



**ACROSS**

- 2 The \_\_\_\_\_ glands are small endocrine glands in the neck, usually located behind the thyroid gland.
- 4 Located just below the thalamus, the \_\_\_\_\_ links the nervous system to the endocrine system via the pituitary gland.
- 9 One of the largest endocrine glands in the body, the \_\_\_\_\_ controls how quickly the body burns energy, makes proteins, and how sensitive the body should be to other hormones.
- 11 Under the influence of the hypothalamus, the \_\_\_\_\_ pituitary produces and secretes several peptide hormones which regulate many physiological processes including stress, growth, and reproduction.
- 13 A secondary \_\_\_\_\_ system is a method of cellular signalling where the signalling molecule does not enter the cell, but rather utilizes a cascade of events that transduces the signal into a cellular change.
- 14 The \_\_\_\_\_ system is an integrated system of small organs which involve the release of extracellular signalling molecules known as hormones.
- 19 The \_\_\_\_\_ glands are triangle-shaped endocrine glands that sit on top of the

- kidneys which regulate the stress response through the synthesis of corticosteroids and catecholamines.
- 27 Epinephrine and \_\_\_\_\_ are a fight or flight hormones released from the adrenal glands, and they are also neurotransmitters within the central and sympathetic nervous systems.
- 28 \_\_\_\_\_ hormone is secreted by the parathyroid glands, acting to increase the concentration of calcium in the blood, opposite the effect of the thyroid hormone calcitonin.
- 30 \_\_\_\_\_ is a polypeptide hormone produced by the parafollicular cells of the thyroid which participates in calcium and phosphorus metabolism, lowering blood calcium, countering the effects of parathyroid hormone.
- 32 \_\_\_\_\_, also called hematopoietin, is a glycoprotein hormone that acts as a cytokine for erythrocyte precursors in the bone marrow.
- 34 \_\_\_\_\_ is a steroid hormone produced by the outer-section of the adrenal cortex in the adrenal gland which regulates sodium and potassium balance in the blood.
- 36 \_\_\_\_\_ hormone or corticotropin is a polypeptide hormone produced and secreted by

- the pituitary gland. It is an important player in the hypothalamic-pituitary-adrenal axis.
- 37 \_\_\_\_\_, often abbreviated as T4, is the major hormone secreted by the follicular cells of the thyroid gland.
- 38 \_\_\_\_\_ is released by the pancreas when the glucose level in the blood is low, causing the liver to convert stored glycogen into glucose and release it into the bloodstream.
- 39 \_\_\_\_\_ (T3) is a thyroid hormone similar to thyroxine but with one less iodine atom per molecule. T3 exhibits greater activity than thyroxine but is produced in smaller quantity.
- DOWN**
- 1 The adrenal \_\_\_\_\_, situated along the perimeter of the adrenal gland, mediates the stress response through the production of mineralocorticoids and glucocorticoids.
- 3 \_\_\_\_\_ is an oligopeptide in the blood that causes vasoconstriction, increased blood pressure, and release of aldosterone from the adrenal cortex.
- 5 The adrenal \_\_\_\_\_ is the part of the adrenal gland located in the center of the gland, being surrounded by

- the adrenal cortex.
- 6 Atrial \_\_\_\_\_ peptide is a polypeptide hormone involved in the homeostatic control of body water, sodium, and adiposity.
- 7 \_\_\_\_\_ hormone or somatotropin is a protein hormone which stimulates growth and cell reproduction.
- 8 \_\_\_\_\_ is an oligopeptide in the blood that causes vasoconstriction, increased blood pressure, and release of aldosterone from the adrenal cortex.
- 9 \_\_\_\_\_ is a glycoprotein hormone produced mainly by the liver and the kidney that regulates the production of platelets by the bone marrow.
- 10 \_\_\_\_\_ is released by the juxtaglomerular apparatus of the kidneys in response to low blood volume or decreased serum NaCl concentration.
- 12 \_\_\_\_\_s are a class of steroid hormones characterised by an ability to bind with cortisol receptors and trigger events which increase and maintain normal concentrations of glucose in blood.
- 15 \_\_\_\_\_ glands are glands that secrete their product directly into the blood rather than through a duct.
- 16 \_\_\_\_\_s are a class of steroid hormones that

- include aldosterone which influence salt and water balance.
- 17 The endocrine cells of the pancreas are grouped in the islets of \_\_\_\_\_.
- 18 Signal \_\_\_\_\_ refers to any process by which a cell converts one kind of signal or stimulus into another.
- 20 The \_\_\_\_\_ pituitary gland and is part of the endocrine system, secreting the hormones oxytocin and vasopressin, which are produced in the hypothalamus.
- 21 Arginine \_\_\_\_\_, also known as antidiuretic hormone, plays a major role in regulating the body's retention of water, being released when the body is dehydrated.
- 22 \_\_\_\_\_ is a hormone that also acts as a neurotransmitter in the brain. In females, it is released in large amounts during labor and it is also released during breastfeeding. It is released in both sexes during orgasm.
- 23 \_\_\_\_\_ cells are endocrine cells in the islets of Langerhans of the pancreas which are responsible for synthesizing and secreting the peptide hormone glucagon.
- 24 \_\_\_\_\_-releasing hormone is a tripeptide hormone that stimulates the release of thyroid-stimulating hormone and prolactin by the anterior pituitary.
- 25 A \_\_\_\_\_ is a chemical messenger that carries a signal from one cell, or group of cells, to another.
- 26 \_\_\_\_\_ is a peptide hormone on the anterior pituitary gland primarily associated with lactation.
- 29 The \_\_\_\_\_ gland, or hypophysis, is an endocrine gland about the size of a pea that sits in a small, bony cavity covered by a dural fold at the base of the brain.
- 31 \_\_\_\_\_ is an animal hormone which causes liver and muscle cells to take in glucose and store it in the form of glycogen and causes fat cells to take in blood lipids and turn them into triglycerides.
- 33 Peptide \_\_\_\_\_s are a class of peptides that are secreted into the blood stream and have endocrine functions in living animals.
- 35 \_\_\_\_\_ cells are a type of cell in the pancreas in areas called the islets of Langerhans which make and release insulin.