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4. The digestive system

4.4 Digestive phenomena

4.4.8 Intestinal wind

WHAT IS INTESTINAL WIND?

The digestive tract contains intestinal gases. Release of these gases through the anus is quite normal and is actually a sign that the digestive tract is functioning well. On average, a person releases 0.5 to 1.5 litres of gas each day, over the span of 12 to 25 episodes. These gases are released at the two ends of the digestive tract – either at the mouth (through burping) or at the anus (through flatulence).

WHAT ARE THE CAUSES?

Intestinal gases consist of nitrogen, oxygen and carbon dioxide produced by the bacteria present in the digestive tract. These bacteria ferment food residues and gas is released during this breakdown process.

There are also hydrogen, methane and sulphur-containing substances. These sulphated gases have a distinct odour, and the human nose can easily detect concentrations of hydrogen sulphide, even low ones.

Fermentation of certain kinds of food generates more gas than others, namely pulses such as kidney beans. Their outer shell has a large amount of sugar, which the intestinal flora easily ferments. Starchy food such as pasta, corn and wheat can also generate gas during fermentation.

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Intestinal wind What produces intestinal wind in the Intestinal wind expelled through the colon? anus is a sign that the digestive tract is not working well. **O Villi O Bacteria O False** O Intestinal cells **O** True What process produces gas in the large How much intestinal wind do we expel intestine? on average every day? **O** Combustion O 2 to 3 litres **O** Oxidation **O 0.5 to 1.5 litres O** Fermentation O 0.2 to 0.4 litres Which of the following produces most Digestive gases are only expelled by gas during fermentation? the anus. **O Sugar O** False **O Kidney beans O** True **O** Tomatoes What do we call expelling intestinal gas via the anus? **O Ventilation**

4.4.8

O Ventilation O Degassing O Flatulence

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Answers

Intestinal wind expelled through the anus is a sign that the digestive tract is not working well.

• False

Well done! Even if passing wind can be embarrassing, it is quite normal and means that your digestive tract is working properly.

O True

Wrong! That is not the right answer.

How much intestinal wind do we expel on average every day?

O 2 to 3 litres

Wrong! It is less than that.

• 0.5 to 1.5 litres

Well done! That's right! This is the total amount of intestinal wind expelled during 12 to 25 instances throughout the day.

O 0.2 to 0.4 litres

Wrong! It is more than that.

Digestive gases are only expelled by the anus.

False

Well done! Digestive tract gases are expelled via your anus and your mouth.

O True

Wrong! These gases are also expelled at the other end of your digestive tract.

What do we call expelling intestinal gas via the anus?

O Ventilation

Wrong! Try again!

O Degassing

Wrong! Nice try, though!

Flatulence

Well done! That's right!

What produces intestinal wind in the colon?

O Villi

Wrong! Villi increase the surface area for the absorption of nutrients.

Bacteria

Well done! Bacteria ferment fibre in your large intestine and this produces intestinal gases.

O Intestinal cells

Wrong! Try again!

What process produces gas in the large intestine?

O Combustion

Wrong! Try again! O Oxidation

Wrong! That's not right.

Fermentation

Well done! Bacteria ferment the residue of undigested food and this process produces gas in your large intestine.

Which of the following produces most gas during fermentation?

O Sugar

Wrong! That's not the right answer.

Kidney beans

Well done! Kidney beans contain a large amount of carbohydrates, which bacteria ferment in the colon. This results in the production of a lot of gas.

O Tomatoes

Wrong! Try again!