

## THE LYMPHATIC SYSTEM

The body tissues are permeated by a network of capillaries containing blood. Except for leukocytes which sometimes leave capillaries through the very fine walls, the blood does not come into direct contact with the tissues and the fluid in which it is bathed which is called tissue fluid. From the tissue spaces the tissue fluid passes into narrow vessels called lymphatic vessels. These unite to form channels which rejoin the general circulation. Therefore lymph is the name given to the tissue fluid when it enters the lymphatic vessels.

Lymph passes through lymphatic nodes (glands) which act as filters preventing the passage of any bacteria, tumour cells and damaged cells entering the bloodstream.

These nodes (glands) are situated in various parts of the body and drain that specific area:

cervical nodes
drain the head, neck and chest

• axillary nodes - drain the arm

inguinal nodes - drain the leg and groin

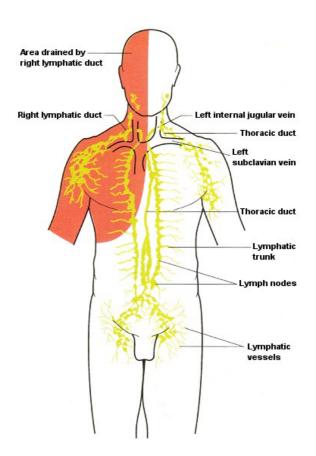
thoracic nodes - drain closely related organs and ribcage

Abdominal nodes - drain closely related organs

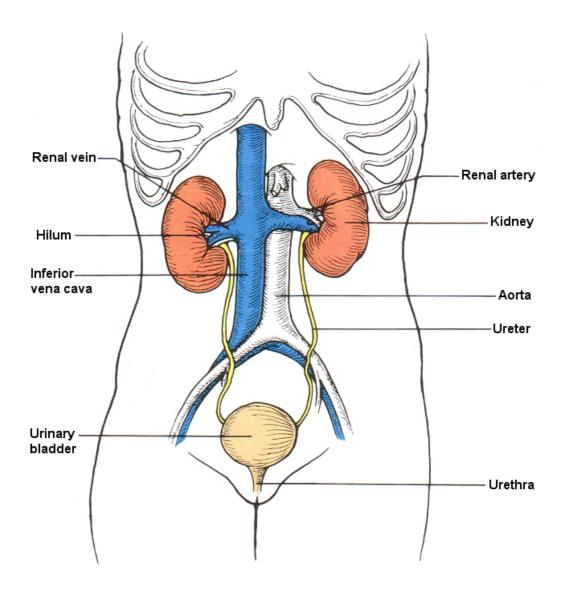
• pelvic node - drain closely related organs

• mesenteric nodes - drain the intestines

• mediastinal glands - drain the lungs



## THE URINARY SYSTEM



The Urinary System consists of:

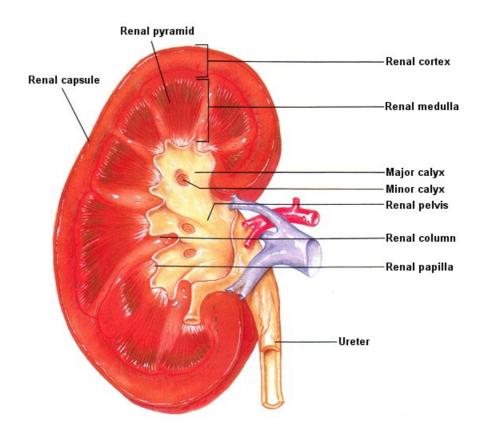
- Kidneys
- Ureters
- Bladder
- Urethra

This system regulates the amount of fluid in the body. In cold weather, very little sweating takes place so more urine is produced. In hot weather, more fluid is lost by sweating and less passed in urine.

The kidneys maintain fluid balance by:

- Maintaining blood pressure
- Maintaining electrolyte balance of the blood
- Maintaining the alkalinity of the blood
- Excreting waste products and urea

## THE KIDNEYS



The kidney's main functions are to:

- Filter the blood
- Secrete urine

There are two kidneys situated on the posterior wall of the abdomen behind the peritoneum, lying on either side of the lumbar vertebrae.

They are bean shaped, 11cm long and are embedded in a pad of fat which protects them.

## THE REPRODUCTIVE SYSTEM

This system produces the sex cells, spermatozoa in the male and the ova in the female, which together enable the species to continue.

The female reproductive organs are divided into external and internal organs.

The external genitalia are known collectively as the vulva and the internal organs consist of the following:

- Vagina
- Uterus
- Fallopian tubes
- Ovaries

The male reproductive system consists of the following organs:

In the scrotum:

- 2 testes
- 2 epididymides
- 2 deferent ducts
- 2 spermatic cords
- 2 seminal vesicles
- 2 ejaculatory ducts
- 1 prostrate gland
- 1 penis