

Chapter 45-Regulation –HORMONES and endocrine system –in class follow along lecture notes

Central Questions: check to see if you can answer these!

- 1) How do the 9 endocrine glands control the target cells and functions?
- 2) How does the Master gland control other glands?
- 3) How does the hypothalamus control the endocrine system?

BACKGROUND:

1) Why is the endocrine system important to have in the body? What are hormones?

Distinguish between endocrine, exocrine and paracrine secretions – give examples.

2) Where are hormones produced? How do they act?

3) What are neurosecretory cells – where are they found? What is the importance of these cells?

4) Explain FEEDBACK HORMONAL REGULATION with an example.

a) Negative feedback:

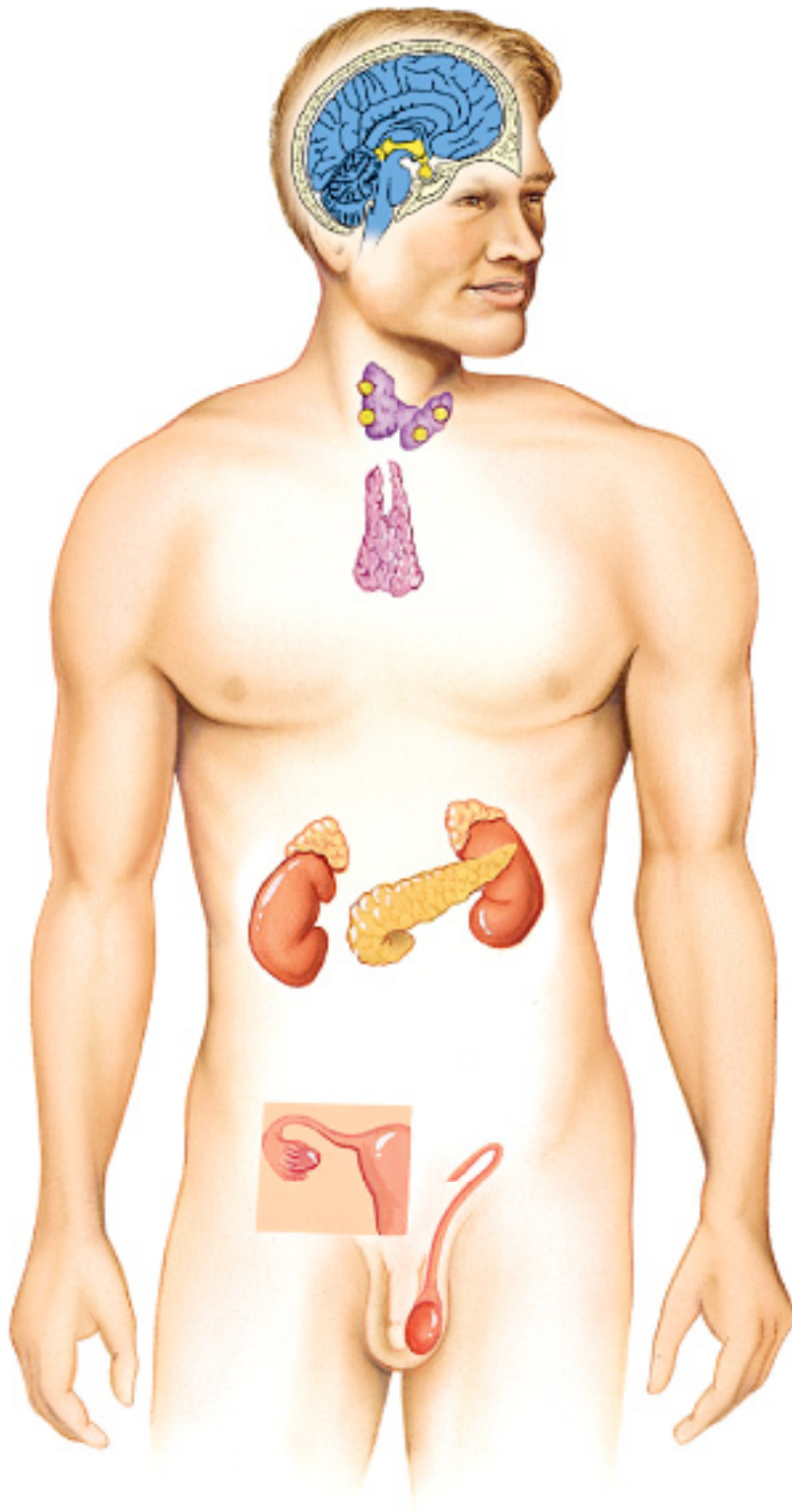
:

b) Positive feedback:

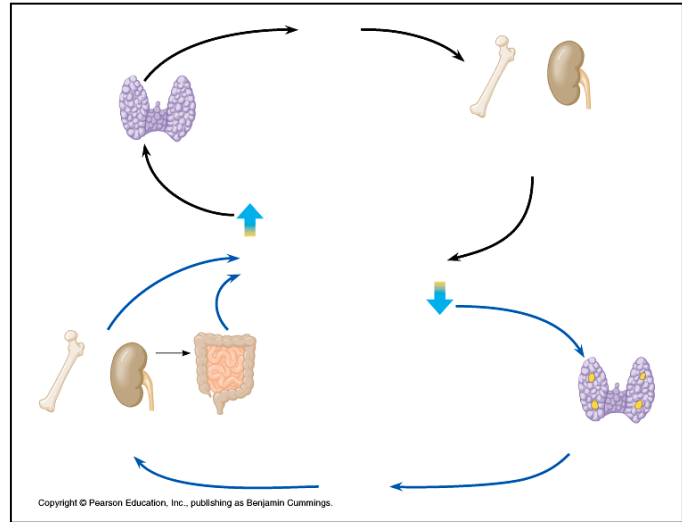
5) How do water soluble hormones cause changes in target cells through cell signaling/signal transduction pathways?

How do steroid hormones cause changes in target cells?-important

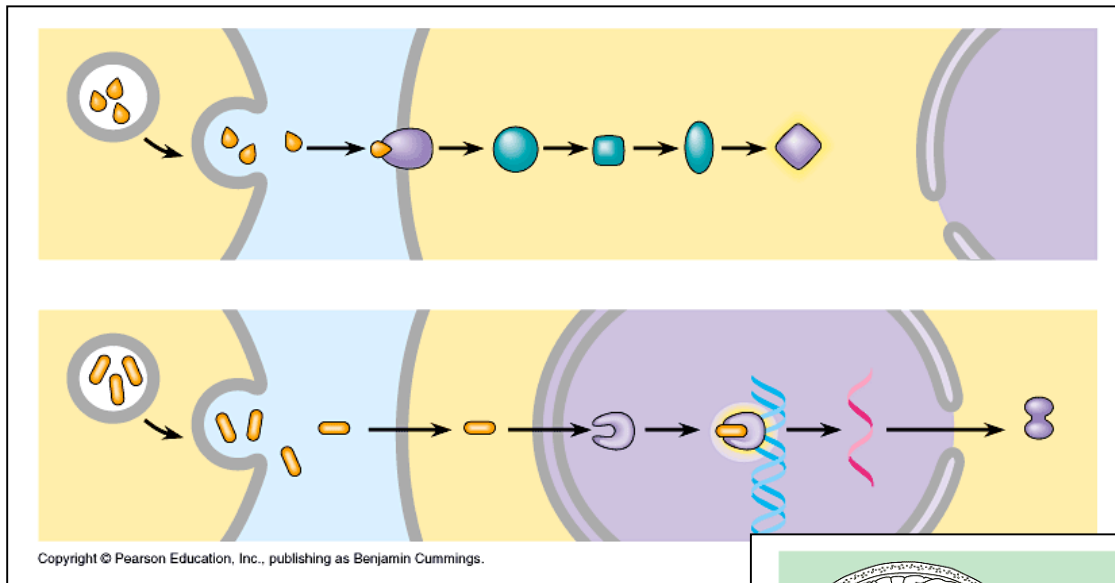
Label the glands and state below each one its primary function



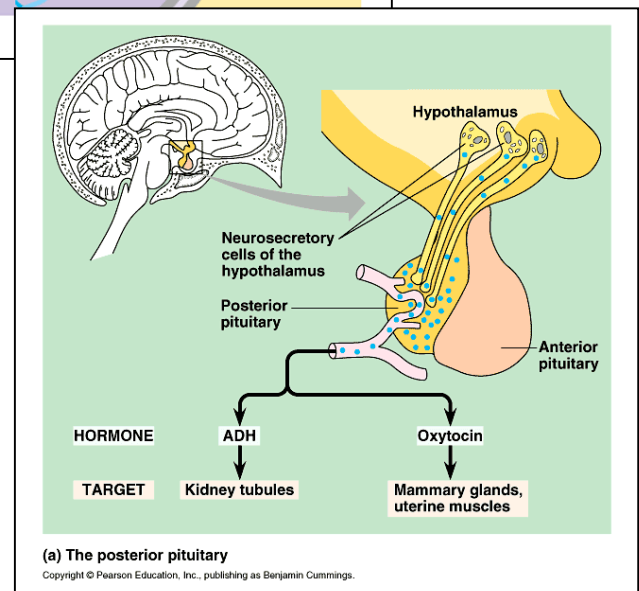
6) Explain how negative feedback works in the thyroid and parathyroid to regulate blood calcium:



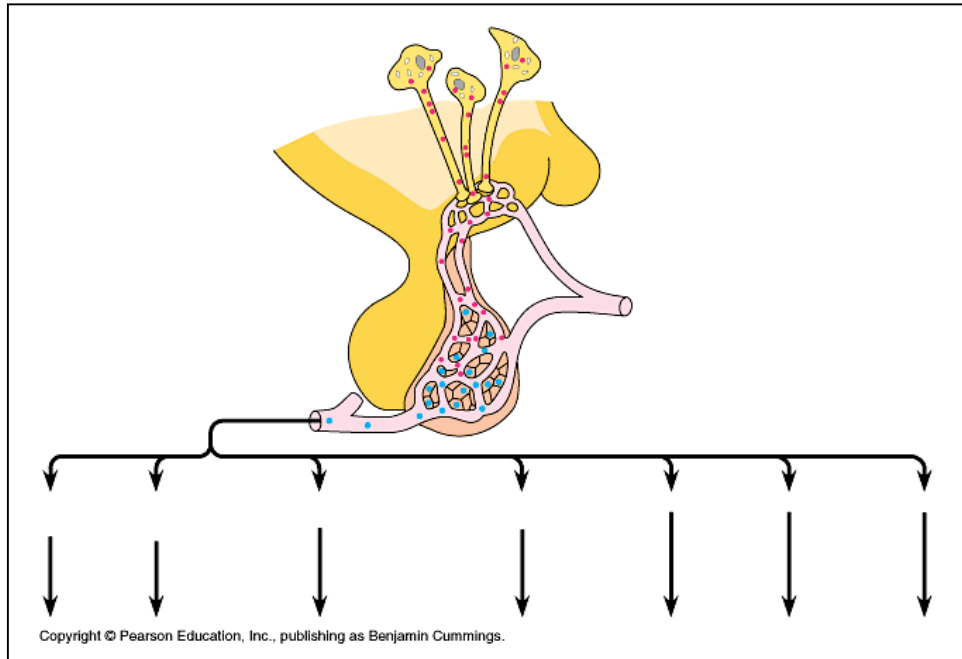
7) What are these pictures showing: label them.



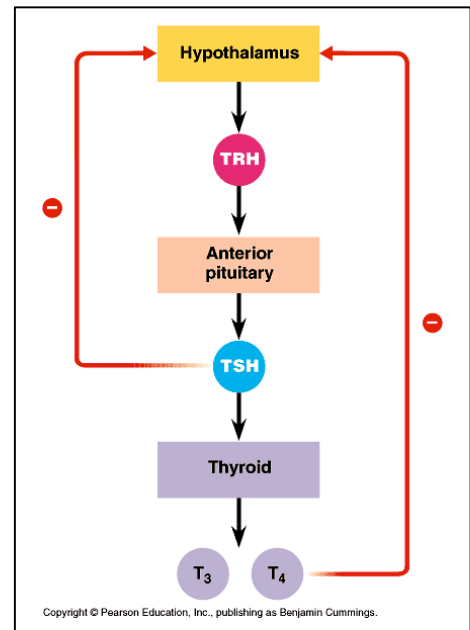
8) What is the function of the hypothalamus and posterior pituitary?



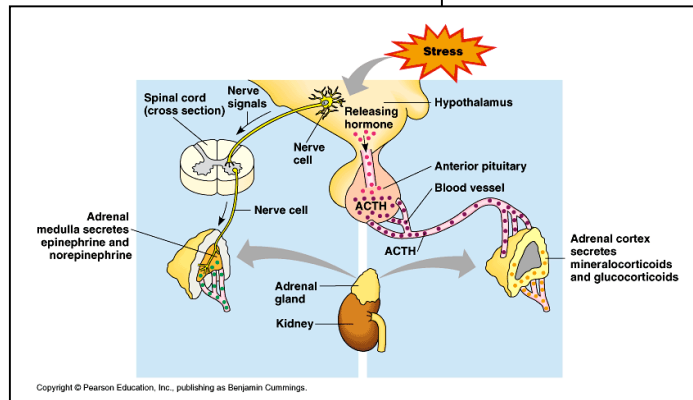
9) What is the function of the anterior pituitary – how does the hypothalamus regulate it?



10) How does the hypothalamus regulate the thyroid function?



11) What does stress do in the body?



Gland – Endocrine or neurosecretory cells	Location and solubility (water /lipid)	Hormone/s	Target cells location	What hormone does in target cell: give the whole feedback loop as in the examples if it is known	Diseases involved
Hypothalamus					
Pituitary gland					
Pineal gland					
Thyroid gland					
Parathyroid gland					
Pancreas					

Gland – Endocrine or neurosecretory cells	Location and solubility (water /lipid)	Hormone/s	Target cells location	What hormone does in target cell: give the whole feedback loop as in the examples if it is known	Diseases involved
Adrenal medulla					
Adrenal cortex					
Testes and ovaries					

