NeuroScience®

AdreCor with Licorice Root

Increases cortisol levels and provides non-glandular ingredients important for adrenal health, energy, wakefulness, and stress management*

Item Number	Available Sizes	Serving Size
2097	90 Capsules	3 Capsules

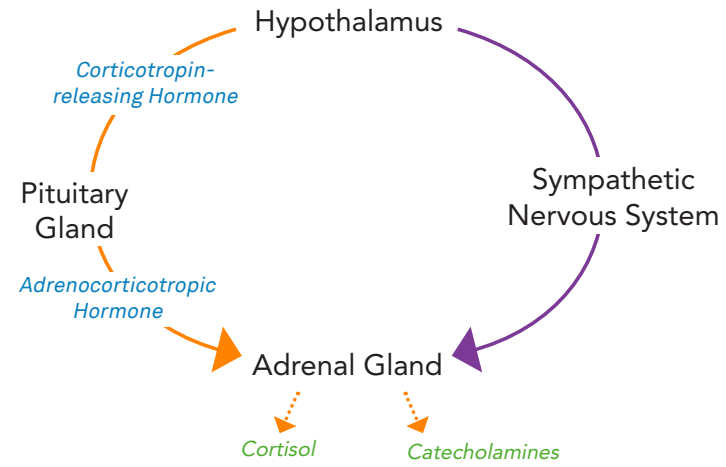
Key Ingredients

Glycyrrhizic acid (from Licorice root extract)	■ Glycyrrhetinic acid (metabolite of glycyrrhizic acid) binds 11β-hydroxysteroid dehydrogenase 2 (11βHSD2) to **inhibit the breakdown of cortisol**[1]*
L-histidine	■ Precursor to histamine ■ In the central nervous system, histamine plays an important role in the release of pituitary hormones and **wakefulness**[2]
L-methionine	■ Precursor to S-adenosylmethionine (SAMe)[3] ■ SAMe is directly involved in **methylation** processes including catecholamine synthesis[4]
L-tyrosine	■ **Precursor to catecholamines** including dopamine, norepinephrine, and epinephrine
Rhodiola rosea root extract (5% rosavins)	■ Adaptogen that has been shown to **reduce stress-induced effects**[5,6]* ■ Research shows *Rhodiola rosea* was shown to significantly improve mental fatigue and general well-being under stress[6]*
Green tea leaf extract (Camellia sinensis) (65% EGCG)	■ Epigallocatechin gallate (EGCG) is a polyphenol in green tea that provides **antioxidant protection** by its ability to scavenge free radicals and metal ions[7]* ■ EGCG has been shown to **increase resistance to fatigue** in vivo[8]*
Vitamins B and C	■ **Active forms** of pantothenic acid, niacin, B6, folate, B12, and C are important for the synthesis of adrenal hormones and neurotransmitters[9-14]*

The Science

- In response to **stress**, the sympathetic nervous system (SNS) and hypothalamic-pituitary-adrenal (HPA) axis signal to the adrenals to release catecholamines (norepinephrine and epinephrine) and cortisol[15]
- **Prolonged stress** is associated with dysregulation of the HPA axis, which can affect catecholamine and cortisol levels[16]

NeuroAdrenal Response



Green = Biomarker *Blue = Hormone*
Orange = Hypothalamic-Pituitary-Adrenal (HPA) axis *Purple = Sympathomedullary Pathway*

*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.

MORE SCIENCE BEHIND ADRECOR WITH LICORICE ROOT

Figure 1. Adrenal Hormones and Neurotransmitters

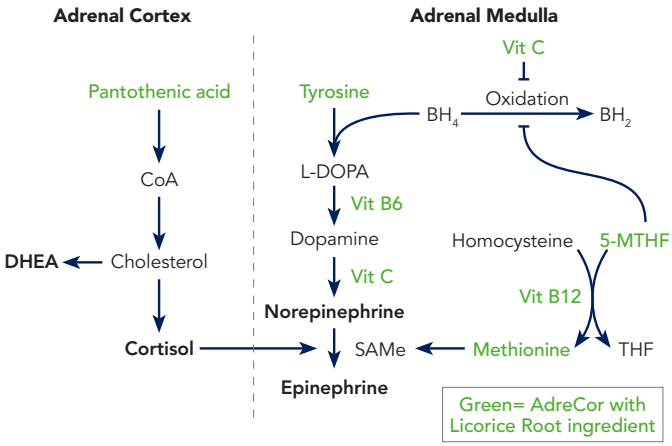
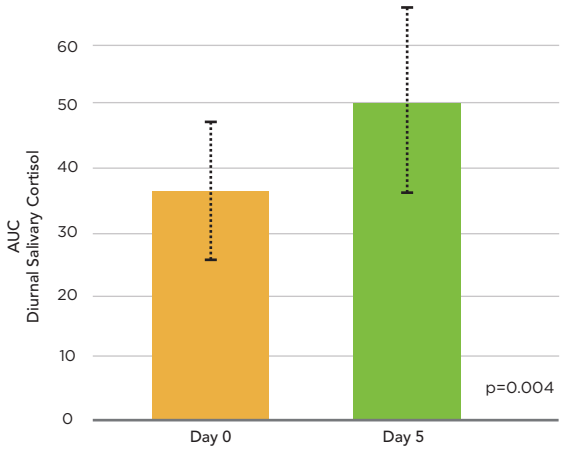


Figure 2. AdreCor with Licorice Root Increases Cortisol Levels[21]*



AdreCor with Licorice Root and adrenal health

Contains amino acids and vitamins important for the synthesis of adrenal hormones and neurotransmitters*

- 5-MTHF (from Quatrefolic®) and vitamin B12 are important for methylation processes including the synthesis of catecholamines[13]*
- Niacin, vitamin C, and 5-MTHF help protect and regenerate tetrahydrobiopterin (BH_4) from oxidation[10-12]*
- Pantothenic acid is the precursor to coenzyme A (CoA), a coenzyme important for energy production and hormone synthesis[9]*
- Cortisol induces the conversion of norepinephrine to epinephrine[16]

Catecholamines play an important role in mood, energy, memory, attention and cognition[17-20]

Cortisol, HPA axis, and fatigue

Cortisol awakening response (CAR) refers to the sharp increase in cortisol levels observed immediately following awakening[22]

- CAR function is thought to be important in regaining arousal after sleep and preparing the body for forthcoming bioenergetic demands[22]
- Cortisol curves lacking a robust CAR are indicative of HPA axis dysregulation and have been correlated with feelings of fatigue[23,24]

AdreCor with Licorice Root increases cortisol levels[21]*

- Participants (n = 19) were prescreened for low cortisol levels
- AdreCor with Licorice Root (3 capsules, twice daily) was taken for four consecutive days
- Mean total cortisol levels (area under the curve – AUC) were higher on Day 5 compared to Day 0 (p = 0.004)[21]*

NeuroScience®

Concerned about mood?

Learn more about TravaCor at
www.neuroscienceinc.com/products/travacor

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If you have cardiovascular concerns or if you are pregnant or nursing, consult your healthcare provider before use.

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