

PINEAL GLAND

Functions & Restoration

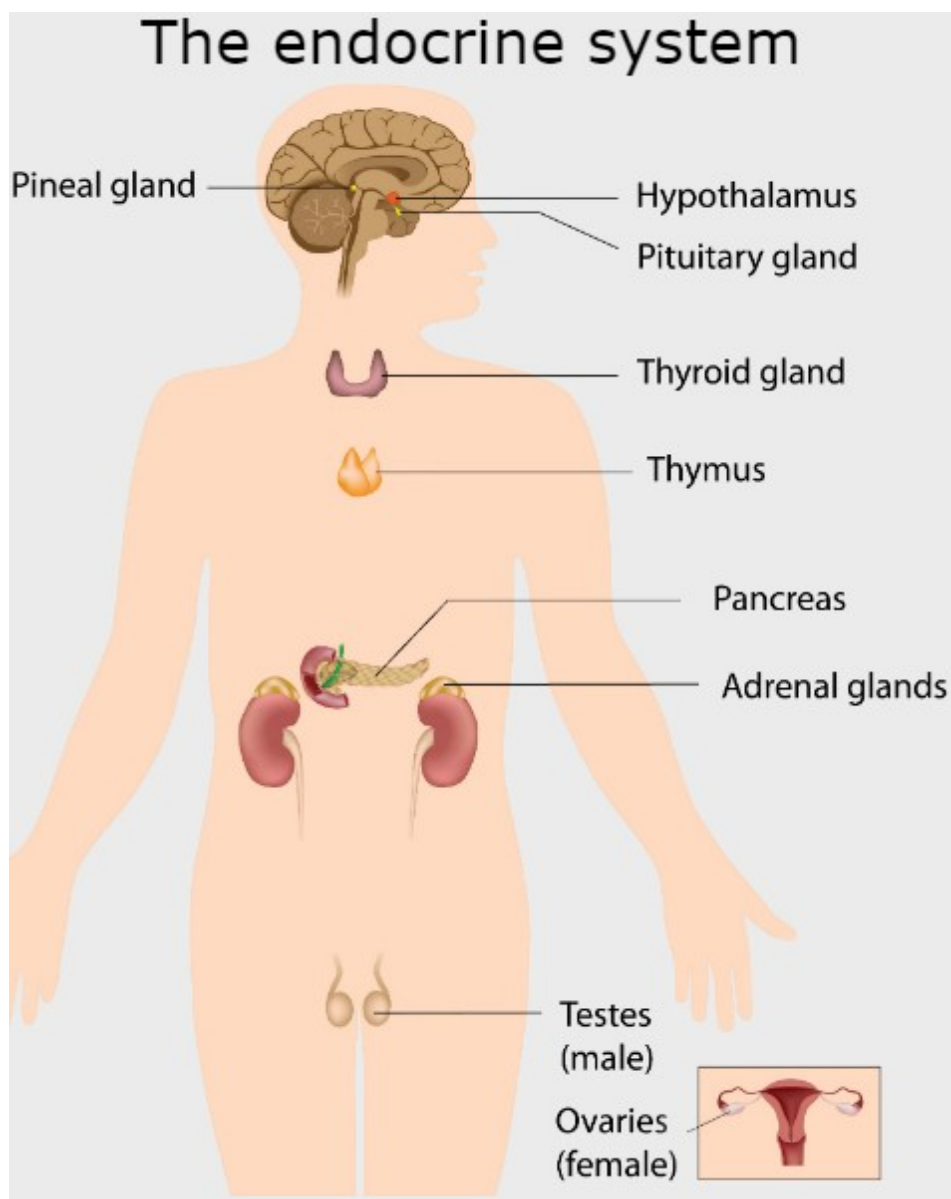


WHAT DOES THE PINEAL GLAND DO?

The **pineal gland** acts as the body's light meter. It receives light information from the eyes and then sends out hormonal messages to the body. This tiny gland transmits information to the body about the length of daylight, commonly called circadian rhythm.

The **pineal gland** tells every other part of your body whether it's light or dark out, what season you're in, and whether days are getting longer or shorter.

Unlike most of our brain, the blood-brain barrier doesn't isolate the **pineal gland** from the rest of our body. Instead, the **pineal gland** gets a tremendous amount of blood flow, second only to the kidneys. Surrounded by and immersed in cerebrospinal fluid, this gland camps out in a tiny cave-like area behind and above the *pituitary gland*.



In the 1990s, **British scientist Jennifer Luke** discovered high concentrations of *fluoride* in the **pineal gland** of her subjects.

Fluoride, commonly found in most municipal water as well as pesticides, accumulates in the pineal more than any other part of the body. This accumulation of fluoride forms phosphate crystals, creating a hard shell around the **pineal** called calcification.

SCIENTIFIC EFFECTS OF PINEAL GLAND CALCIFICATION

Studies show that **pineal gland** calcification:

- Lowers productions of melatonin

- Impairs the sleep-wake cycle

- Disrupts the regulation of the circadian rhythm

Fluoridated water is believed to be one of the chief causes of calcification in the **pineal gland**.

Evidence suggests that children reach puberty earlier now as a consequence of fluoridated water.

Fluoride exposure in animal studies has found to decrease melatonin and lead to accelerated sexual development in females. A recent November 2019 study published in Biological Trace Element Research found that when they fed male rats a diet free of fluoride, it stimulated pineal growth. Simply put, when our **pineal gland** is calcified, we're out of balance with nature, impeding proper biological and brain functioning.



Calcified Pineal Gland

NATURAL MELATONIN RELEASE FROM THE PINEAL GLAND

During darkness, the **pineal gland** releases melatonin. If you think about the brain and organs in the body, they see melatonin as a signal from the world. Melatonin means darkness.

When the eye detects light, it sends a neural signal back to the hypothalamus-pineal pathway.

Pinealocytes store the neurotransmitter glutamate in special packages known as vesicles. When they receive stimulation from light, they release glutamate.

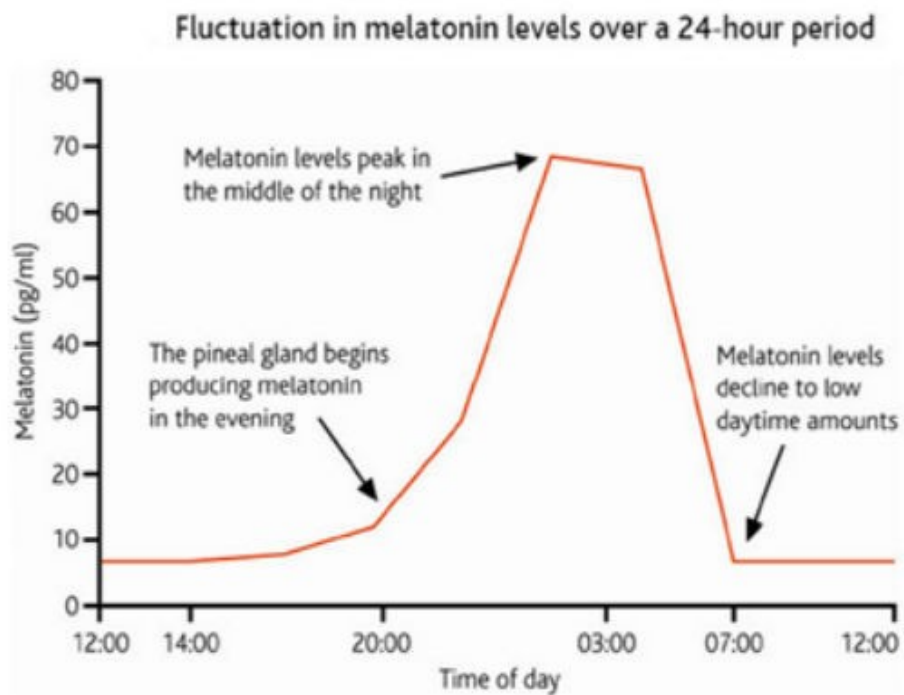
Glutamate decreases the release of melatonin from the **pineal gland**.

Light signals decrease melatonin release to indicate that it's daytime.

Natural melatonin release in response to the absence of light. Light signals from the eye cause the release of glutamate in the **pineal gland** that decreases melatonin release.

Source <https://www.hindawi.com/journals/bmri/2013/618432/>

How melatonin affects sleep



9 HORMONE ROLES OF THE PINEAL GLAND IN THE BODY

As the master endocrine gland, the **pineal gland** oversees nearly every bodily process.

1. Growth and development

Growth is known to happen during sleep. Melatonin released by the **pineal gland** regulates growth hormone release. The **pineal gland** influences the hypothalamus that signals growth hormone from the pituitary. Oral melatonin can increase growth hormone levels.

<https://www.ncbi.nlm.nih.gov/pubmed/180879>

2. Body temperature

As part of the circadian rhythm, body temperatures drop exactly when melatonin levels peak. The **pineal gland** directs the pattern of body temperature associated with daytime height in body temperature. When melatonin is high, body temperature is at its lowest for sleep.

https://www.researchgate.net/publication/285615047_The_allegory_of_the_konarion_A_philosophical_history_of_the_pineal_organ_from_galen_to_descartes

3. Blood pressure

Sleep cycles associate with blood pressure. Circadian rhythm works with the heart rate and the cardiovascular system. Melatonin helps the body to regulate blood pressure levels. Studies have shown that high pressure or hypertension can be reduced with daily oral melatonin

<https://plato.stanford.edu/entries/pineal-gland/>

4. Water balance

Water balance is regulated by antidiuretic hormone (ADH) or vasopressin. It is released from the *pituitary gland*.

ADH regulates osmotic pressure of body fluids by causing the kidneys to increase water re-absorption. It's released from the hypothalamus and stored in the posterior pituitary gland. When secreted into the body it signals the kidneys to store water via concentration of salts in urine.

In rat studies, pinealectomy shows the levels of ADH or vasopressin were elevated. Melatonin decrease these levels, showing the pineal effect on water balance in the body.

<https://www.ncbi.nlm.nih.gov/pubmed/180879>

5. Metabolism and weight gain

Melatonin binds to receptors in the pancreas to suppress insulin secretion. It's thought the main reason is to keep blood glucose levels steady during an overnight fast (sleep).

Insulin plays a role in carbohydrate metabolism, weight gain, and insulin resistance is the mechanism in type-II diabetes. Diabetes insipidus has been noted to occur with pineal tumors. Melatonin is also known to reduce levels of leptin, the hormone that shifts the body to store fat.

People who eat diets high in simple sugars and carbohydrates may affect their melatonin levels. Insulin allows clearance of all amino acids except one, tryptophan.

<https://www.hindawi.com/journals/bmri/2013/618432/>

6. Fertility and reproduction

The **pineal gland** affects the release of the sex hormones. It's well known that in animal systems that melatonin plays a role in reproduction. The anterior pituitary gland releases two hormones.

Luteinizing hormone (LH)

Follicle-stimulating hormone (FSH).

In males, these stimulate the testes to release testosterone. In females the ovaries to release estrogen/ Studies have shown that in blind women, menstrual cycles begin earlier. In men, melatonin can influence testosterone release.

Lack of light can create fertility problems in both men and women.

<http://www.jneurosci.org/content/27/43/11748>

7. The immune system and tumors suppression

The **pineal gland** regulates the immune response. As the head of the neuroendocrine system, it oversees two-way crosstalk with the immune system.

As the immune system detects foreign threats in the body, it relays it to the **pineal gland**. The **pineal gland** then directs a response to the environmental toxin. It's a language that works via melatonin as well as a host of neurotransmitters and hormones. These can produce antibodies, natural killer cells, and mitogens with the ability to kill pathogens.

In cancer and tumors, the **pineal gland** receives the message of its presence. Melatonin activates the immune defense process for tumor-inhibitory activity.

<http://science.sciencemag.org/content/330/6002/379>

8. Anti-aging and anti-oxidant activity

Oxidative stress is one of the main mechanisms of aging. Melatonin is also a powerful anti-oxidant. Its strength against oxidation is noted against better-known anti-oxidants.

Melatonin has been found to possess 200% more antioxidant power than vitamin E.

Melatonin has also been found to be superior to glutathione as well as vitamins C and E in reducing oxidative damage.

<https://www.ncbi.nlm.nih.gov/pubmed/17383936>

9. Depression, anxiety, and mental health

Mood disorders such as depression and anxiety may have common cause in melatonin receptor dysfunction. The balance of neurotransmitters serotonin and dopamine is known to have a role in mental health. The **pineal gland** mediates these hormones and their effect on mood in the brain.

Clean Slate

- Why Is It Important?
- Uniqueness
- Patented & Proprietary Process
- Bioscience Engineering, Nanotechnology, Manufacturing Process
- Cellular communication
- Heavy Metal, Virus, Bacteria, Fungus, Parasites, etc.
- Selective Detoxification
- Orthosilicic Acid



Serotonin is converted to melatonin in the **pineal gland** depending on the light-dark cycle. Disruption in the circadian rhythm is associated with depression and anxiety symptoms. Dopamine levels are thought to be related to melatonin.

<https://www.ncbi.nlm.nih.gov/pubmed/22371425>

WATER-SOLUBLE ZEOLITES TO DETOXYFY PINEAL GLAND

WATER-SOLUBLE ZEOLITES create an impressive detoxifying effect in the human body. Breaking down hardened calcium phosphate crystals and acting as a chelator, **binding to toxic heavy metals in our tissue**, zeolites can release troublesome calcium stored in our tissue, along with flushing toxins and heavy metals from the body.

Zeolite is a natural crystal formed when molten hot volcanic lava meets the minerals in cooler seawater, creating **Zeolite Clinoptilolite**. The scientific reaction infuses a highly energetic molecule with a honeycomb-shaped form specifically charged to attract toxins to itself and escorts them out of your body when taken internally in the form of liquid Zeolite.

When removing toxins from cellular binding sites, it is crucial to **supplement with trace minerals**. These additional minerals are from an especially pure source, the Great Salt Lake. **The addition of vitamin C** provides further stability and improves cell membrane permeability. (*Patent Pending Formulation*)

[MEDICAL DISCLAIMER](#)



THE THIRD EYE

When we are in a toxic state, we lose control of our internal functions: So it is important to detoxify if we are not only aiming to decalcify our **pineal gland**, but to also activate our **THIRD EYE** and awaken to our true power.

Removal of endocrine disruptors helps to reduce stress in the **pineal gland**.



**FORMULATOR: DR. CHRISTINA
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Medical Disclaimer:

The information provided is for educational purposes and is not intended as medical advice, or a substitute for the medical advice of a physician or other qualified health care professional. You should not use this information for diagnosing a health or fitness problem or disease. You should always consult with a doctor or other health care professional for medical advice or information about diagnosis and treatment.

THE ROOT BRANDS

