Endocrine System, Part 2: Crash Course A&P #24

Available at [https://youtu.be/SCV_m91mN-Q](https://youtu.be/SCV_m91mN-Q) or just youtube/google “Crash Course Anatomy & Physiology 24”

1. Who are endocrinologists?

   a. The powerful hormones your [__________] produces influence some of your most important physiological processes.

      i. Your [thyroid] secretes hormones that regulate many aspects of your body’s [__________]—like body temperature, skin moisture, and your blood’s levels of [__________, __________, and ____________].

      ii. What is [Graves’ Disease]? Explain.

2. What is the purpose of the hypothalamus-pituitary-thyroid (HPT) axis? Explain.

   a. Your [endocrine system] gets involved as soon as your body senses that the [_________________________] has changed.

   b. Your cooler-than-normal blood flows into your brain’s [__________], where it bumps up against temperature-sensitive sensory neurons, which act like a kind of [__________]. Once they detect that the temperature is below target levels, those neurons secrete [thyrotropin]-releasing hormone, or [____], into the bloodstream.

   c. [TRH] goes just a few millimeters to the [_________________________], where it hits receptors on cells there, causing it to release thyroid-stimulating hormone, or [____], into the bloodstream.

   d. In your cells, “burning” glucose really means [_________________________], so its component parts can be used to [_________________________].

   e. This process has a [_________________________], or heat-producing effect that warms you up.

   f. What other effects does your thyroid hormone produce?

   g. In the case of Graves’ Disease, the thyroid gland never receives any [_________________________], so it just won’t quit.