

## Chapter 23, The Urinary System

### “Apply What You Know” Answers

- p. 894—The pathway from afferent arteriole to glomerulus to efferent arteriole to peritubular capillaries is a portal system, since the blood flows through two capillary beds in series before returning to the heart.
- p. 903—An ACE inhibitor will increase urine output. It reduces the production of angiotensin II, thus inhibiting relaxing the efferent arteriole. This raises blood pressure in the peritubular capillaries. Elevated BP here opposes tubular reabsorption, so more fluid remains in the tubule and is voided as urine.
- p. 913—The renal clearance of glucose is normally zero. Although glucose is filtered by the glomerulus, normally all of it is reabsorbed by the PCT and none remains in the urine.