

Relieving Stress Through Adrenal Support

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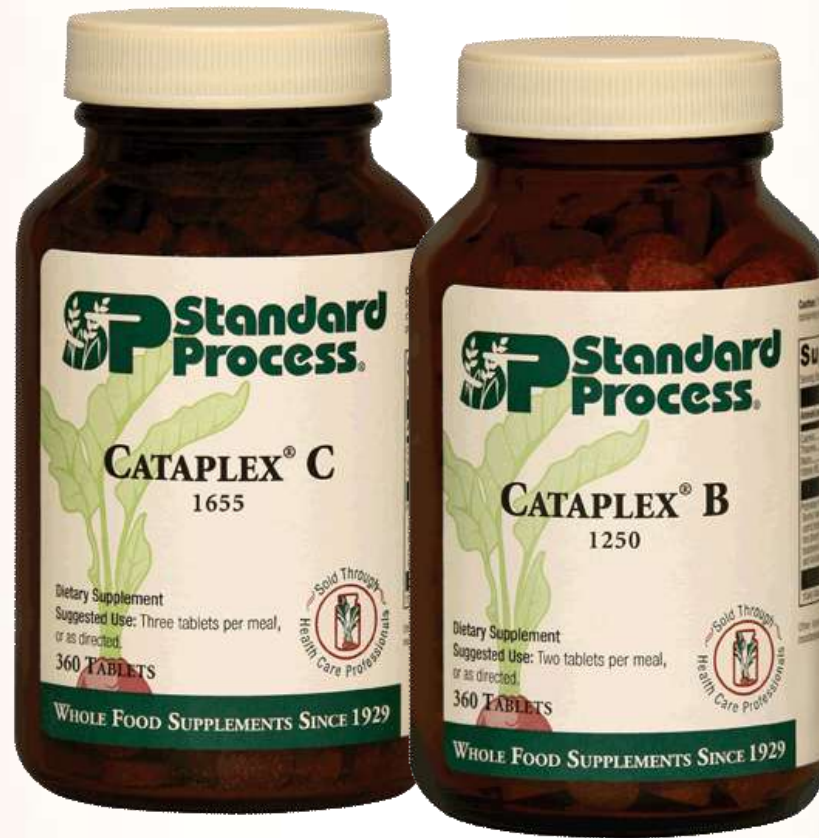


MEDI  HERB

 Standard
Process



Adrenal Desiccated, Drenamin[®], and Drenatrophin PMG[®]



Cataplex[®] C and Cataplex[®] B

Licorice and Rehmannia

Key Adrenal Herbs

- Since the beginning of recorded history Licorice root has been used as a remedy
- The ancient Assyrian, Egyptian, Chinese and Indian cultures were the first to document its use
- Rehmannia root was first mentioned in Chinese texts around the 3rd century although herbs were used in China for millennia prior to this
- In western herbal therapy both herbs are considered:
 - Adrenal restoratives
 - Improving the ability to adapt to occasional stress

Adrenal Complex

Licorice root 7:1 extract 250 mg

from *Glycyrrhiza glabra* root 1.75 g

Containing glycyrrhizin 25mg

Rehmannia rhizome 5:1 extract 150 mg

from *Rehmannia glutinosa*

rhizome 750 mg

Dose: 1 tablet 2 -3 times per day

Adrenal Complex Indications

Adrenal Tonic

- Supports healthy functioning of the adrenal cortex and the body's natural production of cortisol
- Facilitates the body's normal response to occasional stress
- Combats fatigue and supports nervous system and immune system function during periods of occasional stress
- Long term support where stress is a factor
- Female metabolic and hormonal challenges

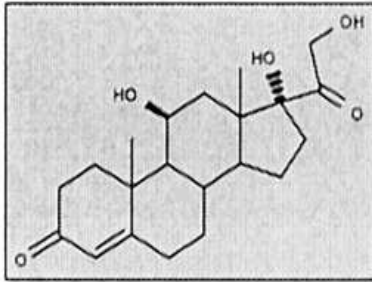
Correcting Misunderstandings About Licorice

- Licorice and Rehmannia combine well to support both cortisol excess and cortisol deficiency
- Licorice neither stimulates nor inhibits the production of cortisol, but rather preserves, protects & restores the cortisol producing machinery (adrenal cortex)
- Where there is cortisol excess the adrenal glands are being overtaxed & where there is cortisol deficiency they are depleted
- Either way there is the need for adrenal support

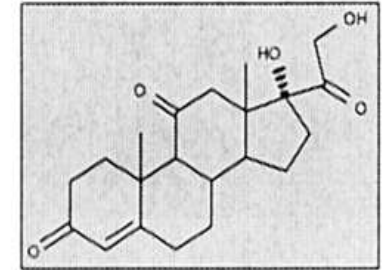
Licorice Safety

- Licorice is safe when taken as recommended
- However in high doses and over a long period of time it can cause potassium depletion and hypertension
- Glycyrrhizin the main active constituent in Licorice is converted to glycyrrhetic acid (GA) in the intestine and absorbed
- GA inhibits the activity of the enzyme 11 beta-hydroxysteroid dehydrogenase type 2 in the kidney
- This allows cortisol to bind to mineralocorticoid receptors and exert an aldosterone like effect with the above mentioned side effects

11 β -HSD2



Cortisol



Cortisone

High expression: Kidney, colon, salivary glands, placenta

Function: Protection of the mineralocorticoid receptor

Licorice

Cautions & Contraindications

- Contraindicated in hypertension & edema
- Caution is advised in patients taking cortisol or prednisolone, & in the elderly & those with cardiac, renal or hepatic disease
- Do not prescribe if patient is taking potassium-depleting diuretics
- Patients who are prescribed Licorice preparations high in GL for prolonged periods should be placed on a high potassium & low sodium diet
- And closely monitored for blood pressure increases & weight gain

Rhodiola & Ginseng Complex

Rhodiola root 20:1 extract	150 mg
from <i>Rhodiola rosea</i> root 3.0 g	
Containing rosavins 4.5 mg and salidroside 1.5 mg	
Korean Ginseng root 5:1 extract	100 mg
from <i>Panax ginseng</i> root 500 mg	
Containing ginsenosides as Rg ₁ and Rb ₁ 8.4 mg	

Suggested Dosage: 1 tablet 2-4 times per day

Rhodiola & Ginseng Complex

Indications

- Promote vitality and stamina and help maintain energy
- Support physical endurance
- Enhance mental clarity and support cognitive function
- Maintain feelings of general well-being when experiencing temporary stress
- Help the body adapt to the changes of everyday life
- Support and maintain the body as it ages
- Support the body's natural defenses against emotional and environmental stressors

Rhodiola and HSP

Serum HSP ↑ 2.8 times in mice forced to swim

Serum HSP ↑ 6 times in mice given a combination of Rhodiola, Eleuthero and Schisandra extracts at human equivalent doses (1g/150lb body weight/day) for 7 days

Serum HSP ↑ 13 times in mice given herb combo and forced to swim

The time to exhaustion when swimming ↑ 7 times, from 3 mins to 21 mins, in mice taking the herb combo



Rhodiola and Mood

A standardized extract of Rhodiola trialled in patients at dosages of either 340 or 680 mg/day over a 6-week period

At 340 mg/day mood, sleep, emotional stability improved significantly

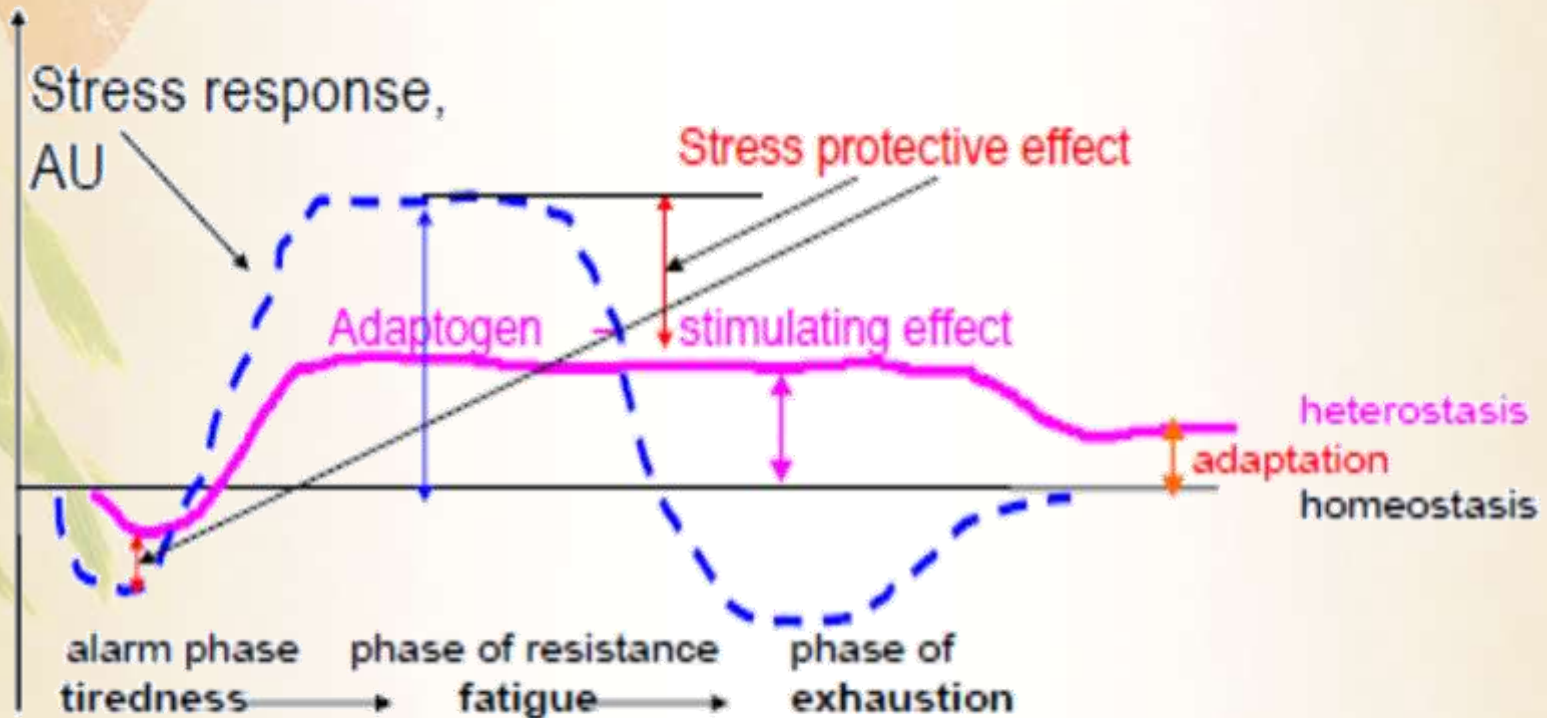
At 680 mg/day self-esteem improved significantly

Energy levels ↑

Up-regulation of Hsp70

Darbinyan V et al. *Nord J Psychiatry* 2007; 61(15): 343-348

Adaptogenic Effect on the General Adaptation Syndrome



Therapeutic Strategy

Improve efficiency of the stress response

- Rhodiola & Ginseng Complex

Harmonize the HPA axis

- Adrenal Complex

Support and restore adrenal cortex function

- Adrenal Complex
- Drenamin, Drenatrophin PMG[®]
- Adrenal *Desiccated* (short term)

Support adrenal gland requirements for Vitamin C

- Cataplex[®] C

Therapeutic Strategy

Decrease the detrimental effects of stress on the adrenal glands and support conservation of adrenal reserves

- Adrenal Complex
- Rhodiola & Ginseng Complex
- Drenamin, Drenatrophin PMG

Improve adrenal output in response to stress

- Rhodiola & Ginseng Complex
- Adrenal Complex
- Drenamin, Drenatrophin PMG

Therapeutic Strategy

Support normal functioning of adrenal hormones

- Adrenal Complex
- Rhodiola & Ginseng Complex
- Drenamin[®], Drenatrophin PMG[®]

General Adrenal Support

Core Support

- Adrenal Complex (2 to 3 tablets per day)
- Drenamin[®] (6 to 9 tablets per day)
- Cataplex[®] B (4 to 6 tablets per day)

Additional Considerations

- Rhodiola & Ginseng Complex (1 to 4 tablets per day)
- Adrenal *Desiccated* (3 to 6 tablets per day) consider
- Drenatrophin PMG[®] (3 tablets per day)
- Cataplex[®] C (6 to 9 tablets per day)
- Catalyn[®] (6 to 9 tablets per day)



Thank you

Special thanks to
Associate Professor Kerry Bone and Rob Santich for their
contributions to this material

A weathered wooden sign with a curved top and bottom, mounted on a wooden post. The sign is set against a dense background of various green plants, including ferns and leafy vegetation. The text on the sign is white and reads "YOU ARE NOW ENTERING A STRESS FREE ZONE".

YOU ARE NOW ENTERING
A STRESS FREE ZONE