

Glossary of Pediatric Endocrine Terms

Adrenal Glands: Triangle-shaped glands located on top of each kidney that are responsible for the regulation of stress response by producing hormones such as cortisol and adrenaline.

Adrenal Crisis: A life-threatening condition that results when there is not enough cortisol (stress hormone) in the body. This may present with nausea, vomiting, abdominal pain, severely low blood pressure, and loss of consciousness.

Adrenocorticotropin (ACTH): A hormone produced by the anterior pituitary gland that triggers the adrenal gland to produce cortisol, the stress hormone.

Anterior Pituitary: The front of the pituitary gland that secretes growth hormone, gonadotropins, thyroid stimulating hormone, prolactin, adrenocorticotropin hormone.

Antidiuretic Hormone: A hormone secreted by the posterior pituitary that controls how much water is excreted by the kidneys (water balance).

Bone Age Study: An X-ray of the left hand and wrist to assess a child's skeletal age. It is often used to evaluate disorders of puberty and growth.

Congenital Adrenal Hyperplasia: A group of disorders which impair the adrenal steroid synthesis pathway. This causes the body makes too many androgens. Sometimes the body does not make enough cortisol and aldosterone.

Constitutional Delay of Growth and Puberty: A normal variant of growth in which children grow at a slower rate and begin puberty later than their peers. They may appear short until they have catch up growth. They usually end up at a normal adult height. A diagnosis of constitutional delay of growth and puberty is often referred to as being a "late bloomer."

Cortisol: The "stress hormone", which is produced by the adrenal glands. Too little cortisol results from adrenal insufficiency, and excess cortisol is seen in Cushing's Syndrome.

Cushing's Syndrome: A rare disorder characterized by prolonged exposure to excess cortisol (stress hormone). This occurs when the pituitary produces too much ACTH. Signs of Cushing's Syndrome include round, swollen face, increased body weight, easy bruising, weakened bones, large purple stretch marks, and increased blood pressure.

Diabetes Mellitus: A disease in which the blood sugar is elevated above normal and the body is unable to manage high blood sugar appropriately. In Type 1 Diabetes, the body no longer makes insulin due to an autoimmune response. In Type 2 Diabetes, the body does not use insulin well due to genetics, weight, or lifestyle influences.

Endocrinologist: A doctor that studies and treats problems with glands and hormones in the body.

Endocrine gland: An organ in the body that creates a substance (hormone) that is then released into the bloodstream.

Estrogens: A group of female sex hormones. They are responsible for the development of breast tissue and contribute to the regulation of the menstrual cycle. Estrogens are present in both girls and boys.

Florinef: The medication that is used to replace the adrenal hormone, aldosterone, for children with adrenal insufficiency or congenital adrenal hyperplasia.

Follicle Stimulating Hormone (FSH): A hormone that controls the menstrual cycle and production of eggs by the ovaries in females and the production of sperm in males.

Glucagon: The emergency medication used for patients with diabetes in cases of extremely low blood sugar when patient is not able to ingest sugar orally. This medication is given by intramuscular injection or intranasally and helps to raise blood sugar in an emergency situation.

Gonads: Organs that make sex steroids for pubertal development and sperm and egg cells for reproduction. The gonads in females are the ovaries, and the gonads in males are the testes.

Gonadotropins: Hormones including LH and FSH that trigger the growth and activity of the gonads (ovaries and testes).

Gonadotropin Releasing Hormone (GnRH): A hormone created and released by the hypothalamus that is responsible for triggering the release of gonadotropins from the pituitary.

Graves' Disease: An autoimmune disease in which the body's immune system incorrectly attacks the thyroid gland and causes overproduction of thyroid hormone. This is most common cause of hyperthyroidism.

Growth Hormone: A hormone secreted by the pituitary gland that triggers the growth of bone and other tissues in the body. Growth hormone and plays a role in bone and muscle strength as well as sugar and fat metabolism. Growth hormone secretion is pulsatile and cannot be checked at random. We use stimulation tests to assess the body's production of growth hormone.

Gynecomastia: The medical term for breast tissue in boys or men. Many boys have the appearance of a small amount of breast tissue during puberty which resolves on its own.

Hashimoto's Thyroiditis: A condition in which there are thyroid antibodies present. This may decrease thyroid hormone production.

Hyperparathyroidism: An overactive parathyroid gland that results in high levels of calcium and low levels of phosphorus in the blood.

Hyperthyroidism: A condition in which the thyroid gland is overactive and produces too much thyroid hormone. This condition is treated by medication, radioactive ablation, or surgery.

Hypoglycemia: Low blood sugar.

Hypothyroidism: A condition in which the thyroid gland does not produce enough thyroid hormone. When left untreated, hypothyroidism can negatively impact growth and development. Hypothyroidism may be present at birth or acquired later in life. The most common cause of hypothyroidism in a child is an autoimmune inflammatory process that causes destruction of the thyroid gland.

Hypothyroidism, acquired: A condition that develops in childhood, adolescence, or adulthood in which the thyroid gland stops making enough thyroid hormone for the body to grow and develop normally. The most common cause of acquired hypothyroidism is autoimmune inflammation of the thyroid gland. This condition is easily treated with thyroid hormone replacement.

Hypothyroidism, congenital: A condition usually diagnosed at birth that results from the thyroid gland not functioning well. It is found in approximately 1 in 4,000 newborns and is easily treated by thyroid hormone replacement. If left untreated, may result in abnormal growth and development.

Insulin: A hormone made by the pancreas that is needed for normal metabolism of carbohydrates and control blood sugar. Insulin is either missing or not functioning well in patients with diabetes mellitus.

Insulin-like growth factor 1 (IGF-1): A protein produced by the liver in response to growth hormone. It plays an important role in growth during childhood. This is used for screening and monitoring of patients with growth hormone deficiency.

Karyotype: A blood test that examines someone's genetic makeup to determine the number, size, and shape of the person's chromosomes. Abnormal chromosomal makeup may explain some disorders of growth and development.

Klinefelter Syndrome: A condition that occurs in males when they are born with an extra X chromosome. Children with Klinefelter Syndrome often have tall stature, delayed puberty, and may have behavior problems or learning disabilities. They usually require testosterone treatment during adolescence.

Lupron: A medication used to suppress puberty given by injection. Puberty may also be suppressed by an implant placed under the skin, known as 'supprelin'.

Luteinizing hormone (LH): A puberty hormone secreted by the pituitary gland that stimulates production of testosterone in males and stimulates ovulation in females.

Pituitary gland: A small gland located behind the eyes that is sometimes referred to as the "master controller" for hormones. The pituitary gland is responsible for the production of growth hormone, thyroid stimulating hormone, puberty hormones (LH, FSH), oxytocin, antidiuretic hormone, prolactin, adrenocorticotropin hormone (ACTH) and vasopressin.

Premature adrenarche: Onset of pubic hair before age 8 in girls and age 9 in boys, triggered by early activation of adrenal puberty hormones.

Premature thelarche: The appearance of breast development in girls before age 8 years.

Precocious puberty: A condition when the body begins to have adult characteristics before age 8 in girls and age 9 in boys. Symptoms in girls may include the development of breast tissue, pubic hair, or menstrual bleeding. Symptoms in boys may include testicular and penile enlargement, pubic hair, voice changing, and facial hair.

Solu-Cortef: The emergency medication used for patients with adrenal insufficiency in cases of severe illness or injury when the body requires much more stress hormone to function normally. This is given when children are not able to take their normal oral stress dose of hydrocortisone.

Testosterone: A sex hormone produced by the adrenal glands and gonads (testicles in boys and ovaries in girls) that is important for normal pubertal development. It may cause abnormalities in puberty and growth if levels are too high or too low.

Thyroid: A butterfly-shaped gland located in the neck. The thyroid is responsible for the production of thyroid hormone and plays a vital role in growth, metabolism, and development.

Thyroidectomy: Surgical removal of the thyroid gland.

Turner Syndrome: A genetic condition that affects girls who are born with only one X chromosome. Girls with Turner syndrome need to be screened for possible problems with growth, intellectual development, puberty, cardiovascular problems, and kidney problems.

Vitamin D: A vitamin that helps the body absorb calcium and phosphorus and is important for bone health.

Division of Pediatric Endocrinology
4220 Wisconsin Ave., NW, Suite 400
Washington, DC 20016

To contact us, please call **202-243-3560**.