

Introduction

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Often considered with reproductive organs, under the title urogenital system, urinary organs comprise kidneys, ureters, bladder, and urethra. The system secretes and excretes urine to remove waste products of metabolism and regulate the amount of water in the body.

Kidneys The kidneys are two bean-shaped filter systems located behind the abdominal cavity, and supplied with blood from the renal artery. Each kidney contains about a million filter units. Each unit comprises a Bowman's capsule, glomerulus (knot of capillaries), and tubule. The kidneys reabsorb into the blood most water, amino acids, glucose, vitamins, and essential salts. Wastes leave tubules in a concentrated solution: urine.

Ureters These two tubes drain urine from kidneys to the bladder. Each ureter is a muscular tube about 10 inches (25cm) long.

Bladder This muscular, balloon-like bag stores urine. A man's full bladder may hold as much as 1.2pt (56cl).

Urethra This muscular tube connects the bladder with the outside of the body. It measures about 1 1/2in (3.8cm) in a woman but up to 8in (20cm) in a man. Micturition (urination) occurs upon relaxation of the sphincter between bladder and urethra. (See also under Reproductive System.)