

CIE Biology GCSE

13 - Excretion in Humans

Flashcards



Where is urea formed?



Where is urea formed?

Urea is formed in the kidneys



What is urea made from?



What is urea made from?

Excess amino acids



Which organ excretes carbon dioxide?



Which organ excretes carbon dioxide?

The lungs



State 3 things that the kidneys excrete



State 3 things that the kidneys excrete

- Urea
- Excess water
- Excess salts



State 3 conditions which alter the volume of urine produced

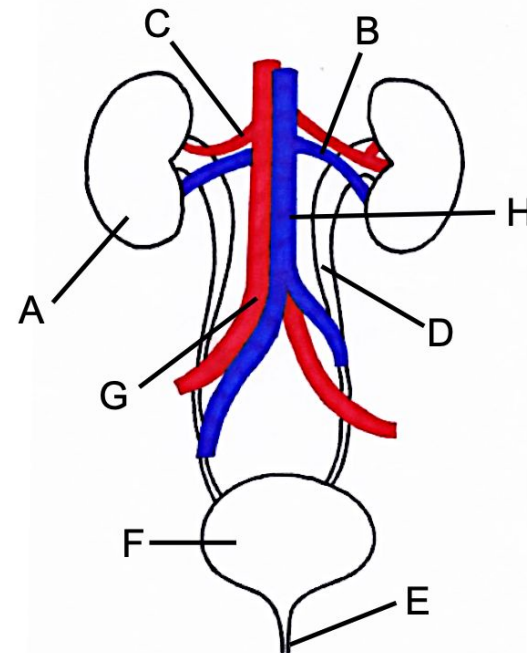


State 3 conditions which alter the volume of urine produced

- Temperature
- Water intake
- Exercise

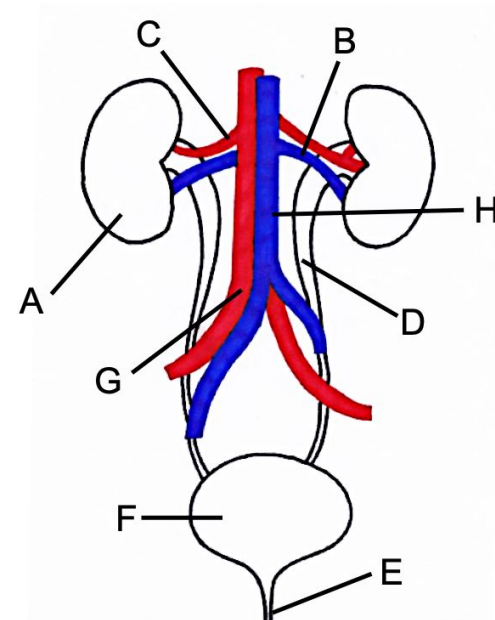


Identify the structures of
the excretory system
labelled in the diagram



Identify the structures of the excretory system labelled in the diagram

A	kidney	E	urethra
B	renal vein	F	bladder
C	renal artery	G	aorta
D	ureter	H	vena cava



Describe the role of the liver in dealing
with excess amino acids
(Higher/Supplement)



Describe the role of the liver in dealing with excess amino acids (Higher/Supplement)

The excess amino acids are converted into different proteins and used in the body or stored

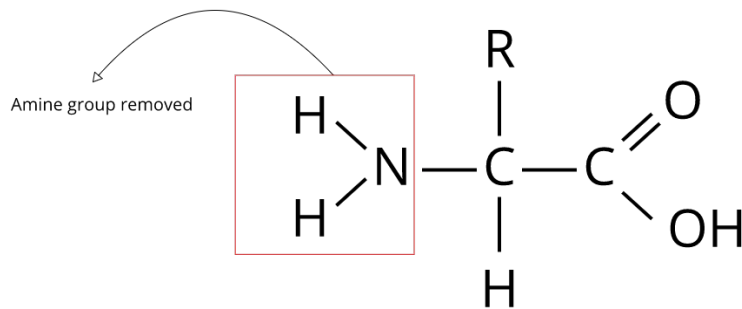


What is deamination? (Higher/Supplement)



What is deamination? (Higher/Supplement)

The removal of the amine group in an amino acid to create urea



Why is excretion necessary? (Higher/Supplement)

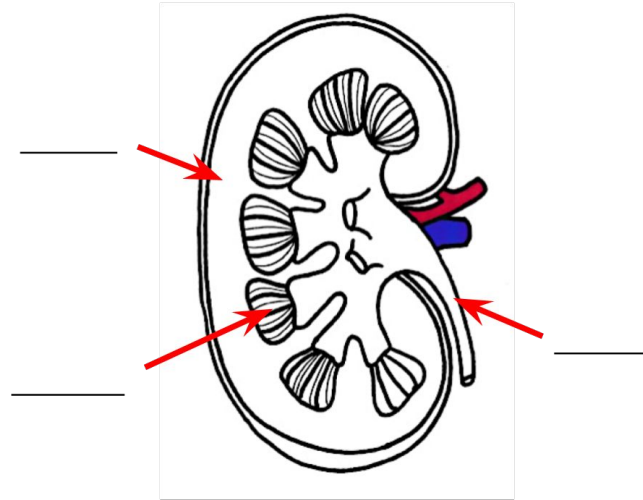


Why is excretion necessary? (Higher/Supplement)

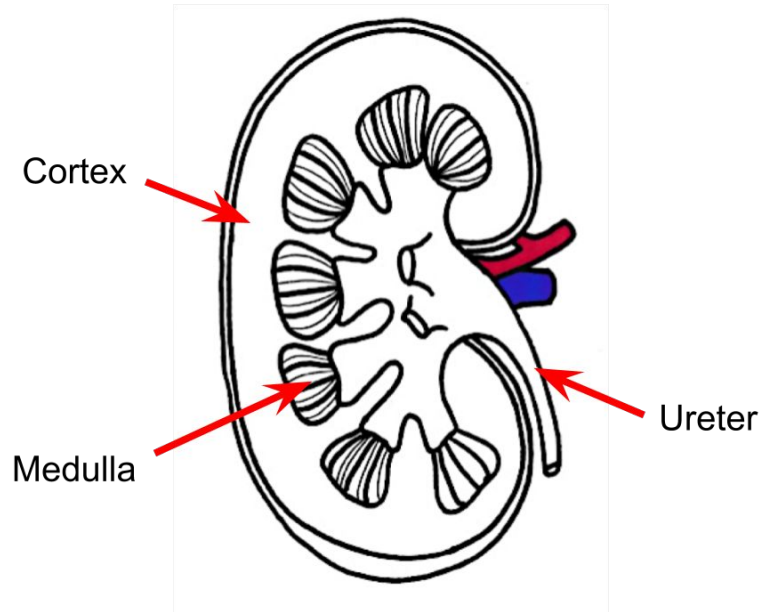
To remove toxic waste substances like urea and carbon dioxide



Label this diagram of a kidney (Higher/Supplement)



Label this diagram of a kidney (Higher/Supplement)



What is the function of the glomerulus in
the kidney?
(Higher/Supplement)



What is the function of the glomerulus in the kidney?
(Higher/Supplement)

To filter out small molecules from the blood (e.g water, urea, glucose and salts)



What is the function of the kidney tubule?

(Higher/Supplement)



What is the function of the kidney tubule?
(Higher/Supplement)

Reabsorbing molecules necessary for
the body



What molecules does the kidney tubule
reabsorb?
(Higher/Supplement)



What molecules does the kidney tubule reabsorb?
(Higher/Supplement)

- All glucose
- Most of the water
- Some of the salts



What does kidney dialysis do?

(Higher/Supplement)



What does kidney dialysis do? (Higher/Supplement)

- Removes urea from the blood
- Maintains the salt and glucose balance



What happens during kidney dialysis? (Higher/Supplement)



What happens during kidney dialysis?

(Higher/Supplement)

The blood is removed from a vein and passed through a dialysis machine along a membrane separating it from dialysis fluid, allowing waste to flow out



Give one advantage of kidney
transplants over dialysis
(Higher/Supplement)



Give one advantage of kidney transplants over dialysis (**Higher/Supplement**)

Kidney transplants improve the patient's quality of life as it offers a more permanent solution



Give one advantage of kidney dialysis
over transplants
(Higher/Supplement)



Give one advantage of kidney dialysis over transplants **(Higher/Supplement)**

There is no risk of rejection as it just involves filtering the blood

