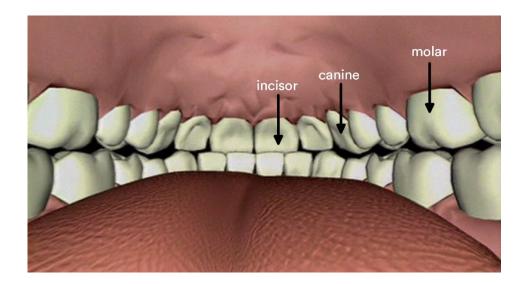
- 4. The digestive system
- 4.2 The stages of digestion

4.2.4

The mouth

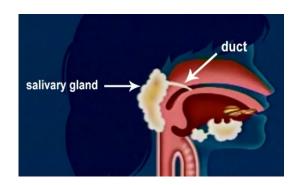
TEETH

Digestion starts in the mouth where teeth break up food into small pieces. The incisors cut, the canines tear and the molars crush food. This mechanical transformation is called mastication.



SALIVA

The salivary glands are also found in the mouth. They secrete saliva.

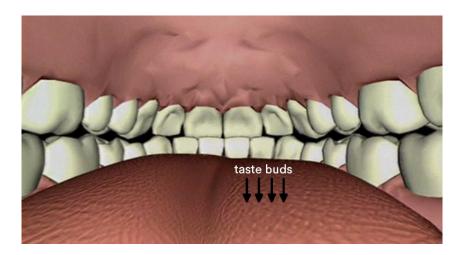


Saliva moistens food, making it easier to break up. This process is called insalivation. Once transformed, the food is referred to as a bolus of food. Saliva contains enzymes that start the chemical digestion process. Salivary amylase, for example, breaks down certain complex carbohydrates, such as starch and glycogen.



THE TONGUE

Taste buds help us determine how food tastes. Taste buds are the small bumps on the tongue.



Since taste buds are only sensitive to substances that have been dissolved, saliva plays an important role in the perception of taste. Food must be soaked with saliva for us to sense what it tastes like. The tongue is a very powerful muscle that propels the bolus of food towards the back of the mouth so it can be swallowed.

THE MOUTH IN DIGESTIX

In DIGESTIX, the teeth and salivary glands are game pieces associated with the mouth. For digestion to be effective, these pieces must be placed at the upstream of the digestive tract. This allows the teeth to break food down into several fragments, and saliva to start the chemical digestion process.

When playing DIGESTIX, one of the first things you need to realise is that the game pieces only transform certain targets. Quite intuitively, the teeth transform food into fragments.

What about the salivary glands? They can also transform food into fragments, but they are not as efficient as the teeth in doing so.

However, they are also capable of transforming food fragments into nutrients. You perhaps remember that salivary amylase breaks down certain complex carbohydrates. So to sum up, salivary glands have three targets – food, fragments, and carbohydrates.

The mouth

Which of the following is not a tooth? O An incisor O A molar O A slicer	What secretes saliva? O The tongue O The salivary glands O The gall bladder
Which teeth cut up food? O Incisors O Molars O Canines	What do we call food being digested? O The bolus O The bolster O The booster
Which teeth grind food? O Incisors O Molars O Canines	What enables us to taste food? O Taste buds O Taste glands O Taste enzymes
What do canine teeth do? O Tear food apart O Grind food O Slice food	Where are taste buds found? O On the tongue O On the glottis O In the trachea
Which of the following helps teeth chew? O The abdomen O Saliva	Taste buds look like small bumps. O True O False

O Lips

Answers

Which of the following is not a tooth?

O An incisor

Wrong! An incisor is a tooth.

O A molar

Wrong! A molar is a tooth.

A slicer

Well done! A slicer is not a tooth.

Which teeth cut up food?

Incisors

Well done! That's right.

O Molars

Wrong! Try again!

O Canines

Wrong! Try again!

Which teeth grind food?

O Incisors

Wrong! Try again!

Molars

Well done! That's right.

O Canines

Wrong! Try again!

What do canine teeth do?

Tear food apart Well done! That's right.

O Grind food

Wrong! Try again!

O Slice food

Wrong! Try again!

Which of the following helps teeth chew?

O The abdomen

Wrong! That's not the right answer.

Well done! Your saliva moistens food, making it easier to break apart.

O Lips

Wrong! Try again!

What secretes saliva?

O The tongue

Wrong! Try again!

The salivary glands Well done! That's right.

O The gall bladder

Wrong! The gall bladder comes into play later on in the digestion process.

What do we call food being digested?

The bolus

Well done! That's right.

O The bolster

Wrong! Try again!

O The booster

Wrong! Nice try, though.

What enables us to taste food?

Taste buds

Well done! That's right.

O Taste glands

Wrong! That is not the right answer.

O Taste enzymes

Wrong! Try again!

Where are taste buds found?

On the tongue

Well done! Your tongue is covered with taste buds.

O On the glottis

Wrong! That's not the right answer.

O In the trachea

Wrong! Try again!

Taste buds look like small bumps.

Well done! That's right.

O False

Wrong! That's not the right answer.