# alimentarium academy

- 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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# 4.4.8 Intestinal wind

Intestinal wind expelled through the anus is a sign that the digestive tract is	What process produces gas in the large intestine?
not working well.	O Combustion
O False O True	O Oxidation O Fermentation
How much intestinal wind do we expel on average every day?	Which of the following gases is not found in the digestive tract?
O 2 to 3 litres	O Methane
O 0.5 to 1.5 litres O 0.2 to 0.4 litres	O Butane O Carbon dioxide
Digestive gases are only expelled by the anus.	Which compound produces the bad odour of intestinal wind?
O False	O Phosphorus
O True	O Carbon O Sulphur
What do we call expelling intestinal gas via the anus?	Hydrogen sulphide is
O Ventilation	O an odorous gas
O Degassing	O an odourless gas O a laughing gas
O Flatulence	
What produces intestinal wind in the colon?	Which of the following produces most gas during fermentation?
O Villi	O Sugar
O Bacteria	O Kidney beans O Tomatoes
O Intestinal cells	O i dinatoes

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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.

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.

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?

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 gases is not found in the digestive tract?

# O Methane

Wrong! Methane is produced in your digestive tract.

## Butane

Well done! Butane is not produced in your digestive tract.

## O Carbon dioxide

Wrong! Carbon dioxide is produced in your digestive tract.

# Which compound produces the bad odour of intestinal wind?

# O Phosphorus

Wrong! Try again!

# O Carbon

Wrong! That's not right.

## Sulphur

Well done! When you pass wind, the bad odour comes from sulphurous gases, which represent only 1% of the total amount of gas in your digestive

# Hydrogen sulphide is...

• an odorous gas

Well done! It smells like rotten eggs.

# O an odourless gas

Wrong! That's not the correct answer.

# O a laughing gas

Wrong! Try again!

# 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!