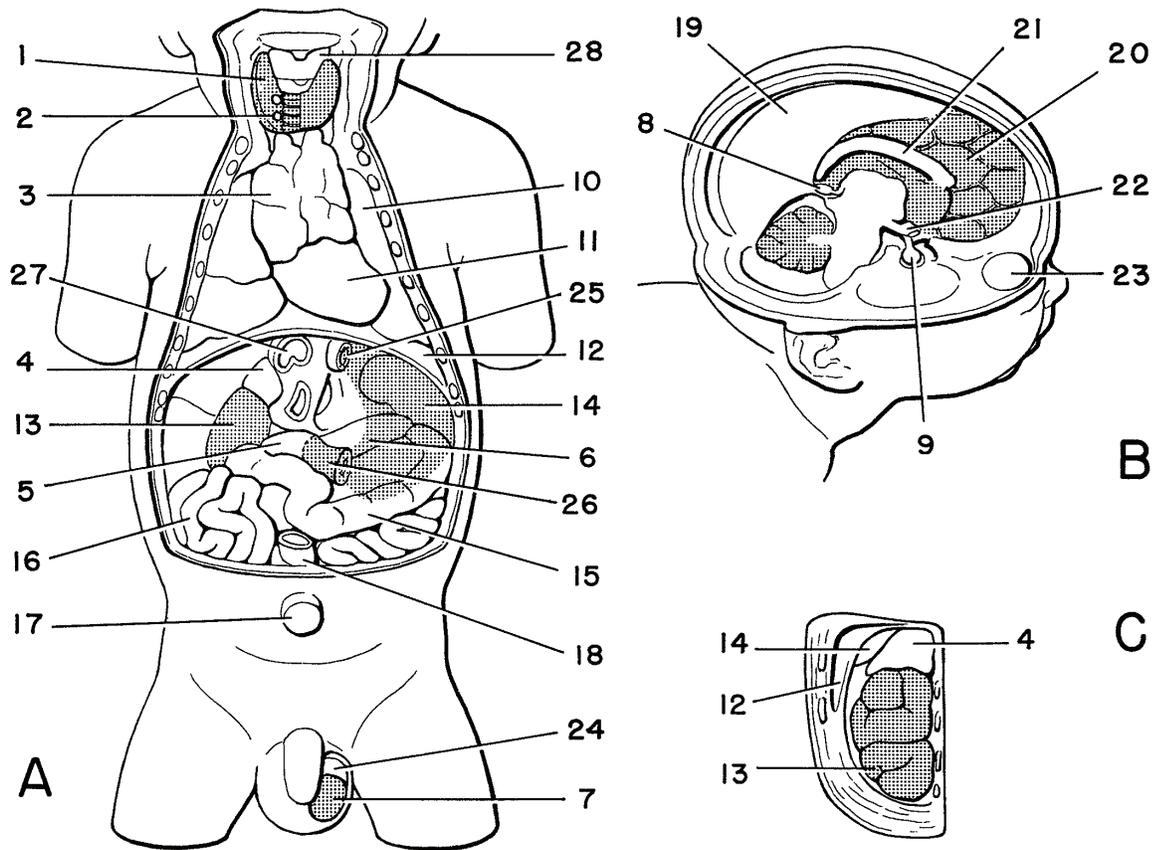


Ward's Endocrine Glands Model

470029-450

1. Thyroid
2. Parathyroids
3. Thymus
4. Suprarenals
5. Duodenum
6. Pancreas
7. Testis
8. Pineal body
9. Pituitary
10. Lungs
11. Heart in pericardial sac
12. Diaphragm
13. Kidneys
14. Spleen
15. Colon
16. Small intestine
17. Umbilical stalk
18. Umbilical vein
19. Falx cerebri
20. Cerebrum
21. Corpus callosum
22. Optic chiasma
23. Eyeball
24. Epididymis
25. Esophagus
26. Pyloric portion of stomach
27. Hepatic veins
28. Thyroid cartilage



The colors, selected for visibility only, do not represent the appearance of the organs in life. The model is a life-sized copy of an actual dissection of a stillborn infant. The infant is chosen because the thymus well-developed at this stage, undergoes involution after puberty. The right half of the thyroid has been dissected away to expose the parathyroids. The liver and most of the stomach have been removed. The stomach (outlined in stipple) is divided at its connection with the esophagus (25) and at the pyloric vestibule (26). The liver occupies the remainder of the cavity. The umbilical vein (18) is a fetal vessel which ceases to function shortly after birth. The function of the pineal body is problematical. The pituitary is composed of anterior and posterior parts, not indicated on the model. The suprarenal consists of medulla and cortex, which differ in structure and physiological activity. The kidney is lobulated in the infant as a reflection of its compound nature. There is evidence that the kidney may include an endocrine component exerting an influence upon blood pressure. The pancreas is exocrine in its digestive function, and endocrine by virtue of the islands of Langerhans. The testis and ovary are both glands of double function, producing germ cells and sex hormones. Except for the sex glands, all endocrine structures occupy the same position in both male and female.

For a detailed account of anatomical relationships, histological structure, and physiological activity of the various glands, standard textbooks of anatomy, physiology or endocrinology should be consulted.