



Rhodiola 150

STANDARDIZED EXTRACT

Adaptogenic herbal support

- Temporarily relieves symptoms of stress, such as mental fatigue and sensation of weakness
- Supports cognitive function, such as mental focus and mental stamina
- Promotes antioxidant defence
- Provides 300 mg of rhodiola root extract per day

Rhodiola 150 provides rhodiola, an adaptogenic herb used in traditional Herbal Medicine.¹ Rhodiola helps to temporarily relieve symptoms of stress (such as mental fatigue and the sensation of weakness) by decreasing mediators of stress responses, including the stress hormone cortisol.¹ By mediating neurotransmitter activity, rhodiola also supports cognitive function, including mental focus and stamina.¹ Recent clinical trials have demonstrated that daily supplementation with 100-200 mg of rhodiola extract significantly supports mental and physical well-being during stress, regulates work-related fatigue, and provides antioxidant protection.²⁻⁴



EACH CAPSULE CONTAINS:

Rhodiola (*Rhodiola rosea*) Root Std. Extract
(3% Rosavins, 1% Salidroside) 150 mg

Non-Medicinal Ingredients: Hypromellose, cellulose

Recommended Adult Dose: Take two capsules daily or as recommended by your healthcare practitioner. Not to be taken immediately before bedtime.

Product Size: 60 vegetable capsules **Product Code:** 07641

NPN 80064036



REFERENCES

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4. Skarpanska-Stejnborn, A, Pilaczynska-Szczesniak, L, Basta, P, Deskur-Smielecka, E. International Journal of Sport Nutrition and Exercise Metabolism. 2009; 19: 186–199.

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Scientific Rationale:

Rhodiola, a plant used in traditional Herbal Medicine, is found at high altitudes in the Arctic, Asia and Europe.¹ By decreasing the activity of enzymes that degrade neurotransmitters and by prolonging neurotransmitter activity in the brain, rhodiola elevates bio-electrical brain activity.¹ This results in increased cognitive function, including improved mental focus, stamina, attention, memory and learning abilities.¹ As an adaptogen, rhodiola helps to relieve symptoms of stress by controlling mediators of stress responses, including the stress hormone cortisol and neuropeptide Y, which counteracts stress-related behaviours by regulating signalling pathways in the brain.^{1,2} Rhodiola also provides antioxidants to promote optimal health.³

In a randomized, double-blind, placebo-controlled trial, rhodiola intake significantly improved mental function among male students during an examination.⁴ Participants were randomized to consume either placebo or rhodiola tablets (containing a total of 100 mg of rhodiola) daily for 20 days.⁴ Efficacy tests, which were conducted at baseline and at the end of the treatment period, analyzed self-rated fatigue (forms of fatigue, sleeping patterns, mental discomfort, mood instability), self-rated general well-being (general state, degree of activity, mood, and motivation to work), psycho-motor function (spiral maze test), and physical fitness (physical working capacity measured by cycling test PWC-170 and the subsequent change in pulse rate).⁴ When compared to placebo values, rhodiola supplementation significantly improved self-rated fatigue, self-rated general well-being and psychomotor function.⁴ Specifically, the accuracy of movement in the spiral maze test (when compared to the speed of movement) significantly improved by 50% when compared to the placebo treatment.⁴ This shows that rhodiola can support mental well-being and capacity during a stressful examination.⁴ Additionally, participants' pulse rates were measured before and after the physical fitness test.⁴ The increase in pulse rate was significantly lower in the rhodiola group when compared to the placebo group, further demonstrating the beneficial effects of rhodiola during periods of stress.⁴

Similarly, rhodiola supplementation promoted recovery after an exhausting physical stress test in a randomized, controlled trial involving 36 healthy untrained adults.⁵ Serum levels of the pro-inflammatory markers C-reactive protein (CRP) and creatinine kinase (CK) typically increase after exhausting physical exercise, making them appropriate markers of recovery after exercise.⁵ Baseline measurements of CRP and CK were collected before the participants were randomly assigned to one of three treatment groups.⁵ Group one received 30 mg of the active substances of rhodiola extract twice daily, group two received a placebo and group three was the control.⁵ Supplements were taken daily for 30 days before and six days after exhausting physical exercise.⁵ Blood was

also collected 30 minutes before the exhausting exercise test as well as five hours and five days after the test.⁵ The exercise test was completed on a bicycle ergometer, with the workload increasing every minute.⁵ The test was ceased after the participants could not rotate the pedals at a speed of 60 cycles per minute.⁵ Exhausting physical exercise increased the levels of CRP and CK in all volunteers; however, when compared to placebo and control values, the level of CRP was significantly lower in the rhodiola group five hours and five days after the test.⁵ CK levels were also significantly lower five hours and five days after the exercise test when compared to baseline values.⁵ As rhodiola reduced the exercise-induced increase in pro-inflammatory markers in the blood, its ability to promote recovery after physical stress was clearly demonstrated.⁵

A randomized, placebo-controlled, double-blind, crossover study evaluated the effects of rhodiola supplementation on work-related fatigue.⁶ Participants were randomized to consume either a placebo or rhodiola treatment (containing 170 mg of rhodiola extract) daily for two weeks.⁶ After a two-week washout period, participants consumed the alternate treatment.⁶ Five tests were performed to determine the degree of fatigue, including word association, spelling, subtraction, word recall and numerical sequencing.⁶ A total fatigue measure was calculated from the individual five measurements, which were scored according to the following calculation: (test score before night duty / test score after night duty) x 100.⁶ Each test was conducted before and after night duty, with a 24-hour separation period between the tests.⁶ The efficacy tests were conducted four times throughout the study: at baseline, after two weeks of supplementation, after the completion of the washout period, and after two weeks of consuming the alternate treatment.⁶ When compared to placebo values, performance scores significantly improved by 20% after two weeks of rhodiola supplementation, demonstrating the ability of the rhodiola supplement to decrease work-related fatigue.⁶

In a randomized, placebo-controlled trial involving male athletes, rhodiola supplementation provided antioxidant support after exercise.³ Participants randomly consumed a placebo or rhodiola treatment (100 mg of rhodiola) twice daily for four weeks.³ Blood samples were conducted before and after a 2,000 m rowing test and analyzed for total antioxidant capacity - a measure of the total antioxidant status in the body.³ When compared to baseline values, rhodiola supplementation significantly increased total antioxidant capacity before, directly after and 24 hours after exercise.³ Although oxidative stress was induced by exercise, rhodiola supplementation increased antioxidant levels in the plasma of participants, indicating its beneficial effects on antioxidant support.³

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