What is the endocrine system?

Endocrinology is the field of medicine that deals with the endocrine system. The endocrine system is the complex system that controls the hormone-producing glands in the body. Hormones are substances that control almost every activity in the body at very low levels. Hormones control reproduction, metabolism (burning of nutrients and excretion of waste), sensory perception, movement, growth, and sexual development, and the response to the environment and provide the energy and nutrients necessary for the body's functions. Endocrine glands include the thyroid, parathyroid, pancreas, ovaries, testicles, adrenal, pituitary, and hypothalamus.

Hormones, after secreted from the hormone producing glands(for example, thyroid, pituitary, etc.), go to the tissues through blood circulation where they act, and carry the signals of what to do to those tissues. Many aspects of life (sleep disorders, weight gain, lack of energy, menstrual irregularities, sexual reluctance/weakness, etc.) are affected if hormone production cannot be performed at the required levels.

From the brain to the skin, every part of the body (heart, kidneys, muscle, intestine, etc.) has its own specific job. They all receive directives from the endocrine system to get things done. Hormones released from the endocrine system tell all parts of the body what jobs to do, when to do and for how long.

In short, hormones are vital to health.