

Excretory System

The **excretory system** of the body controls the fluids of the body, including removing excess and unnecessary fluids from the body. The organs include the kidneys, lungs, liver, and the skin. Each of the organs have a responsibility in the system, but the kidneys are the main organs of the excretory system. The kidneys control the fluids of the body. Other parts of the excretory system include the ureters, bladder, and urethra.

In addition, the urinary system is a part of the excretory system. The **urinary system** controls the balance of water and chemicals in the body for it to function properly. The system works with the lungs, kidneys, and the intestines. The urinary system produces, stores, and eliminates **urine** (pee), which is the fluid released by the kidneys.

The body has two bean-shaped organs called kidneys located below the ribcage in the middle of the back. The **kidneys** are responsible for removing wastes from the blood, as well as different types of salts, and excess water. The excess substances are then sent to other parts of the excretory system such as the ureter and urinary bladder, then to the urethra in the form of urine.

Ureters are thin tubes connected to the bladder which is filled with the urine. The urethra is the tube that is connected to the **urinary bladder**. The bladder, located in the pelvis, is balloon-shaped, hollow, and can stretch like a balloon, stores up to about 16 ounces of urine. Once the bladder is full, a person normally must **urinate** to eliminate the waste from the body through the **urethra**. The urethra is the tube that allows urine to pass outside of the body once the urinary bladder is full.

The kidneys also help control the water the body needs for survival. The kidney is important to make sure the body remains hydrated. For example, if a person was stuck in the desert without water, the kidneys will absorb more of the water in your body so there will be less urine. This way the body will not lose as much water.

When a person breathes out the **lungs** will release water and carbon dioxide. Carbon dioxide is a waste product that must be eliminated from the body. The lungs thin out the carbon dioxide from the blood so it can enter the lung tissue and leave the body when a person breathes.

The **liver's** responsibility is to break down the chemicals, poisons, or other toxins that enter the body. For example, **urea** is a waste product that is produced when the liver breaks down toxic substances. It is released from the body usually through urine, but is also released when a person sweats or perspires. The liver also produces **bile** to break down fats into useful fats or waste.

Finally, the **skin** is the largest organ of the body and is also a part of the excretory system and provides protection for the body. The skin is responsible for the elimination of sweat from the body, which contains waste such as urea, salts, and water. Sweat also help cools down the body. Everybody sweats.

In summary, the excretory system is responsible for controlling the fluids of the body, and along with the urinary system, controls the balance of water and chemicals in the body for it to function properly. Though the kidneys are the main organs of the system, other organs include the lungs, liver, and skin. The addition the ureters, bladder, and urethra also play an important role in the excretory system as the path for urine to be released from the body.

Questions:

1) Which of the following is the fluid released by the kidneys once the wastes are removed from the water and blood in the body?

- A: Bile
- B: Urea
- C: Sweat
- D: Urine

2) Which of the following organ is responsible for removing waste from the blood?

- A: Kidneys
- B: Lungs
- C: Liver
- D: Skin

3) When a person breathes out, or exhales, which of the following is released from the body?

- A: Carbon dioxide and sweat
- B: Urea and bile
- C: Bile and water
- D: Water and carbon dioxide

4) Which of the following parts of the urinary system is the tube allowing urine to pass outside the body?

- A: Ureters
- B: Urethra
- C: Urea
- D: Urinary bladder

5) Which of the following organs of the excretory system break down the chemicals, poisons, and other toxin in the body?

- A: Skin
- B: Kidneys
- C: Liver
- D: Lungs

6) Which of the following best describes the role of the kidneys when a person starts to become dehydrated?

- A: The kidneys produce more water for the body.
- B: The kidneys begin to stop processing the water in the body.
- C: The kidneys absorb more water leading to less urine.
- D: The kidneys release more water leading to more urine.