***Endocrine System***

Function: to control the conditions in your body by making and sending \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ from one part to another.

Hormones: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ that are made in one organ and travel through the body to a second organ (“target” organ). They are often called chemical \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, and each hormone has a different job.

Glands

1. Pituitary Gland
   1. Director of the endocrine system!
   2. Located at the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ of the brain.
   3. Controls \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, sexual development, and water absorption.
2. Pineal Gland
   1. Buried deep in the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
   2. Sensitive to light and necessary for \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, body temperature, reproduction, and aging.
3. Thyroid Gland
   1. Found at your \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ near your Adam’s apple.
   2. Necessary for \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, and regulation of calcium.
4. Thymus
   1. Located in your \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
   2. Continues to grow until \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ when it begins to shrink.
   3. Helps the body fight \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ by controlling production of white blood cells.
5. Adrenal Gland
   1. Located on top of your \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
   2. Produces \_\_\_\_\_\_ different hormones that regulate carbohydrates, proteins, fat metabolism, water, and salt levels.
   3. Produces \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ which makes your heart beat faster.
6. Pancreas
   1. Located beneath the stomach, connected to the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
   2. Secretes \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and glucagon, which regulate the level of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ in your blood.
7. Ovaries/Testes
   1. Secrete hormones that control \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

Hormones are very powerful so they must be carefully regulated. Homeostasis is achieved by \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

* Most feedback in the body is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
  + Negative feedback turns OFF the response to the hormone.
* Some responses are controlled by \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ feedback.
  + The purpose here is not about homeostasis, but to produce a response that continues to increase, ONLY in \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ conditions!
    - Examples- clotting blood, fever, immune response, puberty, labor.
* The action of one hormone is balanced by the action of another hormone. Too little or too much of any hormone can lead to serious disease.