

# TruAdapt Plus

## Stress Recovery Formula



### CLINICAL APPLICATIONS

- Strengthens the Body's Stress Response and Improves Stress Resilience
- Supports Healthy Energy Levels
- Supports Healthy Immune Response
- Improves Mental and Physical Performance
- Helps Maintain a Balanced Cortisol-to-DHEA Ratio



## ENDOCRINE HEALTH

TruAdapt Plus contains a blend of adaptogenic botanicals and adrenal concentrate specifically formulated to strengthen the body's stress response and support healthy energy levels. This powerful formulation helps support the body's resistance to fatigue, improves attention and immune function, and aids in maintaining balanced cortisol and DHEA levels.

### Overview

Stress is defined as any disturbance—extreme cold or heat, psychological stress, sleep deprivation, work overload, physical trauma, or toxic exposure—that can trigger the stress response. The body's stress response system is comprised of the hypothalamic-pituitary-adrenal (HPA) axis. Prolonged stress triggers the HPA axis and consists of three stages: 1: alarm, 2: resistance, and 3: exhaustion.

The initial, short-lived phase is the body's normal fight-or-flight response to danger, characterized by elevated cortisol levels. The subsequent resistance phase allows the body to continue buffering extended stress exposure long after the initial fight-or-flight response has dissipated. Hormones released by the adrenals, such as cortisol and DHEA, help support the resistance reaction. Extended periods of stress not only burden the system, creating an imbalance in cortisol and DHEA production, but can result in mental and physical fatigue, nervous tension, irritability, poor memory, and decreased immunity—all of which are characteristic of stage 3. TruAdapt Plus offers a unique blend of botanicals and adrenal concentrate that supports the adrenal glands and the body's ability to counteract the negative effects of stress.

### Holy Basil<sup>†</sup>

Holy basil (*Ocimum sanctum*) is an adaptogenic herb that enhances the body's stress and immune response. A comprehensive review of 24 human studies has revealed positive therapeutic effects of holy basil on neurocognition, immunity and metabolism.<sup>1</sup> Thirty-five subjects were dosed with *Ocimum sanctum*, and it was found to have a statistically significant effect on low mood and attention.<sup>2</sup>

### Ashwagandha Root Extract<sup>†</sup>

Ashwagandha's strong adaptogenic properties provide an array of benefits for individuals who have compromised health due to extreme stress exposure. Ashwagandha's benefits include improving stress resilience, supporting immune response, regulating the sleep cycle, supporting the healthy thyroid function and protecting against exhaustion of the nervous system.<sup>3,4</sup> Ashwagandha has also been shown to be beneficial in supporting proper mood regulation and restoring a sense of calmness under stress.<sup>4</sup>

### Rhodiola rosea Root Extract<sup>†</sup>

*Rhodiola rosea* has been categorized as an adaptogenic botanical due to its ability to increase resistance to a variety of stressors.<sup>5</sup> *Rhodiola* has been studied extensively and is widely used in Eastern Europe and Asia to help support the nervous system, mood regulation, mental clarity, work performance and the sleep cycle.<sup>5</sup> Within the central nervous system, *Rhodiola* has demonstrated an ability to preserve levels of neurotransmitters, such as serotonin, dopamine and norepinephrine. In a randomized, double-blind, placebo-controlled study examining the effects of *Rhodiola* on fatigue

<sup>†</sup> These statements have not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure, or prevent any disease.

and stress, 161 patients aged 19 to 21 years received *Rhodiola* twice daily resulting in a significant reduction in fatigue.<sup>6</sup> An additional study using *Rhodiola* extract in students showed significant improvements in mental performance, greater mood stability and improved sleep patterns.<sup>7</sup>

### Schisandra Berry Extract†

Schisandra berry extract is an adaptogenic botanical that has been used for centuries in China and Russia to help support mental clarity, stress response and emotional wellness. In a double-blind, placebo-controlled study, athletes who were given an adaptogenic blend including *Schisandra chinensis* extract or placebo, had increased concentrations of nitric oxide, a molecule that causes the blood vessels to expand, resulting in increased circulation, blood flow and nutrients throughout the body and healthy blood pressure.<sup>8</sup> The researchers concluded that schisandra berry enhances physical performance in athletes.<sup>8</sup> Schisandra berry has also been shown to support learning and memory and may have a protective effect on brain health.<sup>9</sup>

### Licorice Root Extract†

The primary components in licorice root that support adrenal health include glycyrrhetic acid and glycyrrhizin. Licorice has also been shown to block 11- $\beta$ -hydroxysteroid dehydrogenase, the enzyme responsible for the conversion of cortisol to the inactive cortisone.<sup>10</sup> When taken in small doses, licorice root extract can be used to maintain cortisol levels, an important factor for individuals that need to support adrenal hormone production and maintain healthy inflammatory pathways.<sup>10</sup>

### Adrenal Concentrate†

For thousands of years, glandular concentrates have been used in medicine to supply key nutrients to support the body. The concept of glandular therapy states that similar organ extracts from animals will support the same organ within humans by stimulating its activity. Adrenal bovine concentrate allows for rejuvenation of the adrenal stress system in a balanced and efficient manner.

### Directions

2 capsules one or two times per day or as recommended by your health care professional.

### Does Not Contain

Gluten, corn, yeast, artificial colors or flavors.

### Caution

Do not consume this product if you are pregnant or nursing.

Supplement Facts <sup>v1</sup>		
Serving Size 2 Capsules		
Servings Per Container 30 & 60		
	Amount Per Serving	% Daily Value
Holy Basil ( <i>Ocimum sanctum</i> ) Leaf 10:1 Extract (Containing Ursolic Acid)	300 mg	*
Ashwagandha Root Extract (Standardized to contain 1.5% Withanolides)	250 mg	*
Adrenal Concentrate (Bovine)	220 mg	*
<i>Rhodiola rosea</i> Root Extract (Standardized to contain 3% Rosavins)	200 mg	*
Schisandra Berry Extract	150 mg	*
Chinese Licorice Root Extract (Standardized to contain 12% Glycyrrhizin)	75 mg	*

\* Daily Value not established.

Other Ingredients: Hypromellose (Natural Vegetable Capsules), Microcrystalline Cellulose, Magnesium Stearate and Silicon Dioxide.

ID# 908060 60 Capsules

ID# 908120 120 Capsules

† These statements have not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure, or prevent any disease.

## References

1. Jamshidi N, Cohen MM. The Clinical Efficacy and Safety of Tulsi in Humans: A Systematic Review of the Literature. *Evid Based Complement Alternat Med*. 2017;2017:9217567.
2. Bhattacharyya D, Sur TK, Jana U, Debnath PK. Controlled programmed trial of *Ocimum sanctum* leaf on generalized anxiety disorders. *Nepal Med Coll J*. 2008 Sep; 10(3):176-9.
3. Mishra, LC, Singh BB, Dagenais S. Scientific basis for the therapeutic use of *Withania somnifera* (ashwagandha): a review. *Altern Med Rev* 2000; 5(4):334-346.
4. *Withania somnifera*. Monograph. *Altern Med Review* 2004;9(2):211-214.
5. *Rhodiola rosea*. *Altern Med Review* 2002;7 (5):421-423.
6. Shevtsov, VA, Zholus BI, et al. A randomized trial of two different doses of a SHR-5 *Rhodiola rosea* extract versus placebo and control of capacity for mental work. *Phytomedicine* 2003; 10(2-3):95-105.
7. Spasov AA, Wikman GK, Mandrikov, et al. A double blind, placebo controlled pilot study of the stimulating and adaptogenic effect of *Rhodiola rosea* SHR-5 extract on the fatigue of students caused by stress during an examination period with a repeated low-dose regimen. *Phytomedicine* 2000;7:85-89.
8. Panossian AG, Oganessian AS, et al. Effects of heavy physical exercise and adaptogens on nitric oxide content in human saliva. *Phytomedicine* 1999; 6(1):17-26.
9. Kang SY, Lee KY, et al. ESP-102, a standardized combined extract of *Angelica gigas*, *Saururus chinensis* and *Schizandra chinensis*, significantly improved scopolamine-induced memory impairment in mice. *Life Sci* 2005; 76(15):1691-1705.
10. Guilliams TG, Edwards L. Chronic Stress and the HPA Axis. *The Standard* 2010;9(2).