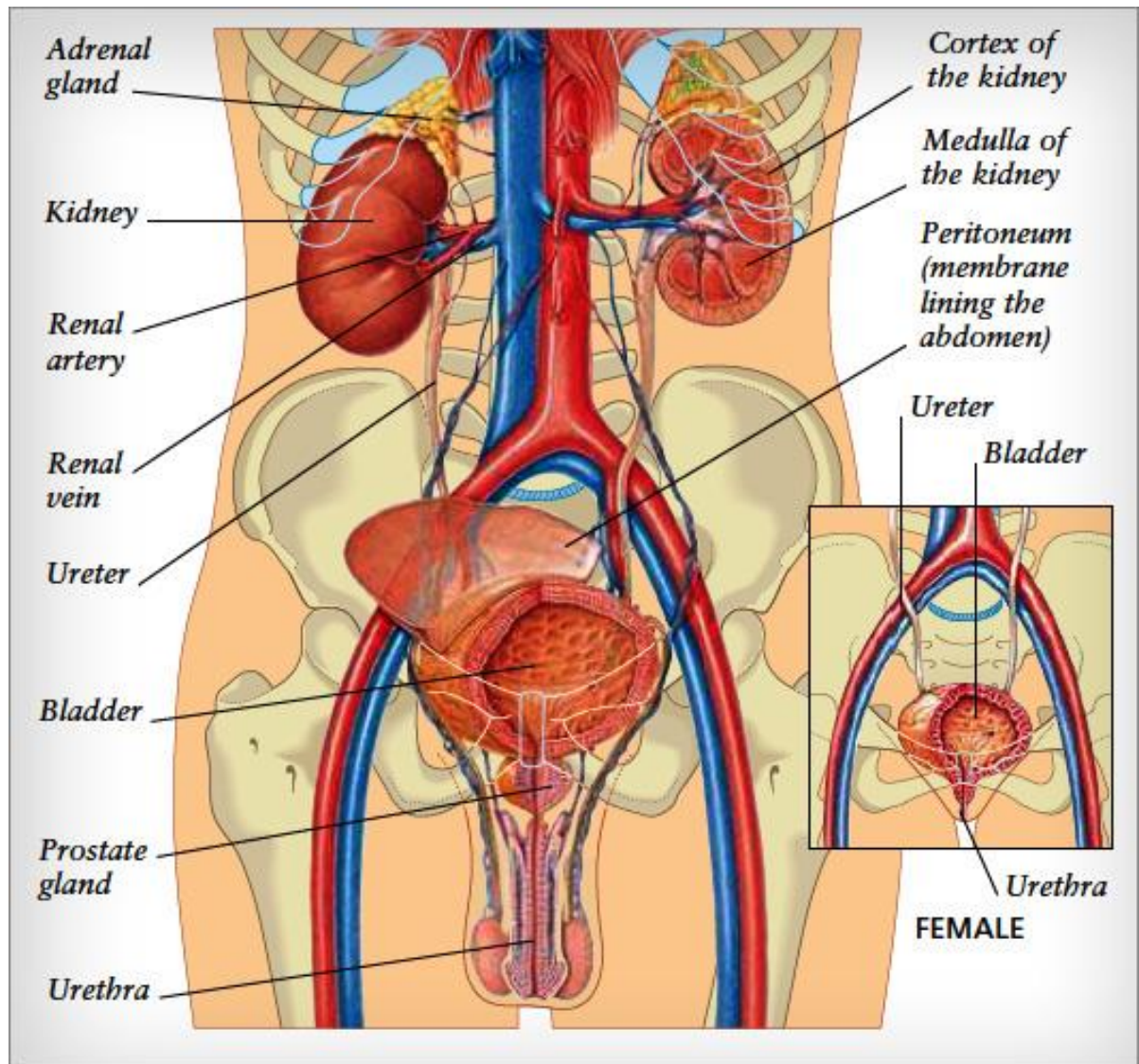


Urinary system



The urinary system produces, stores and eliminates urine, the fluid waste excreted by the kidneys. The urinary system includes two kidneys, two ureters, the bladder, two sphincter muscles and the urethra.

The urinary system works with the lungs, skin and intestines to maintain the balance of chemicals and water in the body. Adults eliminate about 1.42 liters of urine each day, depending on the amount of fluid consumed and fluid lost through perspiring and breathing. Certain types of medications, such as diuretics that are sometimes used to treat high blood pressure, can also affect the amount of urine a person produces and eliminates. Certain beverages, such as coffee, can also cause increased urination in some people.

The primary organs of the urinary system are the kidneys, which are bean-shaped organs that are located just below the rib cage in the middle of the back. The kidneys remove urea — waste product formed by the breakdown of proteins — from the blood through small filtering units called nephrons. Urea, together with water and other waste substances, forms the urine as it passes through the nephrons and down the renal tubules of the kidney.

Kidneys

The human body has two kidneys, one on either side of the middle back, just under the ribs. Each kidney contains thousands of small filters called nephrons. Each nephron has a mesh of capillaries, connecting it to the body's blood supply. Around 180 litres of blood sieve through the kidneys every day. The main functions of the kidney include:

- Regulating the amount of water and salts in the blood
- Filtering out waste products
- Making a hormone that helps to control blood pressure.

Ureters

Each kidney has a tube called a ureter. The filtered waste products (urine) leave the kidneys via the ureters and enter the bladder.

Bladder

The bladder is a hollow organ that sits inside the pelvis. It stores the urine. When a certain amount of urine is inside the bladder, the bladder 'signals' the urge to urinate. Urine contains water and waste products like urea and ammonia.

Urethra

The urethra is the small tube connecting the bladder to the outside of the body. The male urethra is about 20 centimetres long, while the female urethra is shorter, about four centimetres. At the urethra's connection to the bladder is a small ring of muscle, or sphincter. This stops urine from leaking out.

<http://www.livescience.com/27012-urinary-system.html>