

Digesting a banana sandwich

Turn a banana sandwich into a disgusting mush to demonstrate what happens when food is digested.

In the classroom

What you need

An apron, a table knife, a banana sandwich, a potato masher, a cup of water, a really strong plastic bag, red and green food colouring, some vinegar, some washing-up liquid, a sieve and a large bowl.

What you do

Cover the table, put on the apron and tell the children that you are going to show them what happens to food in your gut.

Cut up the sandwich. *This represents the incisors cutting the food.*

Use the potato masher to grind up the sandwich. *This represents the molars grinding the food.*

Add water and a little red food colouring. *The water is the saliva and the food colour represents the enzymes in the saliva getting to work.*

Scoop into the plastic bag with some green food colouring. *The bag represents the stomach and the food colour is the bile from the liver.*

Add some vinegar. *This represents the acids in the stomach.*

Give it all a good squeeze. *This shows the stomach muscles at work.*

Then add some washing-up liquid. *Chemicals called enzymes make it possible to digest food – as well as producing embarrassing gases!*

Sieve the whole mess into a large bowl.

What happens

The sandwich is transformed into a paste.

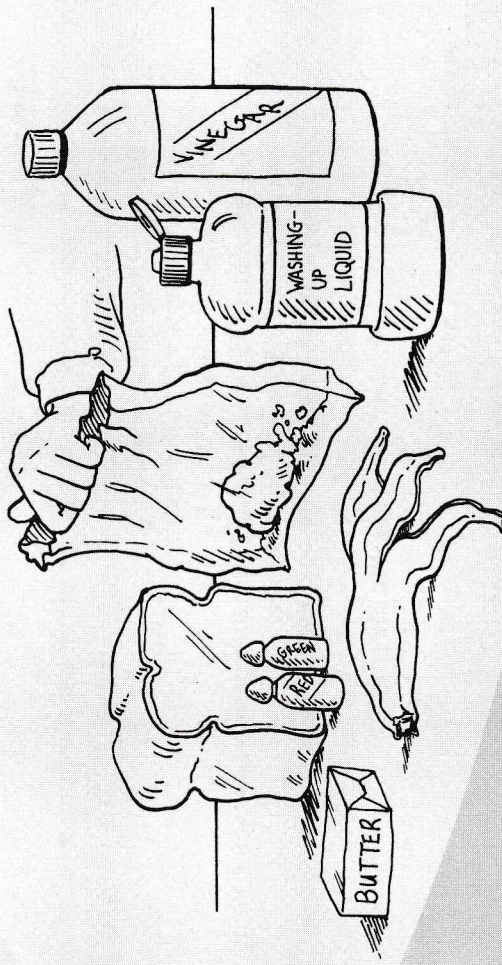
Background Information

Why it happens

The body needs to break food down into simple particles (molecules) that can be used to provide the energy and nutrients it needs to function. It cannot draw out and absorb the components of food without mashing it together and bathing it in digestive chemicals called enzymes.

By the way

Chewing food thoroughly is important. It needs to be well mixed with saliva to slide down easily and start being digested. Children who have vomited will remember the acidic taste. This is because of the acids in the stomach.



Curriculum links

KS2 Sc2 2a,b. QCA SoW 3A Teeth and eating, 5A Keeping healthy
Health Ed/TRH/PH/Level D/Target 1