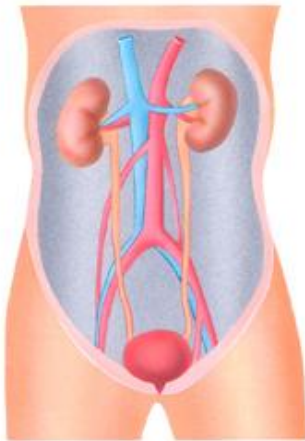




The Urinary System



The function of the urinary system is to remove waste products from the blood and eliminate them from the body. The principal waste products being eliminated are water, carbon dioxide and nitrogenous wastes including urea, uric acid and creatinine.

Other functions of the urinary system include the regulation of the volume of body fluids, the balance of pH and the electrolyte composition of these fluids.

Kidneys

The kidneys are located in the back of the upper abdomen and are protected by the lower ribs and rib cartilage of the back. The kidneys are involved with a number of bodily functions which include:

- The filtering and excretion of unwanted waste products such as urea from the body.
- The maintenance of water balance, the regulation of the acid-base balance of body fluids and the production of renin, which is important in the regulation of blood pressure.
- The production of the hormone erythropoietin, which stimulates the production of red blood cells.

Ureters

The ureters are two slender tubes that run from the sides of the kidneys to the bladder. Their function is to transport urine from the kidneys to the bladder.

Bladder

The bladder is a muscular organ and serves as a reservoir for urine. Located just behind the pubic bone, it can extend well up into the abdominal cavity when full. Near the outlet of the bladder there is a small muscle called the internal sphincter, which contract involuntarily to prevent the emptying of the bladder.

Urethra

The urethra is a tube that extends from the bladder to the outside world. It is through this tube that urine is eliminated from the body.