



# ResTor-T

## Formula Monograph



**ResTor-T** is composed of dietary supplements that help with improving testosterone and cortisol levels in men and women, helping to maintain reproductive health and a healthy body composition. **ResTor-T** contains the Southeast Asian herb Tongkat Ali (*Eurycoma longifolia*), reported in clinical studies to help improve male sexual health and vitality, and to improve testosterone/cortisol ratios in men and women. Also included in **ResTor-T** is the Ayurvedic herb *Tribulus terrestris*, used for centuries to help improve virility and vitality. **ResTor-T** also contains the essential nutrient zinc and phosphatidylserine, both important in testosterone production and utilization.

Supplement Facts			
Serving Size: 2 Capsules Servings Per Container: 30			
	Amount Per Serving	% Daily Value	Formula Use(s)
Zinc	25 mg	167%	<ul style="list-style-type: none"> <li>Helps support testosterone levels and prostate health</li> <li>Helps inhibit 5 alpha-reductase and testosterone aromatization</li> </ul>
<b>Proprietary Blend</b>	600 mg	*	
<i>Eurycoma longifolia</i> (Tongkat ali) 50:1 (w/w) extract		*	<ul style="list-style-type: none"> <li>Known as Malaysian “ginseng”</li> <li>Helps improve testosterone/cortisol ratio in men and women.</li> <li>Used to improve male sexual health and vitality.</li> </ul>
Phosphatidylserine		*	<ul style="list-style-type: none"> <li>Phospholipid component of cell wall membranes</li> <li>Reported to help improve cognitive function and well-being in aging populations</li> <li>Helps balance the cortisol to testosterone ratio in response to increasing stressors</li> </ul>

Tribulus ( <i>Tribulus terrestris</i> ) extract		*	<ul style="list-style-type: none"> <li>• Supports male reproductive health</li> <li>• Helps support virility and vitality</li> </ul>
* Daily value not established.			

**Recommended Uses:**

Helps support testosterone levels in both males and females.

**Recommended Dosages:**

1 capsule in the morning and 1 capsule at bedtime.

**Product Overview:**

Declining testosterone levels are common in the aging process in both men and women. Low levels have been reported in as many as 38.7% of men over 45 years of age. All cause <sup>1</sup> The age-related decline in testosterone in men can play a role in developing weight gain, insulin resistance and type 2 diabetes, erectile dysfunction and decreased libido, thyroid imbalances, cardiovascular conditions, memory and cognitive decline including Alzheimer’s disease, bone loss and loss of muscle mass and resulting increased risk of osteoporosis, sleep and immune problems, cancer and the increased the risk of all cause mortality in adult men.<sup>2</sup> A 2009 study reported that lower testosterone levels, even in the low normal range, increase the risk of developing heart problems.<sup>3</sup> Stress and the release of the stress hormone cortisol is also a major contributor to a decline in testosterone.<sup>4,5</sup> Studies support having healthy testosterone levels supports a healthy body composition in both men and women.<sup>6</sup>

**ResTor-T** contains the herbal supplement Tongkat Ali (*Eurycoma longifolia*), which has been used for centuries in SE Asia as a traditional medicine for male sexual health and is reported in clinical studies to help improve testosterone levels and decrease cortisol release related to chronic or excessive stress in both men and women. Also included is tribulus (*Tribulus terrestris*), an Ayurvedic herb used historically for male reproductive health. **ResTor-T** also contains the nutrients zinc and phosphatidylserine. Zinc is reported to help improve testosterone levels along with inhibiting 5 alpha-reductase and aromatase. Phosphatidylserine is a phospholipid found in the membranes of cells that is reported to help with testosterone production and stress-related cortisol release.

**Supporting Research:**

**Tongkat Ali (*Eurycoma longifolia*)**

Tongkat Ali is an herb traditionally used in SE Asia for male reproductive health. Laboratory studies have supported these uses.<sup>7</sup> In clinical studies, Tongkat Ali root extract is reported to increase male sexual vitality, along with increasing both total and free testosterone levels.<sup>8,9,10</sup> In a 2013 clinical study (n = 63), Tongkat Ali was reported to reduce salivary cortisol levels and improve testosterone levels, along

- Reported to help improve male sexual vitality and to improve total and free testosterone levels
- Helps balance testosterone to cortisol ratio

with improving symptoms of moderate stress, including tension, anger and confusion in both men and women.<sup>11</sup>

### **Zinc**

Zinc is necessary for the functioning of over 300 different enzymes and plays a vital role in a balanced metabolism. Zinc is important for male reproductive health, with the male prostate accumulating the highest level of zinc of any soft tissue in the body. Zinc deficiency is associated with hypogonadism in men.<sup>12</sup> Zinc transporters are altered in those with benign prostate hyperplasia and prostate cancer, leading to decreased levels of zinc.<sup>13,14</sup> Zinc deficiency has been reported in laboratory studies to alter 5 alpha-reduction and aromatization of testosterone and androgen and estrogen receptors.<sup>15</sup>

- Supports healthy testosterone levels
- May inhibit 5 alpha reductase and aromatization

The following drugs can cause a depletion of zinc, which may increase an individual's need for zinc:<sup>16</sup>

- ACE Inhibitors
- Clofibrate
- Copper
- Corticosteroids
- Ethambutol
- H<sub>2</sub> Antagonists (Tagamet, Zantac, Pepcid)
- Iron
- Loop Diuretics
- Oral Contraceptives
- Penicillamine
- PPIs (proton pump inhibitors, including Prilosec)
- Tetracyclines
- Thiazide Diuretics
- Valproic Acid
- Zidovudine

### **Phosphatidylserine**

Phosphatidylserine is a phospholipid naturally found as part of the cell membrane of cells. It is concentrated in organs with high metabolic activity, including brain, lungs, heart, liver, skeletal muscle and prostate gland, being most notably found in the cell membrane of neurons (comprising about 7-10% of its lipid content).

- Phospholipid found in cell membranes
- Antioxidant
- Helps balance testosterone to cortisol ratio in response to stressors

Phosphatidylserine is reported to help improve a variety of brain and neurological functions that tend to decline with age, including mood and memory.<sup>17,18,19</sup> Phosphatidylserine has been reported to affect the hypothalamic release of corticotropin-releasing factor, an activator of the hypothalamic-pituitary-adrenal axis in response to

stress.<sup>20,21</sup> Phosphatidylserine is also reported in a small clinical study (n=10) to help balance testosterone to cortisol ratio in exercise-induced stress.<sup>22</sup>

### **Tribulus (*Tribulus terrestris*)**

Tribulus (*Tribulus terrestris*) has been used in the Ayurvedic system of medicine for thousands of years to promote male virility and vitality.

- Helps support male and female sexual vitality

Steroidal saponins have been isolated from the aerial parts of tribulus and are associated with the reported hormonal benefits.<sup>23</sup> Tribulus has been reported to improve free testosterone levels in laboratory studies, and is commonly used to help improve athletic performance and testosterone levels.<sup>24</sup> However, a 2014 clinical study in 100 men reported no benefit on improving symptoms of erectile dysfunction or serum total testosterone when using tribulus.<sup>25</sup> A 2014 clinical study reported that use of tribulus in women helped improve sexual desire, arousal, lubrication, satisfaction and total Female Sexual Function Index (FSFI) significantly.<sup>26</sup>

**Toxicity, Contraindications, or Side Effects:** There is no known toxicity or side effects from taking ingredients found in *ResTor-T*. Talk with your doctor or pharmacist before taking *ResTor-T* if you have or may be predisposed to hormonally sensitive conditions, including breast or prostate cancer and/or if you are taking prescription or non-prescription medications.

**DISCLAIMER:** Statements made are for educational purposes and have not been evaluated by the US Food and Drug Administration. They are not intended to diagnose, treat, cure, or prevent any disease.

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<sup>2</sup> ENDO 2008: The Endocrine Society 90th Annual Meeting: Abstract OR35-1. Presented June 17, 2008.

<sup>3</sup> Alsantali A, Shapiro J. Androgens and hair loss. *Curr Opin Endocrinol Diabetes Obes.* 2009 Jun;16(3):246-53.

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