# **ENERGY & STRESS**



Available in 30 and 60 tablets

# medicine to enhance mental endurance and stamina KEY FORMULA FEATURES

 Contains rhodiola, a herb traditionally used to enhance mental endurance and stamina, and help the body adapt to stress, at a clinically indicated dose.

**SUPER B DAILY STRESS +** 

· Maintain mental focus and concentration

 Contains key nutrients at doses shown to support neurotransmitter production and maintain nervous system health.

Rhodiola has been traditionally used in western herbal

· Convenient one-a-day maintenance dose.

Reduce stress-related fatigue



Maintain focus & concentration



Help the body adapt to stress



Enhance mental endurance & stamina



Reduce stress-induced fatigue



Contains rhodiola & B vitamins

#### **INGREDIENTS**

Each tablet contains:

Rhodiola rosea, dry root extract
from root dry (Rhodiola)
Ascorbic acid (Vitamin C)
Nicotinamide (Vitamin B3)
Calcium pantothenate (Vitamin B5)
Thiamine hydrochloride (Vitamin B1)

250mg
150mg
150mg
100mg
75mg

Riboflavin (Vitamin B2)

Pyridoxine hydrochloride (Vitamin B6)

Folic acid

Cyanocobalamin (Vitamin B12)

50mg

200 micrograms

200 micrograms

# PROFESSIONAL PRESCRIBING GUIDELINES Directions for use (Adult):

Super B Daily Stress +	{\( \) \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\	{\rightarrow} Lunch
Adults: For everyday stress support: Take 1 tablet daily with food	0	
Adults: For improved performance when stressed: Take 1 tablet twice daily with food.	0	0
Dosing tip	Rhodiola and B vitamins may cause sleeplessness if taken late in the day. Please counsel consumers on appropriate dosing schedule.	

Or as directed by a healthcare professional.

# **HCP COUNSELLING QUESTIONS**

## Should Super B Daily Stress + be taken with food?

Whilst Super B Daily Stress + can be taken without food, we recommend consumers be counselled to have it at breakfast time for ease of compliance. A second dose can be recommended with lunch.

## If I take it at night or in the afternoon, will it keep me awake?

Rhodiola and B vitamins may cause sleeplessness if taken late in the day. Take one tablet with breakfast, or for improved performance when stressed, we suggest the second dose being no later than lunch.

Not all cautions, contraindications and warnings are listed. For full details and references, see Metagenics Pharmacy Academy, or contact Clinical Support.

## Warnings:

Stop taking this medication if you experience tingling, burning or numbness and see your healthcare practitioner as soon as possible. (Contains vitamin B6).

## Cautions:

**Medications metabolised by CYP3A4:** Rhodiola inhibits the CYP3A4 enzyme and may decrease clearance of medications metabolised by this enzyme. Use with caution in these patients and monitor as needed, counselling on possible effects.

# Contraindications:

Allergies and sensitivities: Avoid in individuals with known allergy or hypersensitivity to rhodiola and/or members of the Crassulaceae family. <sup>1,2</sup> Avoid with known allergy or hypersensitivity to cobalamin and/or cobalt. <sup>3</sup>
Bipolar spectrum disorder: Rhodiola should not be consumed in these

individuals due to the risk of mania with use of stimulants. <sup>2,4,5</sup>

# Long term use:

Consider patient's total daily intake of vitamin B6 from all sources.

## Pregnancy:

Limited/unavailable research. A review did not identify any concerns for use during pregnancy, <sup>4,6</sup> however safety has not been conclusively established in humans.

# Breastfeeding:

Limited/unavailable research. A review did not identify any concerns for use in children, however safety has not been conclusively established.

## Children:

Limited/unavailable research. A review did not identify any concerns for use during breastfeeding, however safety has not been conclusively established.

Free from: Gluten, wheat, dairy, lactose, eggs, nuts, and yeast. No added: Artificial flavouring, colouring or preservatives.

New Zealand:

P: 0508 227 744





# **ENERGY & STRESS**

#### **CUSTOMER PRESENTATION**

Adults looking for:

- Everyday stress support
- Daily energy maintenance
- Additional stress support for a busy lifestyle

#### THE NEED FOR STRESS SUPPORT

When the brain perceives a stress, it stimulates the release of cortisol via the hypothalamus-pituitary-adrenal (HPA) axis. Normally, once the stress is removed, a negative feedback loop leads to a reduction in cortisol,<sup>7</sup> however chronic exposure to stress can generate a maladaptive response, leading to disruption of the HPA axis and impairment of neuroplastic and cognitive functions.8

Ethical Nutrients Super B Daily Stress + is specifically formulated to support HPA axis homeostasis and maintain a healthy nervous system that functions well in conjunction with a busy lifestyle (Figure 1).



Figure 1: Super B Daily Stress + contains herbal and nutritional support for the HPA axis.

# **CLINICAL FEATURES: HELP THE BODY ADAPT TO STRESS**

The European Medicines Agency defines adaptogens as "substances that have the capacity to normalise body functions and strengthen systems compromised by stress".9,10 **Rhodiola rosea**, is classed as an adaptogenic herb and has been used traditionally to improve physical endurance, combat fatigue, and improve disorders of the nervous system.10

Animal studies have found that the adaptogenic properties of rhodiola stem from its ability to increases the expression of stress-responsive genes.11 lt supports the HPA axis by reducing the levels of corticotropin-releasing hormones, cortisol, and adrenaline. 10 Rhodiola's adaptogenic properties are also associated with the activation of the cerebral cortex by noradrenalin and serotonin levels as well as with improvements in neuroplasticity - the process by which the brain adapts to external stimuli such as stress.<sup>12</sup> Cell studies indicate that rhodiola extract increases ATP levels and cell metabolic activity, and decreases reactive oxygen species in cells subjected to stress.<sup>13</sup> These studies demonstrate that rhodiola may improve the body's response to stress via multiple actions across the brain and nervous system, making it a valuable herb to improve stress adaptation.

 ${\bf B}$  vitamins are cofactors for various pathways associated with the HPA axis.  $^{14}$ In a systematic review and meta-analysis, B vitamins have been shown to reduce numerous markers of stress and are important for cognitive function and the ability to cope whilst under pressure.15,16

Vitamin C is necessary for glucocorticoid synthesis and can reduce thehyperactivation of the HPA axis by preventing hypercortisolemia and stressrelated disorders.7

#### MAINTAIN FOCUS AND CONCENTRATION, AND REDUCE STRESS **INDUCED FATIGUE**

Rhodiola has been studied across a broad range of participants, ranging from university students,<sup>17</sup> doctors on night shift, sufferers of chronic stress, to those working long hours on a computer, as well as patients experiencing burnout and fatigue. 18 The results show that at doses from 170-500mg per day, rhodiola can improve parameters such as fatigue, concentration, cognitive function and mood. 18,19 Other studies have shown that it is beneficial in supporting subjects undertaking cognitive tasks whilst under some form of physical or mental stress<sup>20,21</sup> making it an ideal herb for people wishing to improve resilience during physically or mentally demanding tasks.

Every aspect of cell molecular metabolism and energy production requires  $\boldsymbol{B}$  vitamins, and the brain is the most metabolically active organ of the body.  $^{15}$ Whilst B1, B2, B3 and B5 are required for ATP synthesis, folate and B12 are required for methylation and the clearance of homocysteine, which may play a role in the decline of neurological function.<sup>15</sup>

In the body, **vitamin C** is most concentrated in the brain and adrenal glands.<sup>14</sup> Within the brain the high concentration of vitamin C is required to regulate neuronal function<sup>22</sup> and as an electron donor to prevent oxidative stress to neurons which could in turn affect cognitive function.<sup>7</sup> A review of plasma vitamin C concentrations in cognitively impaired individuals versus healthy individuals found that plasma vitamin C levels were significantly reduced in cognitively impaired subjects, potentially due to the higher demand for vitamin C in the brain for synaptic plasticity in these individuals.<sup>23</sup> This highlights the need for adequate vitamin C to support healthy focus and concentration.

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