

Wednesday 20<sup>th</sup> January 2021

LI: To explore the digestive system

# Food Groups

What are they called?	What do they do?	Where are they found?
Carbohydrates 1) Starches	They give you energy	Bread, cereals, pasta, rice
Carbohydrates 2) Sugars		Biscuits, sweets, cakes
Proteins	They help you to grow & your body to repair itself	Meat, fish, dairy products, dry beans and eggs
Fats	They provide energy and help to build up your body	Milk, cheese, butter, cooking oil and some meat
Fibre	It helps you digest your food	Wholegrain bread, cereals, fruit and vegetables
Vitamins and minerals	They build healthy cells	Fresh vegetables and fruit
Water	70% of your body is water and it is vital for good health	Drinks and some foods

# The Digestive System

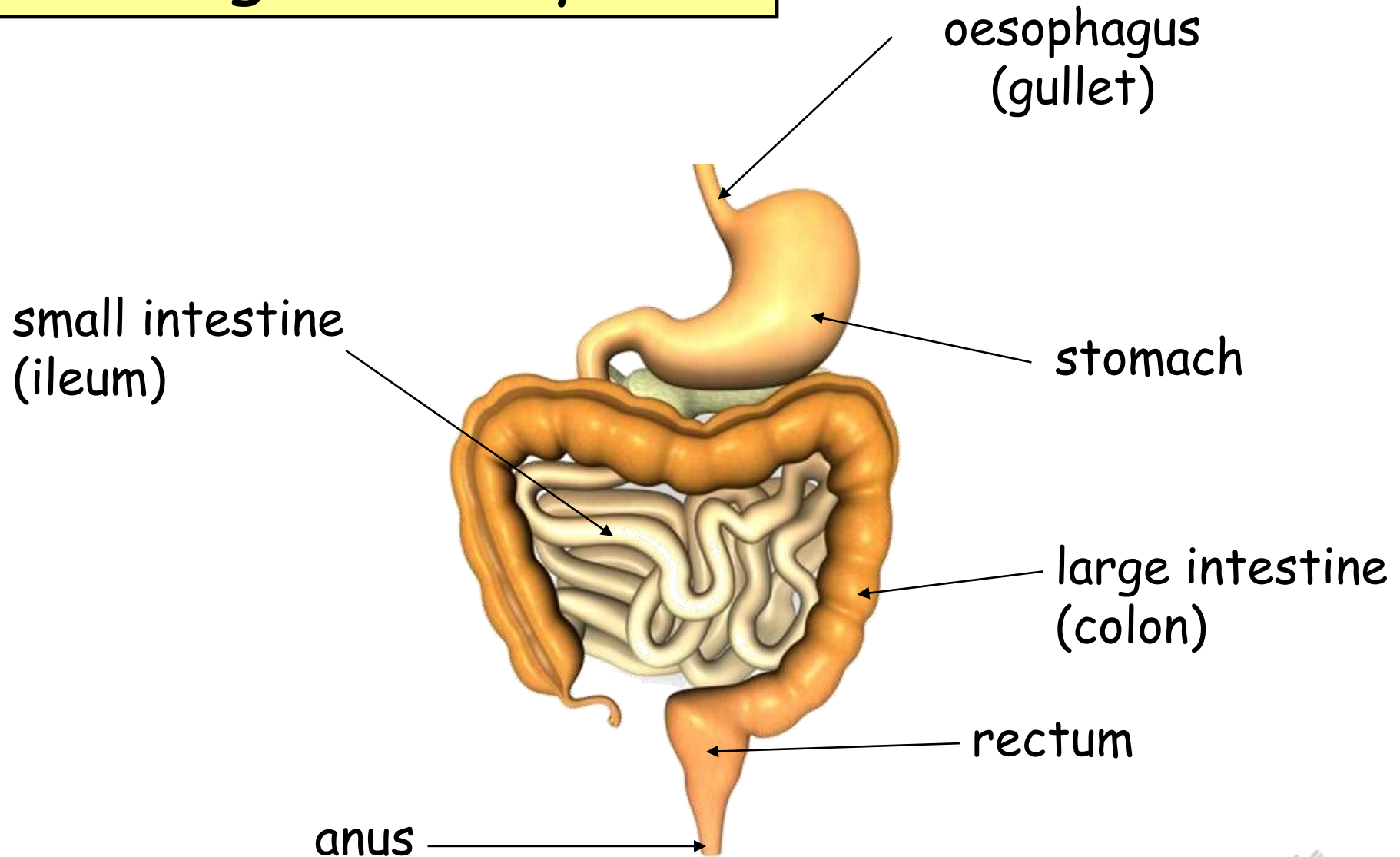
How do we get from this...



...to this?

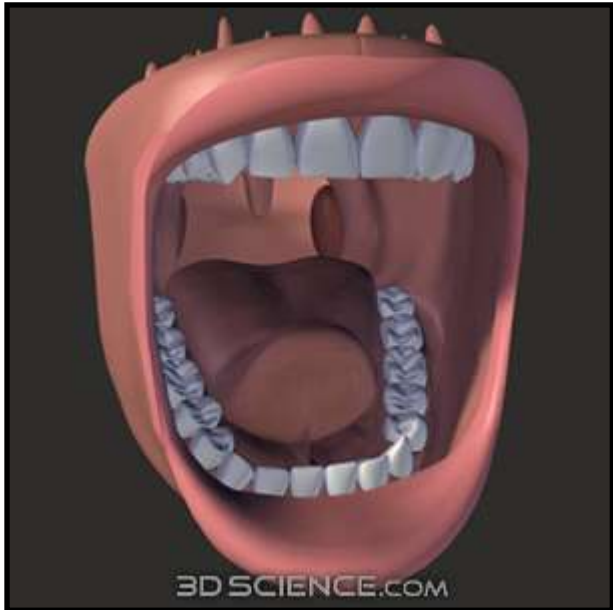


# The Digestive System



# The Digestive System

Each part has a different job to do:



The mouth contains teeth.

These chew the food and break it into smaller pieces.

The tongue pushes food to the back of the mouth so you can swallow it.

**Once you've chewed  
your food, how long  
do you think it takes to  
get to your stomach?**



<http://www.online-stopwatch.com/full-screen-stopwatch/>



# 6 Seconds!

**What if you were upside down –  
would it take a different amount of  
time?**

**Still about 6 seconds – but I wouldn't recommend trying!**

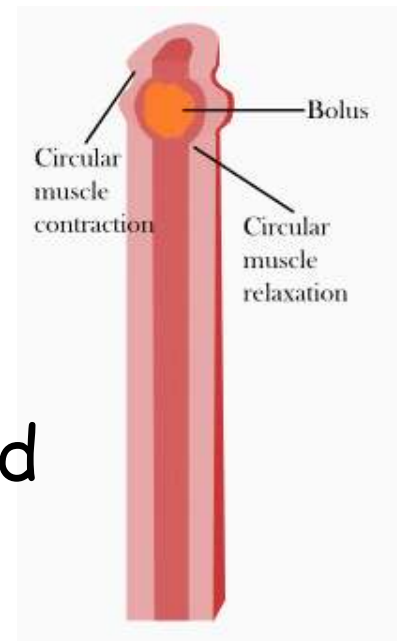


# The Digestive System



The oesophagus, or food pipe, joins the mouth and the stomach.

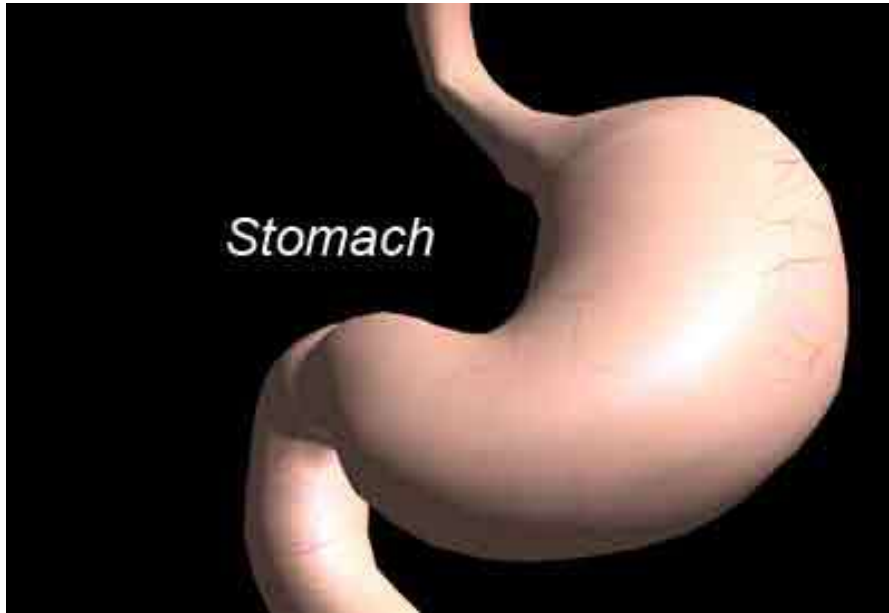
Food is squeezed along this tube into the stomach.



This is called  
Peristalsis



# The Digestive System



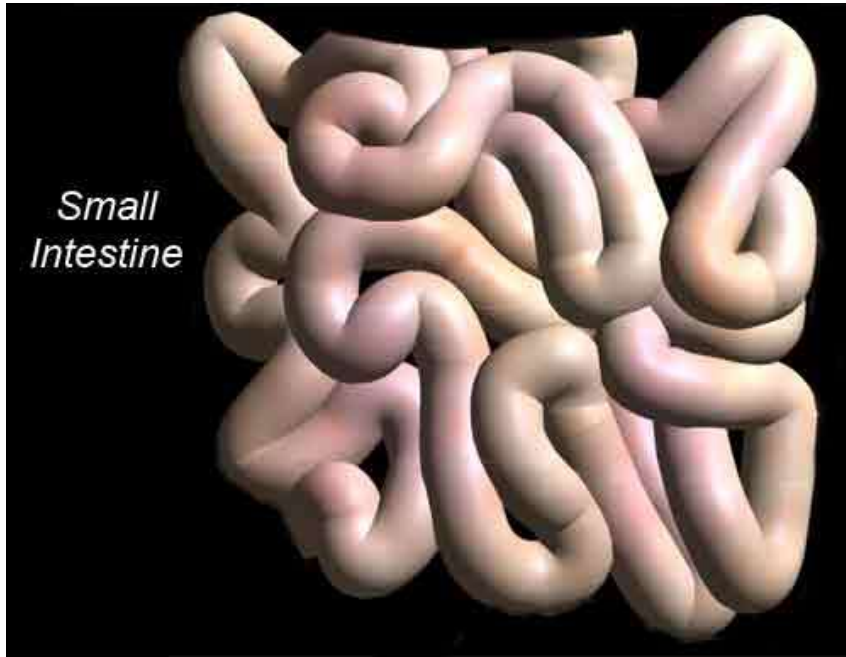
The stomach is a bag of acid.

The acid in the stomach, and special chemicals called enzymes break down the food even more.



The muscles surrounding the stomach contract to help churn up the food.

# The Digestive System



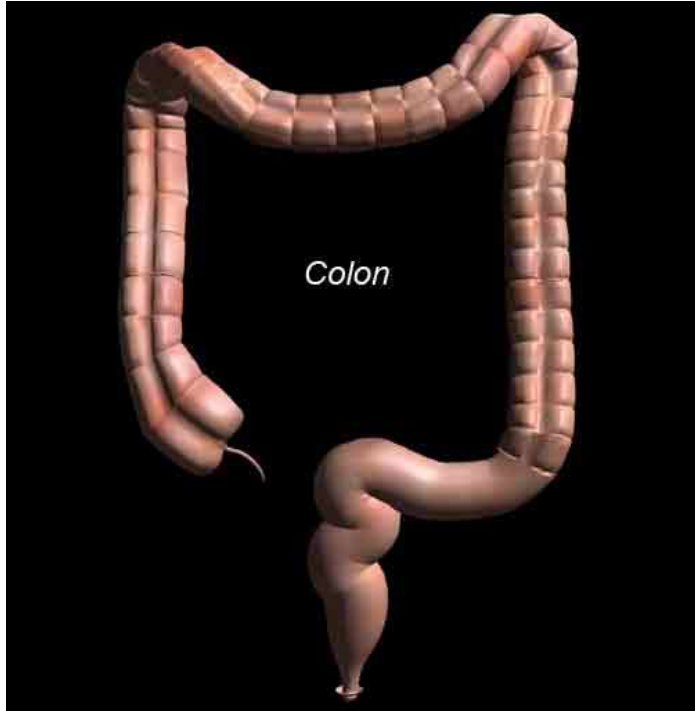
## Ileum

The small intestine is 6-7 metres long.

In the small intestine, the broken down food gets into the blood so the body can use it.

The partially digested food then moves from the stomach to the small intestine. It takes about 20 minutes for your chewed up food to travel from your mouth to here. The small intestine does most of the work - almost all of the digestion and absorption of nutrients and minerals happens here. The remains of the food move along the intestine by peristalsis, just like it does through the oesophagus.

# The Digestive System



## colon

It is actually only 1.5 metres long. It is called the large intestine because it is a lot wider than the small intestine. It is the final stage of the digestive system. The last of the water is absorbed and the waste hardens and forms faeces (poo).

# The Digestive System



At the end of the digestive system, the left over stuff that the body can't use leaves the body through the anus when you go to the toilet.



# What is the result of a healthy digestive system?

**A healthy body!**

**Your digestive system turns the food you eat in to the fuel that your body needs.**



<http://www.bbc.co.uk/education/clips/z7vygk7> animation

## Activity

Label the different parts of the digestive system. Explain what happens to the food at each stage of its digestion.

