Internet Assignment: Hypothalamic-Pituitary-Endocrine Axis

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Class: \_\_\_\_\_\_\_\_\_

<http://bcs.whfreeman.com/thelifewire/content/chp42/4202s.swf>

Read the Introduction

Click Animation and watch Hypothalamus-Pituitary Overview for the 1st set of questions

1. What is the hormonal control center of the body
2. Which gland is considered the master gland and why
   1. .
   2. .
3. What are the 2 parts of the pituitary, where do they originate from, and which contains axons
   1. .
   2. .
   3. .
4. What hormones are produced by each part of the pituitary
   1. Posterior pituitary
      1. .
      2. .
   2. Anterior Pituitary
      1. .
      2. .
      3. .
      4. .
5. Where do the hormones go if released from the posterior pituitary
6. What stimulates ADH producing neurons in the hypothalamus
7. What are the 2 functions of ADH
   1. .
   2. .
8. Whats another name for ADH
9. What stimulates oxytocin producing neurons in the hypothalamus
10. What are the2 target tissues of oxytocin
11. What connects glandular cells with neurons from the hypothalamus?
12. Write the correct hormone name next to the description
    1. Somatotropin 🡪
    2. Controls production and release of steroid hormones 🡪
    3. Regulates seasonal changes🡪
    4. Promotes mammary development for lactation 🡪
    5. Accelerate metabolism, increase heat, and enhance growth during development 🡪
    6. Stimulates protein metabolism influencing growth of cells and tissues🡪
    7. releases cortisol 🡪
    8. help tackle stressful events by increasing glucose in the bloodstream 🡪

Part 2: Negative Feedback Loops

1. Fill in the diagram
2. In response to stress signals, the hypothalamus does what
3. What is the role of CRH
4. What does the adrenal cortex do in response to ACTH
5. What is the primary effect of cortisol
6. What 2 endocrine glands does cortisol act on, and what is the outcome of this
   1. .
   2. .
7. In negative feedback, the output ultimately does what

Now read the conclusions and take the quiz at the end