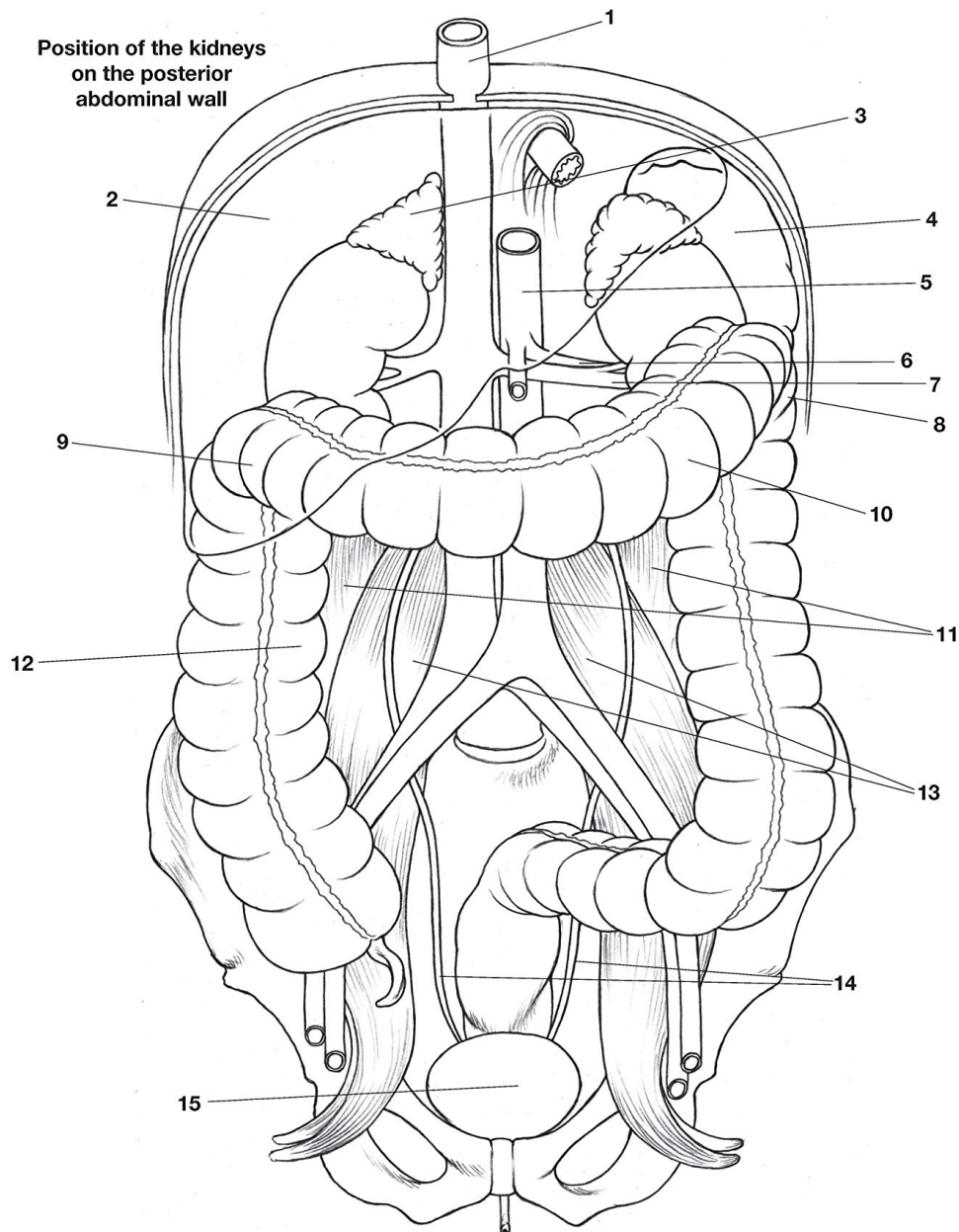


## THE KIDNEYS

The kidneys are partly covered by peritoneum anteriorly and the relations differ on each side. Posteriorly, they are both related to the diaphragm, the twelfth rib, the quadratus lumborum and psoas major muscles, and the lumbar fascia. At the upper poles are the adrenal glands, which lie outside the renal capsules. In addition to their role in urine

production, the kidneys produce hormones and the enzyme renin. Each kidney has a cortex and a medulla. The latter comprises renal pyramids that converge onto calyces extending from the renal pelvis. Each calyx receives a papilla. At each renal hilum are the tributaries of the renal vein, branches of the renal artery, and the renal pelvis.



**Key:** 1. inferior vena cava 2. liver 3. adrenals 4. spleen 5. abdominal aorta 6. renal artery 7. renal vein 8. splenic flexure of colon 9. hepatic flexure of colon 10. transverse colon 11. quadratus lumborum 12. ascending colon 13. psoas major 14. ureters 15. bladder