

Our amazing body - Digestive system quiz

Select the option that best answers the following

1. The term dentist was not used in Britain until the 18th Century. Before dentists, barber surgeons would pull out diseased teeth. The number of teeth an adult human has is:

- 20
- 28
- 32
- 46



2. Which of these is the hardest substance in the human body?

- Bone
- Cartilage
- Tendon
- Enamel



3. Humans have different types of teeth, including, incisors, canines, premolars and molars. Which type is used for tearing and ripping food?

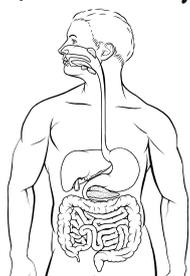
- Molars
- Incisors
- Canines
- Premolars



4. Saliva helps you swallow and digest food, it also helps protect you against gum disease. What is the average amount of saliva produced by a human in a day?

- 570 ml (pint milk carton)
- 1 litre (wine bottle)
- 330 ml (soft drink can)
- 40 ml (egg cup)





5. It is possible to eat and drink upside down due to the food and water being pushed towards the stomach through the oesophagus (food tube). What name is given to the action of muscles pushing the food along the food tube?

- Digesting
- Swallowing
- Squeezing
- Peristalsis



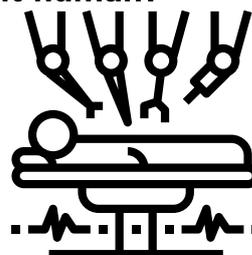
6. Name the organ in the digestive system that contains strong acid?

- Liver
- Small Intestine
- Large Intestine
- Stomach



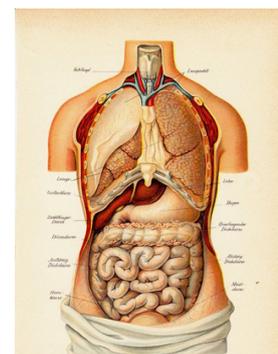
7. In 2020, surgeons in Scotland were the first to use the new 'Versius' surgical robot in Europe. The 'Versius' robotic system is used to mend damaged intestines. What is the approximate length of the small intestine in an adult human?

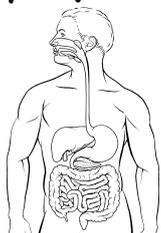
- 1.5 m
- 3 m
- 7 m
- 13 m



8. Which is the correct order of the digestive system organs for food to pass through after swallowing:

- small intestine → stomach → large intestine
- stomach → small intestine → large intestine
- large intestine → stomach → small intestine
- stomach → large intestine → small intestine





Answers and teachers notes: Our Amazing Body- Digestive System Quiz

SURGEONS' HALL
MUSEUMS



1. 32. There are 32 adult teeth in total – 12 than in the baby set. By the age of 12 to 14 most children have lost all their baby teeth and have their adult teeth. The last 4 of these, called wisdom teeth, usually emerge later than the others, generally between the ages of 17 and 21. Note, the instrument pictured is a 'Tooth key'. A tooth key would be used by a barber surgeon to extract a tooth. The claw would be tightened around the tooth and the handle turned to remove the tooth. Before the discovery of anaesthetics, it was important to be able to remove the tooth as quickly as possible.

2. Enamel. The enamel forms the outer layer of the teeth and is the hardest substance in the body. The colour can vary from light yellow to a greyish white. The enamel is made of calcium and phosphate. Its role is to protect your teeth although it can still chip and crack. Sugars and acids (e.g. found in soft drinks) can be used by bacteria in your mouth to attack enamel which can lead to tooth decay.

3. Canine. Canines are used for tearing and ripping food. Incisors help you bite and chew food. Molars and premolars help crush and grind food.

4. 1 litre. The body produces around 1 litre of saliva a day. That adds up to 20,000 litres in a lifetime or 53 bathtubs full to the brim with saliva. Saliva is mostly recycled, as you are constantly swallowing and reabsorbing it. Saliva moistens food to create a food bolus, so it can be swallowed easily. It also contains chemicals called enzymes that breaks down any starch.

5. Peristalsis. Peristalsis is a series of wave-like muscle contractions that pushes food along the digestive system. It takes about 3 seconds for food to be pushed into your stomach once you chew and swallow it. Astronauts are able to eat in zero gravity because food is pushed along the digestive system. John Glenn was the first American astronaut to eat in space – he ate a tube of apple sauce.

6. Stomach. The stomach contains a strong acid called hydrochloric acid. Stomach acid kills any microbes (e.g. bacteria) that are on the food that you swallow and helps in the breakdown of food. An excess of stomach acid can cause 'heart burn' as the acid leaves the stomach and goes up the oesophagus (food tube) causing a pain felt in the chest area.

7. 7m. The small intestine is 7m long. The large intestine is 1.5 m. The 'small' and 'large' refer to the diameter of the intestine tube – the small intestine has a much smaller diameter tube than the large intestine. The small intestine carries out further digestion of food and is also where food is absorbed into the blood stream.

8. Stomach- Small intestine- Large intestine. After the food is swallowed, it enters the stomach. Food is digested in the stomach for up to 4 hours. The digested food then passes into the small intestine where digestion continues and the smaller, broken down food is then absorbed into the bloodstream. Any remaining food and water enters the large intestine, where water is absorbed into the blood stream.