

Weird And Wonderful Digestive Systems

Our digestive systems help us break down our food so it can be used for things like moving, growing and healing. It is a pretty incredible system with a very important job. Other animals need to digest their food too and, whilst there are many similarities, read on to learn about some of the more intriguing digestive systems of the animal kingdom.

- 1. Adult humans have 32 teeth that break food up into smaller pieces so it can be swallowed. (Children make do with only 20). As you can imagine, many animals show off a far more impressive set of gnashers. So what animal do you think has the most? A ferocious shark or a toothy alligator? Well actually, it's gastropods such as snails and slugs which lead the way. They can have tens of thousands of tiny teeth which scrape and saw at food to help them eat. The umbrella slug, which lives under the sea, takes top spot with as many as 750,000 teeth in its lifetime!
- 2. After you chew and swallow your food, you often forget about it. However, your stomach is busy carrying on the job of breaking food down so your body can use it. Humans have one stomach compartment whereas cows and deer have four and other species like the platypus have none at all. Birds have an additional organ called a gizzard that is attached to the stomach. It does the job that in humans is done in the mouth: it grinds up food. Some birds even swallow small stones or grit to help with the grinding when food is in the gizzard. It's a great solution to make up for their lack of teeth!
- 3. To help break down food, the stomach produces enzymes and acids. Yes your body has acid in it that is almost as powerful as battery acid! It is so strong it dissolves food and also helps kill any nasties that you might accidentally have consumed. There is one species however which needs its

stomach acid to be even stronger. Vultures – which eat rotting carcasses – have acid that is 100 times as strong as humans. They need it to help protect them from the dangerous bacteria that grow on their food. It is so strong it can even dissolve bone.

- **4.** After leaving the stomach, our food moves to the small intestine where the nutrients are absorbed. In humans, the small intestine stretches to an impressive 7m. That's a long way for your food to travel on its journey of digestion. However, that distance is nothing in comparison to the blue whale. Its small intestine is estimated to be around 220m long!
- 5. The time taken for food to complete its journey through your digestive system varies. Fruit and vegetables are digested more easily and travel more quickly. They take less than a day to be digested. Meat and fish take up to three days. Perhaps unsurprisingly, the sloth is one animal that takes a slower pace when it comes to digestion. Food takes a month to pass through its system!

EXPLAIN FOCUS

- 1. What does the choice of the word 'intriguing' suggest about the writer's attitude to this topic?
- 2. Find a copy a phrase where the writer addresses the reader directly.
- 3. What phrase tells us the writer could have predicted the sloth would have digested food slowly?
- 4. What examples of informal vocabulary can you find?
- 5. Why has the writer used an informal tone?

VIPERS QUESTIONS

R

Which animal has the most teeth during its life?

V

In the section 3, find and copy a word that means eaten or drank.

S

How do birds make up for not having teeth to chew food?



What does 'varies' tell us about digestion times?



How long do humans need to digest meat?