Anatomy & Physiology: THE URINARY SYSTEM



Prostate

Penis

> The urinary system filters blood and expels waste, regulates blood pressure, and controls the pH of blood.

TERMS

calcitriol: active form of vitamin D in a hormone released by the kidneys

collecting ducts: collect urine in the renal medulla

glomerulus: network of capillaries in the renal cortex where filtration occurs

kidneys: bean-shaped organs that filter waste from the blood; maintain electrolyte balance; regulate blood volume, pressure, and pH; and release hormones

nephron: series of looping tubes in the kidney that filter electrolytes, metabolic waste, and other water-soluble waste molecules from the blood

renal cortex: outermost layer of the kidney

renal medulla: inner layer of the kidney

renin: hormone released by the kidneys that regulates blood pressure

urea: nitrogenous waste byproduct of protein catabolism filtered from the blood by the kidneys

ureters: long, thin tube-like organs that move processed waste from the kidneys to the bladder

urethra: tube through which urine (and, in men, semen) is released from the body

uric acid: waste by-product of nucleic acid metabolism filtered from the blood by the kidneys

urinary bladder: stores urine until it is released

urine: combination of urea and uric acid excreted from the body as waste

Left kidney **Right kidney Renal pelvis** Ureter . Bladder Urine

PARTS OF THE URINARY SYSTEM

Urethra