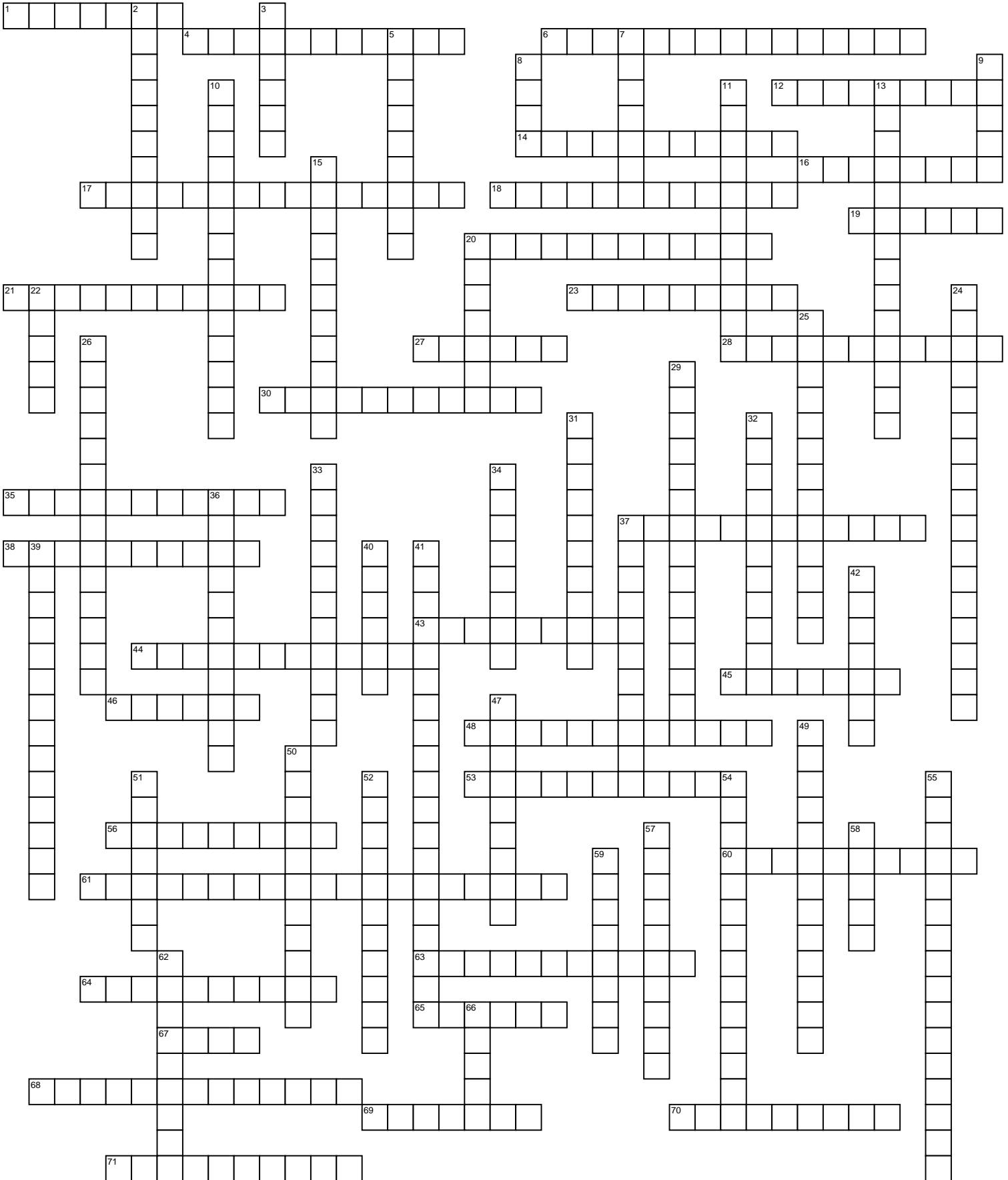


Endocrine System



ACROSS

- 1 The adrenal _____ is the part of the adrenal gland located in the center of the gland, being surrounded by the adrenal cortex.
- 4 Atrial _____ peptide is a polypeptide hormone involved in the homeostatic control of body water, sodium, and adiposity.
- 6 The _____ cells are cells in the kidney that synthesize, store, and secrete the enzyme renin.
- 12 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 _____ is an oligopeptide in the blood that causes vasoconstriction, increased blood pressure, and release of aldosterone from the adrenal cortex.
- 16 _____ 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.
- 17 _____ is the clinical syndrome caused by an excess of circulating free thyroxine or free triiodothyronine.
- 18 Signal _____ refers to any process by which a cell converts one kind of signal or stimulus into another.
- 19 _____ hormone releasing hormone is carried by the hypothalamo-hypophysial portal circulation to the anterior pituitary gland where it stimulates somatotropin secretion.
- 20 Located just below the thalamus, the _____ links the nervous system to the endocrine system via the pituitary gland.
- 21 The _____ glands are small endocrine glands in the neck, usually located behind the thyroid gland.
- 23 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.
- 27 _____ hormones describes as a class the anterior pituitary-secreted hormones which regulate the activity of various endocrine glands.
- 28 _____ 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.
- 30 The _____ portal system is the system of blood vessels that links the hypothalamus and the anterior pituitary.
- 35 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.
- 37 _____-releasing hormone is a peptide hormone responsible for the release of FSH and LH from the anterior pituitary.
- 38 _____ is a vasoconstricting peptide that plays a key part in vascular homeostasis. It is one of the strongest vasoconstrictors yet studied.
- 43 The _____ system is an integrated system of small organs which involve the release of extracellular signaling

- molecules known as hormones.
- 44 _____ is a peptide hormone that regulates the endocrine system and affects neurotransmission and cell proliferation.
- 45 _____ 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.
- 46 _____ is a peptide hormone secreted by pancreatic beta-cells at the same time as insulin
- 48 _____s are cells in the anterior pituitary which produce adrenocorticotrophic hormone and melanocyte stimulating hormone.
- 53 The melanocyte-_____ hormones are a class of peptide hormones produced by cells in the intermediate lobe of the pituitary gland which stimulate the production and release of melanin by melanocytes in skin and hair.
- 56 _____ is a peptide hormone on the anterior pituitary gland primarily associated with lactation.
- 60 _____ 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.
- 61 _____ is a steroid hormone produced by the adrenal gland that possess mineralocorticoid activity and acts as a precursor to aldosterone.
- 63 _____ hormone is secreted by the _____ glands, acting to increase the concentration of calcium in the blood, opposite the effect of the thyroid hormone calcitonin.
- 64 Pars _____ is the boundary between the anterior and posterior lobes of the pituitary.
- 65 The adrenal _____, situated along the perimeter of the adrenal gland, mediates the stress response through the production of mineralocorticoids and glucocorticoids.
- 67 The hypothalamic-pituitary-adrenal _____ is a complex set of direct influences and feedback interactions between the hypothalamus, the pituitary gland, and the adrenal gland.
- 68 A _____ is the precursor protein to one or more prohormones, which are in turn precursors to peptide hormones.
- 69 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.
- 70 _____ glands are glands that secrete their product directly into the blood rather than through a duct.
- 71 The endocrine cells of the pancreas are grouped in the islets of _____.

DOWN

- 2 _____ is a hormone produced by the cleavage of pro-opiomelanocortin, which also produces adrenocorticotropin in the cleavage.
- 3 _____ hormone or somatotropin is a protein hormone which stimulates _____ and cell reproduction.
- 5 _____, often abbreviated as T4, is

- the major hormone secreted by the follicular cells of the thyroid gland.
- 7 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.
- 8 _____ cells are a type of cell in the pancreas in areas called the islets of Langerhans which make and release insulin.
- 9 _____ natriuretic peptide is a polypeptide secreted by the ventricles of the heart in response to excessive stretching of myocytes in the ventricles.
- 10 _____ is the disease state in humans and animals caused by insufficient production of thyroid hormone by the thyroid gland.
- 11 The cells of the zona _____ sit directly beneath the zona glomerulosa within the adrenal cortex, chiefly producing glucocorticoids.
- 13 _____, also called hematopoietin, is a glycoprotein hormone that acts as a cytokine for erythrocyte precursors in the bone marrow.
- 15 _____s are cells in the anterior pituitary which produce growth hormone.
- 20 A _____ is a chemical messenger that carries a signal from one cell, or group of cells, to another.
- 22 _____ cells are endocrine cells in the islets of Langerhans of the pancreas which are responsible for synthesizing and secreting the peptide hormone glucagon.
- 24 _____s are a class of steroid hormones that include aldosterone which influence salt and water balance.
- 25 _____-releasing hormone stimulates corticotropes in the anterior pituitary to secrete adrenocorticotropin hormone and other biologically active substances such as beta endorphin.
- 26 _____ is a glycoprotein hormone produced mainly by the liver and the kidney that regulates the production of platelets by the bone marrow.
- 29 The _____ nucleus (PVN) is an aggregation of neurons in the hypothalamus, which produces many hormones.
- 31 The _____ nucleus is a nucleus of magnocellular neurosecretory cells in the hypothalamus of the mammalian brain.
- 32 _____ is an oligopeptide in the blood that causes vasoconstriction, increased blood pressure, and release of aldosterone from the adrenal cortex.
- 33 Pancreatic _____ is secreted by PP cells in the endocrine pancreas. It is a cholecystokinin antagonist, suppressing pancreatic secretion and stimulating gastric secretion.
- 34 _____ 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.
- 36 Thyroid-_____ hormone or thyrotropin is a hormone synthesized and secreted by thyrotrope cells in the anterior pituitary gland which regulates the endocrine function of the thyroid gland.
- 37 The zona _____ of the adrenal gland is the most superficial layer of the adrenal cortex, lying directly beneath the adrenal gland's capsule.
- 39 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.
- 40 The insulin-like _____ factors are polypeptides with high sequence similarity to insulin. They are part of a complex system that cells use to communicate with their physiologic environment.
- 41 _____ 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.
- 42 _____ bodies are structures found in the posterior pituitary representing the terminal end of the axons from the hypothalamus, where hormones are temporarily stored.
- 47 The _____ pituitary gland and is part of the endocrine system, secreting the hormones oxytocin and vasopressin, which are produced in the hypothalamus.
- 49 _____ neurosecretory cells are large cells within the supraoptic nucleus and paraventricular nucleus of the hypothalamus which produce oxytocin and/or vasopressin.
- 50 The renin-_____ system is a hormone system that helps regulate long-term blood pressure and extracellular volume in the body.
- 51 Peptide _____s are a class of peptides that are secreted into the blood stream and have endocrine functions in living animals.
- 52 _____-releasing hormone is a tripeptide hormone that stimulates the release of thyroid-stimulating hormone and prolactin by the anterior pituitary.
- 54 _____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.
- 55 _____ (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.
- 57 Thyroid _____ is an enzyme mainly expressed in the thyroid that liberates iodine for addition onto tyrosine residues on thyroglobulin for the production of thyroid hormones.
- 58 The pituitary _____ (infundibulum) is the connection between the hypothalamus and the posterior pituitary.
- 59 Under the influence of the hypothalamus, the _____ pituitary produces and secretes several peptide hormones which regulate many physiological processes including stress, growth, and reproduction.
- 62 _____ is a hormone found in all living creatures from algae to humans, at levels that vary in a diurnal cycle.
- 66 _____ is released by the juxtaglomerular apparatus of the kidneys in response to low blood volume or decreased serum NaCl concentration.