

Rhodiola Benefits: Burning Fat for Energy, Beating Depression + More

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Rhodiola rosea (*R. rosea*), also known as “golden root,” is an [adaptogenic herb](#) with tremendous fat-burning, energy-enhancing and brain-boosting power. Adaptogens including rhodiola are a group of plants that can help your body adapt to physical, chemical, and environmental stress. Rhodiola is one of the most effective in this family, due to containing active compounds like rosoavin that have the ability to help balance the stress hormone, cortisol.

This unique herb that is a member of the *Rhodiola* genera in the *Crassulaceae* plant family grows at high altitudes in the arctic areas of Asia and Eastern Europe. Rhodiola rosea has been a part of traditional medicine systems practiced across the world, especially in parts of Europe, Asia and Russia, for many centuries. Historically, rhodiola has a long history of use in [Traditional Chinese Medicine](#), especially for improving stamina and reducing stress. The Vikings also used rhodiola to enhance physical strength, while the Sherpa people used it to climb at high altitudes, even to conquer Mt. Everest.

The Russians have studied rhodiola benefits extensively over the past 70 years, mostly for improving work performance and endurance while fighting insomnia, fatigue, anxiety and depression. It has also been used to cleanse the body, [fight cancer](#) and help treat tuberculosis.

(1)

What Is Rhodiola Rosea?

Rhodiola rosea is a stress-busting supplement that goes by several names, including arctic root, roseroot, king's crown and golden root. (2) What does rhodiola do to the body to help make it more capable of dealing with stress?

As an “ergogenic aid” and an adaptogen— or a “natural herbal product that is non-toxic in normal doses, that produces a non-specific response, and that has a normalizing physiologic influence”— rhodiola is very helpful for improving both physical and mental energy and for fighting the negative effects of stress. (3) It helps body adapt to stress by decreasing or preventing hormonal changes tied to prolonged stress. Research suggests that some of the ways it does this is by acting on beta-endorphins and opioid neuropeptides to enhance stress tolerance and by positively affecting other stress adaptation factors. (4)

Rhodiola has been proven to have at least four major health benefits. The top rhodiola uses include:

1. Helping to lower the “stress hormone,” cortisol
2. Fighting depression and improving brain function
3. Supporting weight loss and helping to burn **visceral/belly fat**
4. Increasing energy and athletic performance, while reducing mental and physical fatigue

Studies have found that *Rhodiola rosea* contains more than 40 kinds of chemical compounds. Active constituents found within rhodiola that are responsible for its pharmacological effects include rosavin and salidroside. (5) Rosavin is the only constituent unique to *R. rosea* within the Rhodiola plant family, while salidroside is common to most other rhodiola species.

Rosavin is found in higher concentrations than salidrosides, with approximately a 3:1 ratio within *R. rosea*. In animal studies it's been found that rosavin contributes to rhodiola's benefits by having antidepressant-like, adaptogenic, anxiolytic-like and stimulating effects. (6)

5 Rhodiola Rosea Benefits

1. Helps Burn More Belly Fat

One of the many incredible characteristics of rhodiola is that it helps your body burn stored fat more efficiently as fuel. We all know that exercise — especially interval exercise like **burst training** — can increase fat loss, but if you want an extra edge, then consider taking rhodiola along with regularly exercising to accelerate your weight loss efforts.

What allows rhodiola to help **lose belly fat**? Certain animal studies have found evidence that *Rhodiola rosea* might reduce visceral white adipose tissue and increase hypothalamic norepinephrine to help prevent diet-induced obesity. (7)

Rhodiola's most active compound, rosavin, has been shown to trigger a fat-burning response. Because it helps normalize cortisol levels, rhodiola may also reduce cravings for unhealthy "comfort foods" and delay fat-accumulation that is tied to high cortisol levels (especially fat around the abdomen/belly).

Rosavin works by stimulating an enzyme called "hormone-sensitive lipase," which has the ability to breakdown fat that is stored in adipose tissue (in the belly area). Some sources suggest that if you combine taking rhodiola extract with doing moderate exercise, the breakdown of belly fat increases even more.

2. Increases Energy and Athletic Performance

Research implies that if you're looking for a **natural way to boost energy** and increase athletic performance, then rhodiola may be for you. Today, one of the most popular uses of rhodiola is for increasing energy, stamina and strength.

Rhodiola may help increase your stamina and endurance by increasing your red blood cell count and lowering oxidative damage. (8) Red blood cells (RBC) carry oxygen to muscles, and having a higher count can dramatically improve an athlete's performance and help to delay fatigue. Rhodiola benefits work by boosting EPO, also known as erythropoietin, which stimulates RBC production.

According to a study published in the *International Journal of Sports Nutrition and Exercise Metabolism* in 2004, rhodiola has anti-inflammatory benefits that aid rapid recovery of muscles and improve endurance. (9) Another study performed on rats found that supplementing with rhodiola could increase endurance by allowing the animals to swim 25 percent longer. The improvements happened because rhodiola was found to increase synthesis of ATP, which is essential for cellular energy. (10)

3. May Help Fight Physical & Mental Fatigue

You don't have to be an athlete to experience the benefits of rhodiola. Not only can it help reduce physical fatigue, but it may also decrease mental fatigue and symptoms like **brain fog** or lack of concentration. Rhodiola is also often used to help people overcome exhaustion from low-intensity, but frequent, exercise or movements. Whether you're a stay-at-home mom, a business executive or a student, you'll be happy to know that rhodiola has been shown to increase workplace performance and to help decrease the effects that **sleep deprivation** can have on your body.

According to author and naturopathic physician Tori Hudson, rhodiola can be prescribed to patients for several reasons, including helping to treat **adrenal fatigue**, chronic fatigue, poor recovery from workouts and problems with physical/athletic performance. (11)

A 2012 systematic review of 11 randomized, controlled trials that focused on rhodiola's anti-fatigue effects found that "some evidence suggests that the herb may be helpful for enhancing physical performance and alleviating mental fatigue." However, the researchers did point out that "methodological flaws limit accurate assessment of efficacy," so further studies are needed. (1)

4. Helps Lower Cortisol

One of the main reasons people turn to adaptogenic herbs like rhodiola is to help balance **cortisol levels**, which can be beneficial for slowing age-related symptoms and for looking and feeling better. Rhodiola can be helpful for calming your body when your nervous system goes into "fight or flight" mode due to dealing everyday stressors. (12)

When the hormone cortisol stays high for a long period of time, such as from emotional or physical stress, it can cause you to experience stress-related symptoms, such as:

- lowered blood glucose response
- abdominal weight gain
- thyroid issues
- **hormone imbalance**
- decreased memory
- weakened immunity

By keeping cortisol levels balanced, you can improve your health in multiple ways, especially when it comes to feeling younger and more energized. High cortisol levels over an extended period of time may contribute to accelerated signs of aging, higher levels of psychosocial stress, poorer cognitive performance, atrophy of memory-related structures of the brain, weight gain and exhaustion — exactly the reason why rhodiola makes such a helpful anti-aging supplement. (13)

5. Can Help Fight Depression and Improve Brain Function

Another amazing benefit of supplementing with rhodiola is that it's been shown to help improve cognitive functioning and to help as a **depression natural remedy**.

Rhodiola may help to increase the sensitivity of your neurons (cells of your brain and nervous system), including the two neurotransmitters serotonin and dopamine. These neurotransmitters are known for increasing focus, memory, pleasure, and overall mood improvement — making them very important for preventing anxiety and depression. In animal studies, rhodiola has also been shown to help repair damaged neurons in the hippocampus, a region of the brain considered to be the center for emotion, memory and the autonomic nervous system regulation. (14)

Many doctors of functional medicine prescribe rhodiola as an effective **natural alternative to anti-depressant medications**. This works because rhodiola may increase dopamine sensitivity, which has been shown to improve moods and also to help fight food cravings and addictions.

In a clinical trial with 150 individuals suffering from depression, participants were given *Rhodiola rosea* for one month. At the end of the trial two-thirds of the group had full remission of depression symptoms and daytime weakness had also greatly improved. (15)

Another small 2015 study that was supported by the National Center for Complementary and Integrative Health (NCCIH) tested rhodiola against the drug sertraline (often prescribed to treat depression) and a placebo in 58 adults with mild-to-moderate major depressive disorder. Results showed that all treatments were similarly effective in reducing depressive symptoms (there were no significant difference found between groups at the end of the study), but the participants who took rhodiola had fewer side effects than those who took sertraline. (16)

Can rhodiola also help with **anxiety**? Yes, it seems likely that it can. A trial involving 80 “mildly anxious participants” found that compared to controls, the experimental group (taking *Rhodiola rosea* in the form of 2 × 200 mg dose Vitano®) demonstrated a “significant reduction in self-reported, anxiety, stress, anger, confusion and depression at 14 days and a significant improvements in total mood.” No relevant differences in cognitive performance between the rhodiola and untreated groups were observed. Rhodiola supplementation was shown to have a “favourable safety tolerability profile.” (17)

Another small pilot study including 10 adults with anxiety found that supplementing with 360 milligrams of rhodiola daily for 10 weeks led to significant improvement in symptoms of generalized anxiety disorder (GAD) and a reduction in the Hamilton Anxiety Rating Scale (HARS) scores. (18) Some physicians have also started recommending rhodiola for **ADD and ADHD** because of its ability to improve focus.

Where Can You Find Rhodiola? Rhodiola Dosage & Types

When should you take rhodiola? And what is the ideal rhodiola rosea dosage?

Here’s what you need to know about rhodiola supplementation:

- As a dietary supplement, rhodiola root extract is usually taken in capsule or tablet form. You may also take it as a tincture, but most people find capsules to be most convenient.
- Look for *Rhodiola rosea* as either SHR-5 extract (or an equivalent extract) that has approximately 3 percent rosavins and 1 percent salidroside.
- The recommended supplemental dose of *Rhodiola rosea* extract (containing rosavin) is around 250–700 milligrams total per day (typically split into 1–2 doses).
- Randomized, controlled trials have studied a range of rhodiola doses for treating conditions such as depression and fatigue. Many use *R. rosea* extract in doses between

350–1500 milligrams daily. (19) Doses as low as 8–300 milligrams/day have even been shown to help reduce fatigue. It's recommended that you take no more than about 700 milligrams daily without speaking with a doctor first or being monitored.

- For help with weight loss, studies have found that taking a combination of *C. aurantium* (bitter orange) and *R. rosea* helps to best prevent obesity and health problems caused by over-feeding.
- Ideally, rhodiola should be taken about 15 minutes before meals. Higher doses should be split into two to help with absorption (such as one dose before breakfast and one before dinner).
- According to the ancient practices of Traditional Chinese Medicine and **Ayurvedic medicine**, herbs, roots and mushrooms are absorbed better when taken alongside a “warming herb” (like black pepper or long pepper) and with a **healthy fat** of some kind. Rhodiola supplement blends that contain these types of ingredients may be absorbed more efficiently, although this has not been studied thoroughly.
- Taking rhodiola in fermented (pre-digested) form may also help with absorption. Check your chosen supplement for information about fermentation.

How to make Rhodiola rosea tea:

- Another way to benefit from rhodiola is to drink *Rhodiola rosea* tea, traditionally used to help calm nerves, reduce anxiety and promote restful sleep. To prepare homemade rhodiola tea, you'll first need to purchase rhodiola roots that have been dried and ground.
- Start by steeping about five grams of rhodiola roots in hot water. Either use a steeper or pack tea bags with the root. (20) Make sure the water is not very hot or boiling, keeping it no higher than 85 degrees Fahrenheit (boiling point is 212 degrees F). For the best results, steep the tea for about four hours.
- To speed up this process, you can also use rhodiola tinctures and liquid extract, which can be added to warm water with lemon or another herbal tea, such as **chamomile** or green tea.

Potential Rhodiola Side Effects & Precautions

What are the side effects of rhodiola? Rhodiola has been found to be generally well-tolerated by most people, and, according to some studies, less likely to cause side effects than prescription drugs such as antidepressants. That being said, when rhodiola is taken orally it can potentially cause side effects like temporary dizziness and dry mouth. If these side effects persist, you should stop taking rhodiola. If you're already taking medications and interested in trying rhodiola as an alternative, it's best to speak with your doctor first before stopping any medication.

Overall, while some studies (and reviews) have found that rhodiola shows promise for offering many benefits, according to the National Institute of Health, “The quality of research is limited so firm conclusions about its effectiveness can't be made.” (2) Most researchers have reported that while *R. rosea* may have beneficial effects on physical performance, mental performance and certain mental health conditions, more research is still warranted. (21)

Final Thoughts on Rhodiola

- Rhodiola rosea is an adaptogen herb that is taken in extract and/or supplement form to help improve mental and physical tolerance to stress.
- Rhodiola benefits include normalizing cortisol levels, helping with fat-burning and weight loss, fighting depression and anxiety, improving athletic performance and preventing or treating fatigue.
- Rhodiola is well-tolerated and unlikely to cause side effects, but it may temporarily cause dry mouth or dizziness. The recommended dosage is between 250–500 milligrams taken once or twice daily (most studies use about 350–1500 milligrams daily).