

Brief summary of the endocrine system assignment

[Psychology](#)



**ASSIGN
BUSTER**

The field of study dealing with the endocrine system and its disorders is endocrinology, a branch of internal medicine. The endocrine system is an umbrella term used to describe the complexity of different types of endocrine glands which are responsible to help the body carry out many of its functions. This system regulates our mood, growth, metabolism, tissue development, sexual functions and reproductive process. The endocrine system is made of a series of glands that produce chemicals called hormones.

Like many medical terms, it originates from the Greek words “endo” meaning inside, within, and “crinis” for secrete. The endocrine system is an information signal system similar to the nervous system, yet its effects and mechanisms are different. The endocrine system’s effects are slow to initiate, and prolonged in their response, lasting for hours to weeks. The nervous system sends information very quickly, and responses are generally short lived. These endocrine glands secrete hormones directly into the blood stream, rather than through a duct. That is the reason why, the glands are also known as ductless glands.

Additional features of endocrine glands are, in general, their vascularity, and usually the presence of intracellular vacuoles or granules storing their hormones. The following essay would provide you with a quick overview on the subject of the endocrine system, the individual glands that make up this system as well as their functions. Pituitary Gland This gland has its location at the base of the brain. It is known as the master gland, because it is responsible to control the function of other glands to put forth their hormones. Growth, body metabolism, sexual development and reproduction
<https://assignbuster.com/brief-summary-of-the-endocrine-system-assignment/>

happen to be the elements which come under the domain of the pituitary gland. The pituitary also secretes anti-diuretic hormone, prolactin, and oxytocin, a hormone which causes contractions of the uterus during labor.

Hypothalamus The hypothalamus is a section of the brain responsible for hormone production. The hypothalamus' primary function is homeostasis, which is to maintain the body's overall function and keep it balanced. The hormones produced by this area of the brain govern body temperature, thirst, hunger, sleep, rhythm, moods, sex drive, and the release of other hormones in the body. Hypothalamic hormones include thyrotropin-releasing, gonadotropin-releasing, growth hormone-releasing, corticotrophin-releasing, somatostatin, and dopamine hormones. These hormones release into the blood through the capillaries, traveling to the pituitary gland where their effects are exerted. Oxytocin and vasopressin are also hypothalamic hormones.

Thyroid Gland Just below the Adam's apple, is located what is known as the thyroid gland. The thyroid gland functions by releasing hormones called thyroxine, triiodothyronine and calcitonin. These hormones play vital roles in regulating metabolism, body heat production and bone growth.

Pancreas

Pancreas is the endocrine gland that is situated in the abdominal region, behind the stomach. One of the major pancreas function is maintaining appropriate levels of sugar throughout the body. The hormones which get secreted into the blood stream by these glands serve to control proper digestion and blood sugar regulation, the body's chief source of energy. Insulin and glucagon are known to be the important hormones produced by the glands.

Adrenal Glands The adrenals are two small glands which sit on

top of each kidney. In hormone production, there are two parts of these glands which comes into play. One is known as the adrenal cortex. It is known to secrete steroid hormones which are essential for digestion and sexual maturity. Hydrocortisone effects metabolism and androgens such as DHEA and aldosterone, maintains blood pressure and the body's salt and potassium balance. The other is what is known as the adrenal medulla. The hormones that this part secretes are not essential to sustain life, but help the body to manage stress and improve the quality of life.

Parathyroid Glands
These are located behind the thyroid gland being the reason they are known as parathyroid glands. They are there with the work of regulating the amount of calcium and phosphorus in the blood stream.

Pineal Gland
This is a cone-shaped gland at the base of the brain that secretes the hormone melatonin and is responsible for alertness or consciousness.

Gonads
Male gonads are known as the testes, and ovaries in the case of females. These glands produce hormones and cells that are vital to reproduction in both males and females. Ovaries produce the hormones estrogen and progesterone and produce eggs in the ovaries and influence female characteristics. Testes secrete testosterone, which stimulates sperm production and development of male characteristics.

As mentioned from the onset, the endocrine system functions for carrying out some of the vital processes in the body. They help in keeping the body maintained and balanced. Any malfunction in this system triggers the occurrence of bouts of medical conditions and various kinds of symptoms. Maintaining healthy hormone levels is crucial in order to avoid unnecessary medical conditions. Analyze your lifestyle, track your symptoms when not

feeling well, get a blood spot hormone level test which will measure your hormones involving a simple finger stick and most important, maintain regular communication with your healthcare professional.