Epithalon, also known as Epitalon, is a tetrapeptide that is a form of Epithalamin. Epithalamin is found in the pineal gland, which helps regulate various hormonal and metabolic systems throughout the body. Epithalon possesses increased bioregulatory activity and pronounced reparative properties compared to Epithalamin. Epithalon modulates antioxidant, endocrine, immune, and nervous system functions, as well as circadian rhythm. It has also been shown to regulate pancreatic and gastrointestinal system functions, particularly in relation to glucose accumulation and tolerance.

Epithalon is particularly well known for its wide range of geroprotective effects and has been shown to increase lifespan. It also has a range of related stress-protective and neuroprotective effects on the body. These neuroprotective effects extend to the regulation of the menstrual cycle and fertility. Apart from its geroprotective effects, Epithalon also has noteworthy anticancer properties, reducing both tumor incidence and size and lowers the risk of cancer (often dramatically). It has also been shown to have a range of retinoprotective effects that can normalize or reverse a number of diseases of the eye and improve vision, including genetic conditions such as retinitis pigmentosa.

At this time, Epithalon has been tested extensively in humans and a variety of mammalian models. Epithalamin has successfully completed a number of clinical trials.

**Clinical Effects of Epithalon**

- Stimulates melatonin synthesis, thereby regulating cortisol circadian rhythm
- Has stress-protective effects
- Helps correct immune system dysfunctions and disturbed immune-neuroendocrine interactions
- Stimulates antioxidant production
- Has antimutagenic effects, reducing chromosome aberrations and tumor incidence, as well as tumor size
- Elongates telomeres and prolonging lifespan
- Has retinoprotective effects, increasing visual acuity, extending visual field borders, and normalizing retinal lesions
- Has selective anticholinesterase properties, improving memory, mood and can increase production of neuroprotective proteins
- Has a wide range of geroprotective effect, preventing diseases of aging and increased lifespan
- Inhibits leukemia development
- Inhibits enkephalin-degrading enzymes, improving mood and depressive symptoms
- Improves gastrointestinal function
- Modulates activity of gastrointestinal enzymes during aging
- Has neuroprotective effects that extend to the menstrual cycle and reproduction
- Normalizes pancreatic function
- Normalizes glucose metabolism and corrects impaired glucose tolerance
- Stimulates and regulates pineal and thymus function

**Side effects:** Epithalon has an excellent safety profile and stability, and displays no toxicity when administered over long periods of time. No major side effects have been reported.
Dosing protocol: Epithalon is typically available as a freeze-dried powder that should be reconstituted in bicterostatic water. Epithalon can currently administered intranasally, or subcutaneously. Reconstituted Epithalon should always be stored in a refrigerated environment. The effects of Epithalon may be altered based on the chosen the route of administration; both dosage and route of administration are based on the condition and its severity. Consult your physician to create a dosing plan appropriate to your needs. Epithalon works very synergistically with DSIP and CJC as bedtime for sleep and with Thymosin alpha 1 and Thymosin Beta 4 and BPC-157 for immune dysfunction, immune modulation and for preventative medicine applications and longevity optimization.

Typical intranasal dosing: Administer daily doses in the range of 100 to 300mcg (0.1-.03mls). Dosing can be administered in two or three doses spread out throughout the day and at bedtime to help with sleep.

Typical subcutaneous dosing: Administer daily doses in the range of 100-300 mcg(0.1-0.3mls). Dosing can be administered in one session or split up into two doses. Injections should be made subcutaneously.