Endocrine System Rap

Sam and Justin

Wanna know about the **Endocrine System**?

We're gonna teach you how it goes

it works together with the **nervous system**,

With different and important bodily roles,

Startin' off with the pituitary gland,

The one who's in control

Chillin underneath the brain and right behind the nose

The master gland produces all the the good hormones

Finds the body's needs and sends signals head to toe

The pituitary gland even controls how much you grow

<u>Hormone</u> messengers go to different cells

Regulates their activity and secretes all different smells

Ever wondered how the body achieves **internal balance**?

Go ahead and thank the **hypothalamus**

Located right at the base of the brain

Almond sized and lets you know your stomach's drained

Keeps you feeling good, controls your heart rate

Regulations spans all the way to body weight

Iodine.	triiodo	thyron	ine, th	vroxine
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All essential to the **thyroid** and consumed when you fine dine

Can't let the T3 or T4 get too high or low

Good thing if they do the hypothalamus and pituitary will let each other know

Without the thyroid your stomach wouldn't be too great at digesting food,

And you know that may change your mood

If the thyroid goes bad, you might come across **Goiters**,

That big lump in your neck would be enough to see some doctors

The **parathyroid** glands, we can forget to mention

Are on a pretty important mission

Located behind the thyroid in the neck

Not 1, nor 2, but 4 on deck,

All makes sure your calcium levels are up to check

Even though they are small like the size of rice,

They are not okay with the job being suffice

Calcium is only element regulated by its own system

The Parathyroid holds its own kingdom

Dive on down to the top of kidneys

Some may call the **adrenals** the gland master key

Not large in stature, but still a massive factor

2 of them with their own <u>outer cortex</u>

Working to produce the type of **steroids** that you can't even flex

Producing your adrenaline, get you feelin like Paul Bunyan

Aldosterone controls the blood pressure, and it really isn't using too much effort

Just checks the levels of sodium and potassium

Can never have too much or too few of either of em

<u>Pineal gland</u>, pea shaped, small, in the brain all the same

Pushing **melatonin** so your sleep schedule ain't playing games

Regulates the female hormones, get them fertility and menstrual cycles in check

Can't have the ladies feeling out of whack

Stabilizing moods, for girls and the dudes

Pineal can't be too huge, that could be bad news

Not too much is known but the studies have shown,

Mood disorders occur when the pineal's undergrown.

Last but certainly not least, the **gonads** get to be apart of the beat

The testes are there to make sure the **testosterone** count is concrete

But their role isn't quite over, they get another job when you get a little older

Each woman comes with two of these

They call themselves the **ovaries**

Located on either side of the <u>uterus</u>, held in place by ligaments

Ovaries alternate creation of the eggs to help produce little ones

When released at ovulation, eggs leave behind space called the **corpus luteum**

Producing hormones at a minor continuum

What hormones the ovaries produce, you might ask?

Estrogen and **progesterone** are the results of this bodily task

Circling back to the **Nervous System**

Gonna try and mix in a lil rhythm,

2 separate parts, work together like a belt and some denim

The central nervous system, brain and spinal cord,

Containing massive amounts of **neurons**, oh lord

Communicating selectively, forming **neural networks**,

These will help you know when your foot hurts.

Organizing all this information is the Central's tough task,

Once its done it sends it all to the **peripheral** to act fast,

It makes some bodily adjustments, all likely relevant,

These too are anatomically separate, but their functions still are crazy interdependent.

Glossary

- (3.11) Adrenaline a hormone secreted by the adrenal glands, especially in conditions of stress, increasing rates of blood circulation, breathing, and carbohydrate metabolism and preparing muscles for exertion.
- (3.11) Adrenals A small gland that makes steroid hormones, adrenaline, and noradrenaline.

- (3.1) Central Nervous System The brain and spinal cord.
- (3.11) Endocrine System The glands and organs that make hormones and release them directly into the blood so they can travel to tissues and organs all over the body.
- (3.11) Estrogen any of a group of steroid hormones which promote the development and maintenance of female characteristics of the body.
- (3.11) Gonads the primary reproductive organs, are the testes in the male and the ovaries in the female.
- (3.11) Hormones Chemical substances released into the bloodstream by endocrine glands.
- (3.11) Hypothalamus an area of the brain that produces hormones that control: Body temperature. Hunger. Mood.
- (3.11) Iodine, triiodothyronine, thyroxine (thyroid) converted to power for the thyroid.
- (3.11) Melatonin a hormone secreted by the pineal gland which inhibits melanin formation and is thought to be concerned with regulating the reproductive cycle.
- (3.1) Nervous systems 2 different types, peripheral and central nervous systems. The central nervous system consists of the brain and spinal cord, while the peripheral nervous system consists of everything else.
- (3.1) Neural Networks Circuits of neurons, developed through genetic influence, maturation and experience, and repeated firing. Basically, alliances form among groups of neurons.
- (3.1) Neuron Basic units of the nervous system; cells that receive, integrate, and transmit information in the nervous system. They operate through electrical impulses, communicate with other neurons through chemical signals, and form neural networks.

- (3.11) Ovaries a female reproductive organ in which ova or eggs are produced, present in humans and other vertebrates as a pair.
- (3.1) Peripheral Nervous System -
- (3.11) Pineal gland a small, typically cone-shaped structure of the brain that arises from the roof of the third ventricle, is enclosed by the pia mater, and functions primarily as an endocrine gland secreting melatonin.
- (3.11) Pituitary gland the major endocrine gland. A pea-sized body attached to the base of the brain, the pituitary is important in controlling growth and development and the functioning of the other endocrine glands.
- (3.11) Progesterone a steroid hormone released by the corpus luteum that stimulates the uterus to prepare for pregnancy.
- (3.11) Testosterone (Androgen) a steroid hormone that stimulates development of male secondary sexual characteristics, produced mainly in the testes, but also in the ovaries and adrenal cortex.
- (3.11) Thyroid a large ductless gland in the neck which secretes hormones regulating growth and development through the rate of metabolism.
- (3.11)Uterus the organ in the lower body of a woman or female mammal where offspring are conceived and in which they gestate before birth; the womb.

Citations

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