- provide the body with energy
- protect the body
- help build the body

Which of the following mainly provides the body with energy?

- Meat
- Vegetables
- Bread

Nutrients obtained by digestion pass into your...

- stools
- blood
- saliva

Once nutrients arrive in your blood, they no longer serve any purpose. They are simply eliminated in your urine.

- True
- False

We need to eat a varied diet because different kinds of food provide the body with different nutrients.

- True
- False

What roles do nutrients play in the body?

- Building, protection, packaging
- Building, protection, function
- Destruction, protection, function

The digestive system does not play a crucial role.

- False
- True

Answers

The digestive tract converts food into...

- nutraceuticals**
Wrong! That's not the right answer.
- nutrients**
Well done! Your digestive tract breaks down food into nutrients your body can assimilate.
- medications**
Wrong! Medications are to cure us when we are ill.

The digestive tract does not have any...

- organs**
Wrong! Your digestive tract comprises various organs, such as your stomach, intestines, etc.
- glands**
Wrong! Your digestive tract has glands, such as your salivary glands, pancreas, gall bladder, etc.
- bones**
Well done! That's right! There aren't any bones in your digestive tract.

Milk is considered as a foodstuff which mainly...

- provides the body with energy**
Wrong! That's not the correct answer.
- protects the body**
Wrong! That's not the main role of milk.
- helps build the body**
Well done! Milk contains calcium and proteins, which are essential elements in building your body.

Vegetables mainly...

- provide the body with energy**
Wrong! Vegetables contain only a few carbohydrates and lipids.
- protect the body**
Well done! Vegetables contain vitamins, which boost your body's defence mechanism.
- help build the body**
Wrong! Vegetables contain very few proteins.

Which of the following mainly provides the body with energy?

- Meat**
Wrong! Meat is high in protein, so it is a foodstuff that helps build your body.
- Vegetables**
Wrong! Vegetables play a protective role.
- Bread**
Well done! Bread contains complex carbohydrates, which are a source of energy for your body.

Nutrients obtained by digestion pass into your...

- stools**
Wrong! Waste matter is eliminated in stools. Nutrients are far too precious to waste!
- blood**
Well done! Yes, nutrients pass into your blood.
- saliva**
Wrong! That's not the correct answer.

Once nutrients arrive in your blood, they no longer serve any purpose. They are simply eliminated in your urine.

- True**
Wrong! That's not the right answer!
- False**
Well done! Nutrients are used to fuel all the cells of your body.

We need to eat a varied diet because different kinds of food provide the body with different nutrients.

- True**
Well done! That's right! A variety of food ensures you cover all your body's requirements.
- False**
Wrong! That's not the right answer.

What roles do nutrients play in the body?

- Building, protection, packaging**
Wrong! Only two of these roles are correct.
- Building, protection, function**
Well done! When considered together, nutrients fulfil these three roles.
- Destruction, protection, function**
Wrong! Only two of these roles are correct.

The digestive system does not play a crucial role.

- False**
Well done! Your digestive system does play a crucial role. It converts the food you eat so it can fuel all your cells.
- True**
Wrong! Try again!