

Excretion

Revision notes · What excretion is, and the excretory products of the lungs, kidneys and skin, such as carbon dioxide and urea.

For Edexcel International GCSE Science (Double Award) 4SD0.

Excretion Spec 2.71-2.79B

Excretion: lungs, kidneys and skin Spec 2.71

Excretion

The removal from the body of the waste products of metabolism.

Cells make waste products as they carry out chemical reactions. Some of these are poisonous or harmful if they build up, so they must be removed. Three organs carry out **excretion** in humans: the lungs, the kidneys and the skin.

Organs of excretion and their excretory products

Organ	Excretory products
Lungs	Carbon dioxide (and water vapour), lost when we breathe out
Kidneys	Urea, with excess water and ions, lost in urine
Skin	Water, salts (ions) and urea, lost in sweat

Carbon dioxide is a waste product of respiration. **Urea** is a nitrogen-containing waste product. The blood carries both to the organs that remove them.

Common mistake: Faeces are not excretory products. They are undigested food that has never been part of the cells' chemistry, so removing them is egestion, not excretion.

Exam tip: Always match the product to the organ: carbon dioxide from the lungs, urea from the kidneys. Sweat also contains urea, but its main job is cooling.

Quick check

1. Name the excretory product of the lungs.
2. Name three substances lost from the skin in sweat.

Quick check answers

Excretion

- 1 . Carbon dioxide.
- 2 . Water, salts (ions) and urea.