

# Epithalon

## What is Epithalon?

Epithalon, also known as Epitalon or Epithalone, is a synthetic peptide derived from the naturally occurring compound called Epithalamin, which is produced in the pineal gland. It was first discovered and studied by Russian scientist Professor Vladimir Khavinson. Epithalon is known for its potential anti-aging effects, which are attributed to its role in regulating telomerase, an enzyme that can elongate telomeres — the protective structures at the ends of chromosomes. Over time, telomeres shorten as cells divide, which is associated with aging and cellular senescence.

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## Potential Benefits

- 1. Telomere Maintenance and Cellular Aging:** Epithalon is believed to stimulate the production of telomerase, an enzyme that helps maintain and elongate telomeres—the protective caps at the ends of chromosomes. By preserving telomere length, Epithalon may support cellular health and delay the aging process.
  - 2. Antioxidant Properties:** Research suggests that Epithalon exhibits antioxidant effects, reducing oxidative stress by neutralizing free radicals. This action may protect cells from damage and contribute to overall health maintenance.
  - 3. Immune System Support:** Studies indicate that Epithalon may enhance immune function by modulating the activity of certain immune cells, potentially improving the body's defense mechanisms against infections and diseases.
  - 4. Regulation of Circadian Rhythms and Sleep:** Epithalon has been associated with the regulation of melatonin production, a hormone crucial for sleep-wake cycles. By influencing melatonin levels, Epithalon may improve sleep quality and restore circadian rhythms, which often become disrupted with age.
  - 5. Potential Anti-Tumor Effects:** Preliminary research has explored Epithalon's role in inhibiting the development of certain tumors. While findings are promising, more extensive studies are necessary to confirm its efficacy and safety in this context.
  - 6. Skin Health Improvement:** Epithalon may promote skin health by enhancing the synthesis of collagen and elastin, proteins essential for maintaining skin elasticity and firmness. This could result in a reduction of wrinkles and other signs of aging.
  - 7. Enhanced Cognitive Function:** There is evidence to suggest that Epithalon may support cognitive health by promoting the growth and survival of neurons, potentially improving memory and reducing the risk of age-related neurodegenerative disorders.
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## Potential Side Effects and Precautions

Research indicates that Epithalon is generally well-tolerated, with minimal reported side effects. In long-term studies, such as a 15-year follow-up involving elderly patients, no significant adverse effects were observed, and a decrease in

overall mortality was noted among those treated with Epithalon. However, some individuals may experience mild, transient side effects, including:

- **Injection Site Reactions:** Redness, swelling, or discomfort at the injection site.
- **Digestive Issues:** Occasional nausea or diarrhea.
- **Sleep Disturbances:** Changes in sleep patterns or difficulty sleeping.
- **Fatigue:** Temporary feelings of tiredness.
- **Headaches:** Mild to moderate headaches.

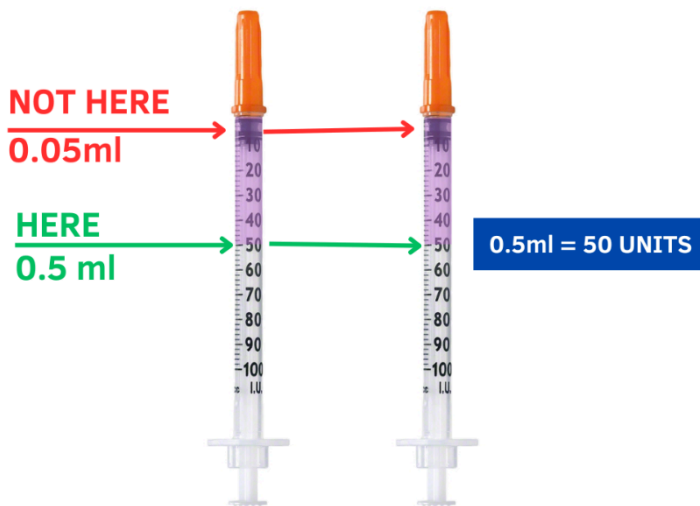
These side effects are uncommon and typically resolve without intervention.

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### Dosage Guidelines

**Epithalon 20mg/ml:** 10mg (0.5ml or 50 units) subcutaneously (SQ) at bedtime every other day for 10 days. Cycle done twice a year.

#### 0.5ml - 50 units (Not 5 UNITS)



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### Cost

Epithalon is currently only available as a research peptide. Please see document titled *“Research Peptide Information”* in the Education Folder under Records in the patient portal.

**Epithalon 10mg Vial (10 mg/ml):** \$88.50 (includes shipping and bacteriostatic water). **Five vials required for 10-day cycle.**

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**Epithalon 50mg Vial (10 mg/ml):** \$208.50 (includes shipping and bacteriostatic water) **One vial required for a 10-day cycle.**

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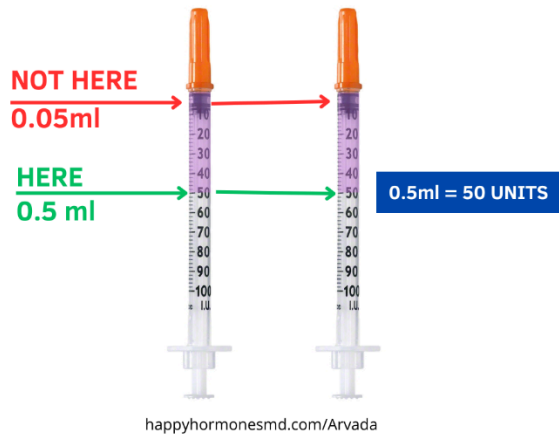
### Reconstitution Instructions

#### IMPORTANT:

- Follow the instructions below regarding the amount of bacteriostatic water to use when reconstituting the peptide. **DO NOT** follow the instructions that come with the peptide.
- **Do NOT** throw away the vial of bacteriostatic water!!! It is a multiuse vial and can be used for your next order!

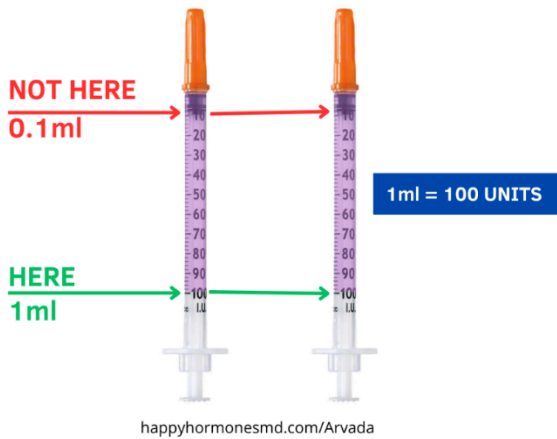
**Epithalon 10mg Vial:** Inject **0.5ml of bacteriostatic water** into the vial (**0.5ml = 50 units**).

**0.5ml - 50 units (Not 5 UNITS)**

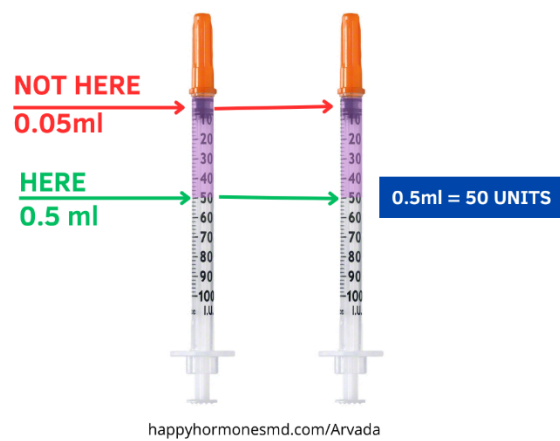


**Epithalon 50mg Vial:** Inject **2.5 ml of bacteriostatic water** into the vial (**2.5ml = 250 units**). You will need to inject 2 full 1ml syringes and one 0.5ml syringe of water into the vial.

1 ml - 100 units (Not 10 UNITS)



0.5ml - 50 units (Not 5 UNITS)



- See the **document** titled *“Reconstituting Medications in Powder Form”* in the Education Folder in the patient portal.
- See the following Instructional **videos** in the Education Folder in the patient portal:
  - *“Reconstituting Powdered Medications”*
  - *“Injection Video – Introduction”*
  - *“Injection Video – Drawing Up the Medication”*
  - *“Injection Video – Administering the Medication”*

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### Storage and Stability

- Vials are shipped as **lyophilized powder**, requiring no refrigeration during shipping.
- In Lyophilized Form:
  - Stable for up to 3 years in the freezer and 2 years in the refrigerator.
  - Protect from light.
- Once Reconstituted:
  - Stable for 6 weeks.
  - Must be refrigerated and kept away from light.
  - Avoid placing vials in the refrigerator door to prevent degradation from frequent temperature changes.

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### Important Disclosures

- These statements have not been evaluated by the US Food and Drug Administration (FDA).
  - Not intended to diagnose, treat, cure, or prevent any disease.
  - Compounded drugs and research peptides are not FDA-approved but are produced under strict quality control measures.
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### Quality Assurance

- All peptides are subjected to third-party testing with publicly available Certificates of Analysis (COA).
- Testing includes:
  - RP-HPLC (Reversed-Phase High-Performance Liquid Chromatography)
  - Mass Spectrometry (MS)
  - Sterility Testing
  - Additional tests meeting or exceeding U.S. Pharmacopeia (USP) and USP-National Formulary (NF) regulations.
- The manufacturer ensures quality, safety, and efficacy, complying with regulatory standards.