

ENDOCRINE SYSTEM AND DISORDERS

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The endocrine system is an integrated system of small organs that involve the release of extracellular signaling molecules known as hormones. The endocrine system is instrumental in regulating metabolism, growth, development and puberty, and tissue function and plays a part in determining mood.

There are many endocrine system disorders, which may cause many dangerous diseases in the human body.

Hyperthyroidism is a condition caused by the effects of too much thyroid hormone in tissues of the body. Although there are several different causes of hyperthyroidism, most of the symptoms that patients experience are the same regardless of the cause. Because the body's metabolism is increased, patients often feel hotter than those around them and can slowly lose weight even though they may be eating more.

Hypothyroidism is a condition characterized by abnormally low thyroid hormone production. Many disorders result in hypothyroidism. These disorders may involve directly or indirectly the thyroid gland. Because thyroid hormone affects growth, development, and many cellular processes, inadequate thyroid hormone has widespread consequences for the body.

Hyperparathyroidism or hypoparathyroidism is a condition in which the body produces too much or too little parathyroid hormone. The parathyroid hormone regulates calcium and phosphate levels and helps to maintain these levels. Over activity of one or more of the parathyroid glands causes high calcium levels (hypocalcaemia) and low levels of phosphate in the blood.

Acromegaly is a syndrome that results when the pituitary gland produces excess growth hormone after epiphyseal plate closure. A number of disorders may affect the pituitary to create this circumstance, although most commonly it involves a GH producing tumor derived from a distinct type of cells and called pituitary adenoma. Acromegaly most commonly affects adults in middle age, and can result in severe disfigurement, serious complicating conditions, and premature death if unchecked.