The nervous system and the endocrine system allow information to be communicated throughout the body. Discover how these systems work. Each of these glands works in a number of unique ways in specific areas. The endocrine system is not a part of the nervous system, but it is still essential to communication throughout the body. The hypothalamus connects these two important communication systems. The hypothalamus is a tiny collection of nuclei that is responsible for controlling an astonishing amount of human behavior.

**The endocrine system**

- **Endocrinology**
- **Hormones** - active molecules
- **Endocrine pathology**

The sites of the principal endocrine glands.

The endocrine system co-ordinates the body’s internal physiology, regulates its development throughout life, and helps it to adapt to nutrition and other external environmental changes. The system is based on a number of glands, which secrete hormones into internal medium to act on target tissues. Hormone release (in the hypothalamus and pituitary) is regulated by numerous stimuli of nervous metabolic, physical hormonal origin, in particular feedback control by hormones produced by the target glands (thyroid, adrenal cortex and gonads). These integrated endocrine systems are called axes Nervous system’s interactions with the endocrine system.

- **Instructor:** Sheila G. Dolipas.

**ANTERIOR 1. Human Growth Hormone (HGH); controls growth**

The peripheral nervous system is itself divided into two subsystems, one controlling internal responses (the autonomic nervous system, ANS) and one controlling external responses (the somatic nervous system). The sympathetic division of the ANS is involved in preparing the body for behavior by activating the organs and the glands in the endocrine system. The parasympathetic division of the ANS tends to calm the body by slowing the heart and breathing and by allowing the body to recover from the activities that the sympathetic system causes. The endocrine system works in concert with the nervous and immune systems which also share their functionaries (Kovacs and Ojeda, 2012, pp1-3).

The branch of science dealing with the endocrine system is called **endocrinology**, which is now a well-developed branch enjoying the technological advancement for the investigatory and diagnostic tools in the field. Being a physiological functionary, the hypothalamus is the neural control center for all endocrine systems. In humans, the major endocrine glands are the thyroid gland and the adrenal glands. The study of the endocrine system and its disorders is known as endocrinology. Endocrinology is a branch of internal medicine.