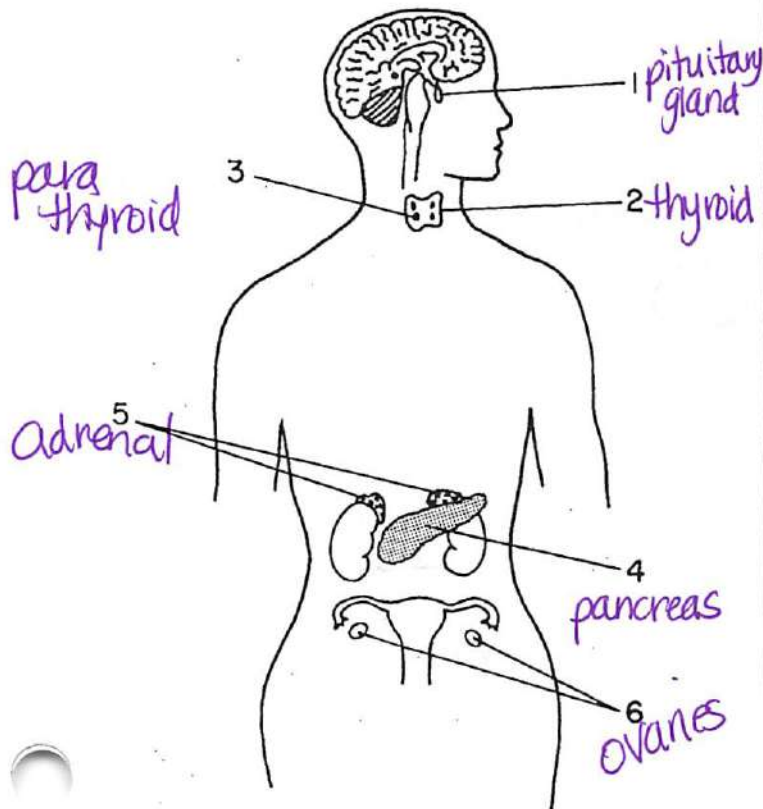


Base your answers to questions 1 through 4 on the diagram below which represents the location of several endocrine glands found within a human body and on our knowledge of biology.



1. Which structure contains specialized cells that secrete the hormones insulin and glucagon?

- A) 5 C) 3
B) 2 D) 4

2 2. Produces thyroxine, a hormone that regulates the metabolism.

6 3. Produces estrogen + progesterone.

~~2.~~ Which gland could become enlarged due to a lack of iodine in the diet?

- A) 1 C) 5
B) 2 D) 4

~~3.~~ Which gland produces parathormone, which regulates the metabolism of calcium?

- A) 1 C) 3
B) 2 D) 5

4. Label the following endocrine glands:

1. pituitary
2. thyroid

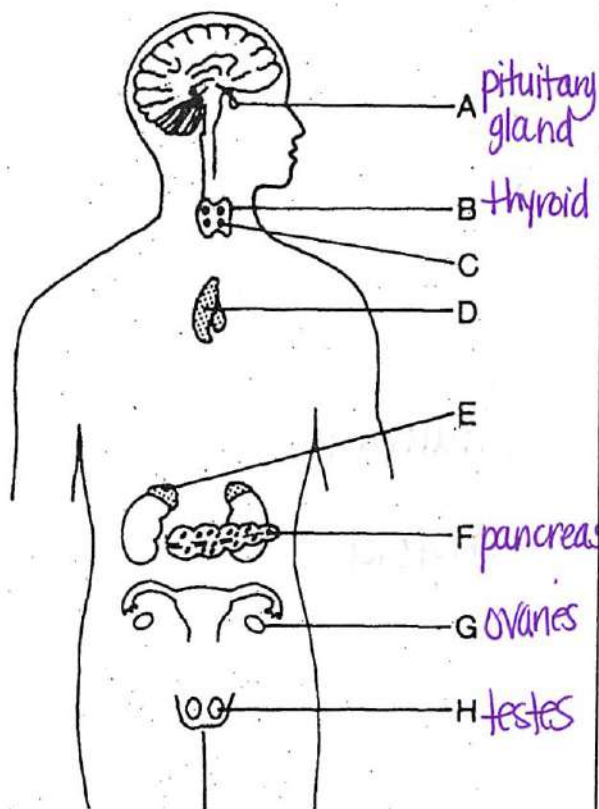
5. Secondary sex characteristics in males are regulated by

- A) amylase C) testosterone
B) acetylcholine D) estrogen

6. The body normally responds to low concentrations of sugar in the blood by secreting

- A) glucagon C) insulin
B) estrogen D) testosterone

7. Base your answer to the following question on the diagram below and on your knowledge of biology. Many of the endocrine glands found in humans are represented and labeled in the diagram.



A hormone that directly stimulates glands *G* and *H* is secreted by structure

- A) *A* C) *C*
B) *B* D) *E*

8. Base your answer to the following question on the glands below. Choose from the list below, that is best described by that statement.

Glands

- (1) Adrenal
(2) Pancreas
(3) Parathyroid
(4) Hypothalamus

Cells within this gland secrete a hormone that, in times of emergency, increases the glucose level of the blood and speeds up the actions of the circulatory and respiratory systems.

- A) 1 C) 3
B) 2 D) 4

9. Base your answer to the following question on the diagram below and on your knowledge of biology. The arrows in the diagram indicate certain hormones in the human male body.

Hypothalamus

1

Pituitary

2

Testis

3

Body Tissues

, made by testes

The hormone testosterone is represented by

- A) 1 C) 3, only
B) 2, only D) 2 and 3

10. After a hormone enters the bloodstream, it is transported throughout the body, but the hormone affects only certain cells. The reason only certain cells are affected is that the membranes of these cells have specific

- A) receptors C) antibodies
B) tissues D) carbohydrates

11. Which hormone does *not* directly regulate human reproductive cycles?

- A) testosterone
- B) estrogen
- C) insulin
- D) progesterone

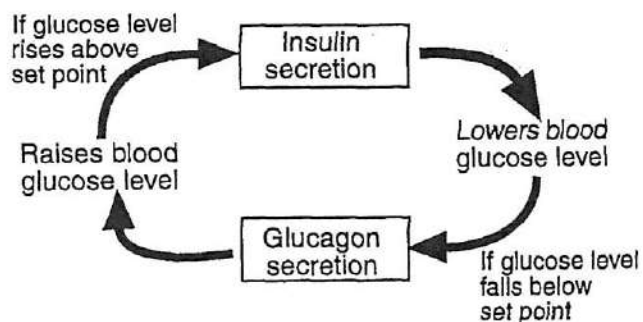
12. Neurons are to neurotransmitters as endocrine glands are to

- A) hormones
- B) vitamins
- C) nucleic acids
- D) enzymes

13. Feedback mechanisms are best described as processes that help

- A) reduce hormone levels to below normal in the blood
- B) destroy hormones in the blood
- C) directly control muscle contraction in the leg
- D) keep body conditions near a normal, steady state

14. The diagram below represents the actions of two hormones in the human body.



This diagram best illustrates

- A) recombination
- B) feedback
- C) insertion
- D) deletion

15. After you eat a meal, the level of glucose in your blood rises. Explain the biological process that occurs.

a) Include the endocrine gland and what it secretes.

pancreas → insulin

b) What are the target cells and the message

Body cells - let in the $C_6H_{12}O_6$

c) Response

lowers blood sugar level

16. A hyposecretion of a hormone

↑ too little

- A) is an excess of the hormone
- B) rarely causes a disorder of the body
- C) is a deficiency of the hormone
- D) maintains homeostasis