

Health Benefits of Neem

Neem – An Overview

The botanical name of the neem tree is *Azadirachta indica*. This tree is native to India, Myanmar, Sri Lanka, Bangladesh, Pakistan, etc., but now is grown worldwide for its medicinal and healing properties. With all of its parts possessing medicinal values, this herb is useful for the treatment of various ailments. **The antibacterial, antiseptic, antimicrobial and anti-inflammatory properties of neem make it valuable for human health.**

Neem is a popular herb that has been a part of traditional medicinal remedies dating back almost 5000 years. The neem tree is home to over 130 active compounds. All of these compounds come with many health benefits, including immuno-stimulants, anti-bacterial, and anti-viral compounds. Neem can be used for many different types of ailments. It is used to purify the blood, remove toxins, treat ulcers, treat insect bites, and prevent damage that free radicals might cause in the body. Neem is great for burns, infections, and any type of skin issue as it can destroy the bacteria that cause infections. In addition, **neem can stimulate your immune system to promote faster healing**, when you are suffering from an illness of any kind. There are many great health benefits associated with neem. Here are 14 reasons how neem can help with your health.

Neem leaves contain potent antioxidants such as quercetin and nimbolide which can protect against the damaging effects of free radicals.¹ Harmful free radicals are known to damage DNA and have been implicated in conditions such as diabetes, heart disease, and cancer. They also play a role in aging.² Neem-based supplements and remedies may help you keep these free radicals at bay.

ANTIOXIDANT: Neem oil is often the most talked about, but neem leaves are also extremely beneficial. Neem leaves have been used for many years for cleansing the body. **The many antioxidants that are found in neem leaves can be extremely beneficial when it comes to clearing your body of harmful toxins.** The leaves can be used to make a juice that you drink. This cleansing neem leaf juice is often used to help rid the body of toxins and as a restart for your body. If you are suffering from an illness, drinking neem leaf juice can help provide your body with many nutrients that it needs in order to fight off the illness. You can purchase neem leaf juice from many stores and you can also make it yourself. This natural juice can be one of the best things that you can do for your body when it comes to fighting off illnesses. You can also drink it a few times each week to maintain your health.

GUM INFECTIONS: If you visit India, chances are you will see people chewing on neem twigs. For many years, neem twigs were used as toothbrushes. The oil from the neem twigs has great cleansing properties that can provide you with fresh breath and a pleasant smile. **Neem also has many antibacterial properties that will provide your gums with a deep cleaning. These antibacterial properties can also help to prevent gum diseases such as gingivitis and any teeth issues.** The neem twig fights germs, can help with swollen gums and provides a natural way to whiten your teeth. As you chew on the twig it starts to shred and these shreds work like tiny bristles to get in between your teeth. The bristles also will prevent and destroy plaque. If you do not have a neem twig, you can use neem oil on your toothbrush to get the great antibacterial properties that neem can provide. **Neem powder can be added to toothpaste** also. It has been found to be very beneficial in treating oral/dental problems. It combats gum diseases and keeps the mouth healthy and germ-free, fights bad breath, kills bacteria in the mouth, prevents and reduces plaque, fights cavities, etc. Neem powder is totally oral friendly.

TREATS SKIN DISEASES: Eczema is a skin condition that can be quite uncomfortable. The condition causes people to have outbreaks on their skin that are red and dry. These patches can become irritated and itchy. The skin in the area can even crack as a person is prone to scratching the area as they are uncomfortable. For those that suffer from dry flaky skin or eczema, using neem oil can be extremely helpful. When you have a flare-up, neem oil can help keep you more comfortable. **The neem contains nimbin, nimbidin, and quercetin.** All of these things can help to cool down the redness of the skin and reverse any swelling. Additionally, neem can help to counteract the inflammation of the skin and will build up a protective layer, thus reducing the number of outbreaks a person might have. Many people suffering from

skin conditions of this type find neem oil to be extremely soothing. **You can take one teaspoon neem powder and 1/2 a teaspoon turmeric powder with lukewarm water twice daily.**

If you suffer from acne, chances are that your face is oily. After all, oily skin is one of the main reasons that a person will get pimples on their face. However, what many people do not realize is that acne is caused by oil lying under the skin. In order to treat it, you can apply natural oils to your problem areas. Neem oil contains elements that can help dry up any existing blemishes you might have. When you use neem oil it can help to keep your skin clean and clear of pimples. The **antioxidant properties** can help heal any scabs that you might have on your face or other areas of the skin as well. To use neem oil as a facial cleanser you can mix it with eucalyptus and peppermint oil. This will leave your face feeling fresh and clear of pimples and other blemishes.

No one wants to hear the words, you have lice. Even if you hear someone else say that they have lice, there is a good chance that your head is going to start to itch. Lice is an uncomfortable and embarrassing condition, and the worst part is that it spreads quickly. If a member of a family has head lice, chances are that everyone in the house is going to get it. There are many over-the-counter medications that people often turn to when they get lice. While these shampoos and medications are typically effective, one of the biggest issues with them is that they often contain toxic chemicals. If you have lice and want a more natural treatment, turn to Neem. **Neem contains azadiractin, which is a natural insecticide.** Simply massage the neem oil into your scalp, place a shower cap over your head and leave it on for the night. You should also cover your sheets and bedclothes with neem in order to keep lice out of them after you have washed them thoroughly.

Prepare a face pack by mixing 2 tbsp. neem powder with enough rosewater. You can add 1/2 tsp turmeric to this mixture. Apply it on face and let it dry. Wash off with cold water to reveal radiant skin.

FUNGAL INFECTION: Neem can also be used as a treatment for ringworm, which is not actually caused by a worm despite the name. Studies have shown that **neem is effective at fighting off at least fourteen types of fungi that humans are affected by.** The active ingredients in neem are to thank for this. The active ingredients found in neem that help fight off fungal infections are nimbidol and gedunin. Simply apply neem to the area of the body that is affected. Neem can be combined with oregano oil, which is also effective at fighting fungus due to the thymol it contains.

WOUNDS: As mentioned, **neem contains many antibacterial properties.** If you have a wound on your skin, one of the most important things that you can do is to make sure that you keep it clean. Once you have cleaned the area, you might want to consider putting neem oil on the wound as this can help the wound heal much faster and also works to prevent infections. On top of fighting off possible infections, neem can also **help reduce any inflammation in the area,** helping to alleviate redness and any discomfort you might be experiencing. If you apply neem early after you get a wound, it can also help even out any discoloration or irregularities that you might experience. It can also help prevent any scarring. The soothing properties of the neem will help cool off the area. To apply, dilute some neem oil with coconut oil or another type of carrier oil and apply directly to the area.

IMMUNE SYSTEM: Even the healthiest person can use some help keeping their immune system working at its highest level. After all, the immune system is what helps the body fight off disease. When your immune system is working well you are less likely to get sick or if you do get sick, it does not last long. If you want to ensure that you are doing everything that you can to improve your immune system, neem is a great thing to add to your diet or health regimen. **Neem can help you combat colds and flu** during the colder winter months and also help you keep germ-free during the warmer summer months. **The antioxidants in neem help to prevent damage that is caused by toxins** and free radicals in the body. Vitamin E is abundant in neem and can promote your overall general health.

Viral and fungal infections (COVID 19+): is a very severe disease and causes many deaths each year. It is prominent in many parts of Africa as well as in many third-world countries throughout the world. People are constantly exposed to the risks of malaria. Lack of clean watering holes and basic hygiene, combined with hot weather and tons of mosquitoes, are the main risks of getting malaria. One study found that taking neem oil orally on a daily basis can actually help prevent malaria outbreaks. The study was done in Tanzania and the group that was given the oral neem had fewer malaria cases than the general population. More research needs to be completed, but if neem oil can effectively prevent

malaria, it will help reduce the devastation that this disease causes. For those who are infected with malaria, neem can help reduce the pain of many of the symptoms that the disease can cause.

PREVENTS INTESTINAL WORMS: Intestinal parasites are common in many developing countries in the world and spread through food and water. Mostly found in children, intestinal worms are also found in adults and can have serious implications if they are left untreated for long durations. Some compounds in neem inhibit the parasites' ability to feed, thus interrupting their life cycle and preventing new parasites from hatching. Neem also removes the toxins that the parasites leave behind as they die. This is one of the major health benefits of neem and makes it a very effective anti-parasitic. Chewing neem leaves, drinking neem juice or taking tablets which contain extracts of neem are all good ways to treat parasitic infections.

PURIFIES BLOOD: One of the health benefits of neem is that it is an excellent blood purifier and detoxifier and also helps to increase the oxygen-carrying capacity of blood. **It gets rid of all toxins and harmful chemicals present in blood** and increases the potential of the blood of carrying nutrients. This, in turn, improves the functioning of important body organs like the kidneys and liver. Moreover, it helps maintain healthy circulatory, digestive, respiratory and urinary systems. Consuming neem tea, neem leaves or powder with honey and neem capsules are some ways in which you can consume neem.

REDUCES SYMPTOMS OF ARTHRITIS: Long term disorders of the joints like osteoarthritis and rheumatoid arthritis are extremely painful and chronic and this leads to significant discomfort. **The anti-inflammatory and pain relieving properties of neem can help in reducing the symptoms of these diseases.** Drinking neem juice or the strained water after pureeing the leaves is very beneficial in this respect.

BLOOD PRESSURE: High blood pressure can raise your risk for serious conditions such as kidney failure and heart failure. But neem **may help you keep your blood pressure levels under control.** Animal studies show that neem leaf extracts can cause a drop in blood pressure. One study even found that when animal subjects were given an extract of neem leaves along with salt, they had a much lower blood pressure than the control group which was given only salt. So there you go – neem leaves might just help you ward off high blood pressure!

ULCERS/ANTACID: Intestinal ulcers can leave you with a burning pain and symptoms such as indigestion and heartburn. But neem may be able to help you out if you suffer from this condition. One study found that neem bark extract was able to decrease the secretion of gastric acid by 77% and almost completely heal duodenal ulcers. A glycoside present in neem bark is thought to be mainly responsible for its antiulcer property and ability to control gastric acid secretion.

How To Use Neem

Here's a look at how you can take advantage of the many beneficial properties of neem:

Neem leaves: Traditionally, 2 to 4 grams of powdered neem leaf or 2 to 4 teaspoons (10–20 ml) of neem leaf juice are consumed twice or thrice a day for therapeutic purposes. The leaves are also ground into a paste with a little water and applied topically or added to your bathwater for tackling skin conditions. But neem leaves are also very bitter so you may be able to have only a little quantity of the paste or juice at a time – that too after an allergy test. Neem leaf extract capsules are readily available but should only be taken under the guidance of an alternative medicine practitioner or with your doctor's go-ahead.

Neem leaf teas are usually safe to have as long as you stick to about 2 cups a day.

Benefits and Uses of Neem

The purported health-friendly properties of Neem are numerous and have led to it being used as an antioxidant and for antifungal, antibacterial, and pest control applications. It's also used to reduce inflammation and boost the immune system.

Supplement use should be individualized and vetted by a healthcare professional, such as a registered dietitian nutritionist, pharmacist, or healthcare provider. No supplement is intended to treat, cure, or prevent a disease.

What Are the Side Effects of Neem?

Consuming a supplement like neem may have potential side effects. These side effects may be common or severe. Due to lack of research, little is known about the safety of short-term or long-term use of neem; however, there are some possible concerns and side effects.

Oral consumption can lead to:

Vomiting	Diarrhea
Drowsiness	Encephalopathy (diffuse disease of the brain that affects its function or structure)
	Seizures and coma

Precautions

Children and people who are pregnant or breastfeeding should not use neem supplements due to the lack of safety research in those groups.

Consuming neem oil is not advised. One case report indicated that oral consumption may lead to neem oil poisoning, which can cause symptoms like nausea, vomiting, and seizures.

Neem is widely known for its many therapeutic compounds and medicinal benefits. Be it the skin-clearing natural face packs or immunity-boosting home remedies, neem powder benefits us in several possible ways. While neem leaves, bark, and flowers are extensively used, you may or may not have access to a neem tree. That's when neem powder makes all of its medicinal potentials more readily accessible. An important ingredient in many ayurvedic medicines and treatments, neem powder benefits are significant and many! Keep reading to learn more!

As far as the neem powder is concerned, it possesses most of the medicinal values of neem. It can be used internally in tea form; it can be added to cuisines or used externally as well. Earlier, neem powder was even used as a contraceptive. Nowadays, it is used in cosmetics, soaps, lotions, etc. The intake of neem powder has been found beneficial in treating digestive problems. It also enhances immunity and acts as a blood purifier.

How much neem powder should I take daily?

It is advised to take ¼-½ teaspoon of neem powder twice a day **to start**.
Skin and hair disorders. Make a paste and apply for 15-30 minutes and rinse.

WHO SHOULD USE NEEM POWDER?

Patients who suffer from skin problems like acne, blemishes, and pimples. It acts as a blood purifier and helps to remove the toxins from the body. It is also good for gastric problem like ulcers in gut and treats the constipation, bloating. It helps to remove the toxins (ama) from the body. It is also good for rheumatoid arthritis due to its anti-inflammatory properties. Apart from these it has anti-bacterial, anti-fungal properties and helpful in different infections. It also boosts the immune system of body.

DOSAGE

1/2 to 1 teaspoonful of this powder should be consumed along with plain water after meals, two times in a day.

Health Benefits of Shilajit: The Miracle-Working Himalayan Remedy

Shilajit is a dark brown or black substance that oozes out of rocks. It is typically found in high elevations, such as in the Himalayan Mountains, but it is also found in volcanic areas as well. Shilajit contains large amounts of trace minerals, especially fulvic acid. It has been used medicinally for centuries, particularly in Ayurveda where it is referred to as “rasayana”, which means rejuvenator. In Sanskrit, its name means “Conqueror of mountains and destroyer of weakness.”

Sourced from the Himalayas, shilajit, mineral pitch, or mumijo is as potent as it is exotic. Made of organic plant material and humus from the earth, this ancient remedy is packed with nutrients, including 84 minerals like copper, iron, and zinc.¹ And while the dark, sticky substance may literally be a bitter pill, the results for your health are quite sweet! Courtesy its nutrient richness and healing properties, shilajit has been used to treat all manner of ailment from diabetes to immune system problems and even digestive, urinary, or reproductive health problems.² Here’s a detailed look at its powerful health benefits.

1. Improves Stamina and Battles Fatigue

Shilajit is considered a rasayana or rejuvenating remedy in ayurveda and siddha medicine, helping revitalize the body, reduce ailments, and improve your quality of life. If you need to improve your stamina or rejuvenate the body, this ayurvedic remedy could be a good option to consider. Fulvic acid, a major component of shilajit, can ease fatigue and weakness and give you the boost you need to overcome these problems. The remedy helps with energy production and improves immunity as well.

Animal studies have also found that shilajit can alleviate behavioral symptoms of chronic fatigue syndrome (CFS). While the exact causes for CFS are unknown, dysfunction of the hypothalamic-pituitary-adrenal axis in our body is thought to be a trigger. Shilajit may be able to modulate the axis and bring relief to people grappling with CFS. The study also showed that shilajit can help reverse oxidative damage to cell mitochondria seen in CFS. Mitochondria are involved in the production of energy in the body and shilajit may be able to protect their integrity and function.

2. Boosts Hemoglobin Levels and Iron Absorption

Shilajit may be just what you need if iron deficiency or malabsorption is a problem you face. An animal study found that shilajit given at the dosage of 500 mg/kg had anti-anemic activity, improving hemoglobin levels and red blood cell count and fighting iron-deficiency anemia.

If you have low hemoglobin levels in the blood, taking shilajit along with amla (Indian gooseberry) and iron could also help. Researchers have found that a dose of 25 mg of purified shilajit with 10 mg of elemental iron and 50 mg of amla can help raise levels of hemoglobin by 1 g/dl or more every week. This is especially useful if you have malabsorption syndrome and your body isn’t able to leverage the iron you’ve been consuming through your diet. It is also an alternative if your system has not been responding to conventional chemical or metal remedies

3. Improves Testosterone Levels and Fertility in Men

Animal studies show that shilajit can work as a fertility agent in women as well, helping induce ovulation.⁸

Shilajit may offer respite to men looking to raise their testosterone levels to boost fertility. As one study revealed, taking a 250 mg dose of the ayurvedic remedy twice a day for 90 days helped significantly increase levels of total testosterone as well as free testosterone and dehydroepiandrosterone, a hormone that’s a

precursor to testosterone, in healthy volunteers.⁹ In another study on infertile male patients with total sperm count of under 20 million/ml of semen (oligospermia), taking 100 mg capsules of processed shilajit twice a day helped raise the total sperm count and testosterone levels.¹⁰ Shilajit is also considered an aphrodisiac for men, with animal studies confirming its ability to boost sexual drive and performance.

4. Protects Bones And Joints

Shilajit is also good for your bones and can be used to help fight conditions like osteoporosis.¹² Animal studies confirm that it can improve the mechanical strength of bone tissue and bone weight.¹³ Its anti-inflammatory properties also make it beneficial for those with rheumatoid arthritis or osteoarthritis. Shilajit is said to nourish your joints and can ease inflammation and pain associated with these ailments.¹⁴

5. Offers Relief From Pain

Shilajit also works as an analgesic, easing pain and other discomfort associated with inflammatory or chronic illnesses.¹⁵ In an animal study, the remedy showed potential in chronic pain management, helping reduce the intensity of pain in the subjects.¹⁶ Traditional medicine also uses it as a painkiller for conditions as varied as bone fractures, wounds, headaches, and body pain.

6. Helps Cope With Stress

Shilajit has adaptogenic properties you can tap into if stress is a constant reality.¹⁷ Herbal formulations which combine shilajit with ashwagandha, holy basil, shatavari, and bindii have especially been seen to improve the ability of your body to manage and cope with stress. The adaptogenic properties of these herbs help restore normal physiological functioning which may have been impacted by the stress. And as one animal study found, this potent herbal mixture can be just as effective as well-established and popular restorative and revitalizing remedies like ginseng.¹⁸

7. Boosts Function Of The Urinary System

Karpura shilajit bhasma, a powdered herbo-mineral medicine made with shilajit, aloe juice, and rice wash, has strong diuretic properties and helps flush out excess fluid and sodium in the body. Shilajit is a diuretic and has applications for urinary problems in ayurveda – an effect noted in animal tests as well. When taken along with lots of fluids like water, shilajit as a diuretic can help flush out stones in the urinary tract. It also helps improve bladder function and strengthen and tone the kidneys.

8. Fights Microbial Infections

Thanks to its anti-inflammatory action and ability to counter oxidative damage, shilajit hastens wound healing and can help heal gastric ulcers quicker. Animal studies show that it may work by reducing gastric acid secretion and pepsin levels.

The antiviral properties of Shilajit, courtesy its component humic acid, might make it a possible remedy for some common viral infections. An in-vitro test found that it worked against the herpes simplex virus (HSV) type 1 and 2, as well as the human cytomegalovirus 32 (HCMV) and the human respiratory syncytial virus (RSV).²⁴ Other research has noted its effectiveness against Staphylococcus aureus, Escherichia coli, Pseudomonas aeruginosa bacteria as well as Candida albicans fungi. Together, these pathogens are responsible for many digestive, skin, and respiratory infections that we constantly grapple with.

9. Helps Protect The Heart

Shilajit may work as a cardiogenic thanks to its antioxidant benefits. Animal studies confirm its ability to improve heart function and protect it from myocardial injuries.²⁶ Shilajit may also have a favorable impact on blood cholesterol levels, a risk factor in heart problems like atherosclerosis. In one study of healthy volunteers, taking 2 g shilajit for 45 days helped reduce triglyceride levels and improved HDL levels. The antioxidant status of the subjects also improved.

10. Helps Manage Diabetes

Ayurveda combines shilajit with other herbs like ashwagandha, bhringaraj, guduchi, kutki, and holy basil to make a formulation that brings down hyperglycemia.²⁸

Another area shilajit has garnered attention is in its potential to help those with type 2 diabetes. In one animal study, shilajit helped significantly reduce blood glucose levels and improved the lipid profile of the diabetic test animals. In addition, when shilajit was administered with typical medication for diabetes like metformin, it helped enhance the glucose-lowering ability of the drugs. The destruction of beta cells in the pancreas is thought to have a role to play in the development of diabetes.

11. Fights Addiction-Related Withdrawal

If you are fighting an addiction, shilajit could help ease the symptoms of withdrawal. This has especially been seen in the case of opioid withdrawal symptoms. Shilajit also had a positive impact on tolerance and countered dependence on opioids.³⁰ Other animal studies show that it helps reduce alcohol withdrawal anxiety, both on its own as well as with ashwagandha.

12. May Help Ward Off Alzheimer's

Shilajit is being explored for its potential to help those at risk of developing Alzheimer's disease (AD). The ayurvedic remedy is said to improve cognition and may be able to help prevent or delay the onset of the disease. The primary component of shilajit is an antioxidant known as fulvic acid. This powerful antioxidant contributes to cognitive health by preventing the accumulation of tau protein. Tau proteins are an important part of your nervous system, but a buildup can trigger brain cell damage.

Researchers think that the fulvic acid in shilajit may stop the abnormal buildup of tau protein and reduce inflammation, potentially improving Alzheimer's symptoms. However, more research and clinical trials are needed.

Shilajit is traditionally used to treat epilepsy and may be able to reduce the frequency and intensity of seizure attacks. Animal studies confirm that it can help with faster recovery from a seizure and may even have a protective effect against them.

Fulvic acid in shilajit may be responsible for its potential to protect against dementia. The fulvic acid in this herbal cure may help by blocking tau protein aggregation. A buildup of tau protein is thought to impair brain cells involved in learning and memory and has been noticed in people with neurodegenerative conditions like Alzheimer's disease or with cognitive impairment.³⁴ However, longer and more extensive studies are needed to establish if shilajit is a viable treatment or preventive measure.

13. Works As A Remedy For Altitude Sickness

The anti-anxiety and adaptogenic properties of shilajit also make it a great remedy for insomnia.³⁵

Travel to high altitudes can sometimes affect the body adversely, causing headaches and lethargy. Shilajit helps combat precisely these problems, thanks to the ability to supply energy and nutrients to your tissues. It also stimulates your immune system and helps you better cope with the stress of high altitudes both mentally and physically. It can also boost the ability of your blood to carry oxygen whilst also improving the blood circulation itself, something that's invaluable if you're experiencing hypoxia or oxygen deficiency. You could take it as a rejuvenator when you travel to high altitudes, especially if you're prone to such issues.³⁶

14. Has Anti-Cancer Benefits

Shilajit may be able to fight tumor growth and can be toxic to cancer cells. This is possibly linked to its antioxidant, anti-inflammatory, and immune-modulating properties. It may also offer protection against radiation-induced damage during treatment for cancer. In one animal study, it helped counter the oxidative stress and cell damage associated with radiation and protected the ovaries.

15. Gastric Ulcers

Shilajit helps treat gastric ulcers in two main ways. Firstly, it increases the carbohydrate to protein ration in the stomach. Secondly, it increases the mucus barrier in the stomach. This makes it a good natural treatment for ulcers.

Taking Shilajit Safely

When using shilajit, be sure to use pure shilajit that has been processed and is free of contaminants. Raw shilajit may be contaminated with fungal organisms or free radicals that can cause damage to the cells in your body.³⁹ If it is impure, shilajit may even cause dizzy spells, fainting, fatigue, constipation, or a burning sensation. There are also concerns around very high levels of heavy metals in impure shilajit, so be sure to buy yours from a reputed ayurvedic manufacturer.

Don't take shilajit if you have sickle cell anemia, hemochromatosis (too much iron in your blood), or thalassemia. It's possible to be allergic to this supplement. Stop taking shilajit if you develop rash, increased heart rate, or dizziness.

Shilajit is traditionally had with milk or incorporated into other herbal formulations.

Shilajit is often given at doses of 125–250 mg taken twice a day. Dosages of half a gram to 1 gram are typically given for treating conditions like diabetes though this will vary depending on the ailment you're trying to treat and your own medical history. A word of caution here – do not discontinue any existing lipid-lowering, diabetic, or other medication without first consulting your doctor. *Using it in addition to your diabetic medication may also cause blood sugar to drop suddenly*, so always check on whether any dosages need to be altered and if it is safe for you to have shilajit. You may also need to check with your doctor for any interactions with existing medication you may be on.

Side Effects of Shilajit

Shilajit usually does not cause any side effects. However, some people do experience some nausea and diarrhea when they first start taking shilajit. This is reported to be a side effect of the detox properties of the fulvic acid in shilajit.

To reduce the likelihood of side effects, start out by taking a smaller dosage of shilajit and work your way up to the recommended dosage.

Burdock root

Burdock root is a vegetable native to Northern Asia and Europe, though it now grows in the United States. The burdock plant's deep roots are very long and vary in color from beige to brown and nearly black on the outside.

Burdock root has been used for centuries in holistic medicine to treat a variety of different conditions. Traditionally, it's been most commonly used as a diuretic and a digestive aid (1).

Now, researchers have discovered numerous potential uses and health benefits for burdock root. These benefits may be extensive enough to warrant using burdock root as a complementary treatment for certain conditions.

Burdock root benefits

1. It's a powerhouse of antioxidants

Burdock root has been shown to contain multiple types of powerful antioxidants, including quercetin, luteolin, and phenolic acids (2).

Antioxidants protect cells in the body from damage due to free radicals. They can help treat and prevent a number of different health conditions.

Antioxidants can also help to reduce inflammation. One study found that burdock root reduced inflammatory markers in the blood of patients with osteoarthritis

2. It removes toxins from the blood

One of the most common uses for burdock root has been to purify the blood.

Recent evidence has found that burdock root contains active ingredients in its root system that can remove toxins from the bloodstream.

Research also found that burdock root effectively detoxified blood and promoted increased circulation in the surface of the skin (1).

3. It may inhibit some types of cancer

Burdock root, as it turns out, may not only purify the blood, but it may also inhibit certain types of cancer.

Research has also found that burdock had "potent inhibitory effects" on cancer growth caused by cancers like pancreatic carcinoma (1). Another study found burdock root significantly interfered with cancer cell growth.

While more research is needed to determine the full effects of burdock on different types of cancers and tumors, this is still a remarkable finding

WebMD: Burdock root has been used as food and medicine for centuries in various ways, including as a diuretic to aid digestion. It comes from the plant burdock (*arctium lappa*) that is related to daisies and sunflowers. It's native to North Asia and Europe, but is grown in other parts of the world, including North America.

The roots of the burdock plant are believed to be the most beneficial part of the plant. While scientific research is limited at this time, burdock root contains a variety of nutrients such as antioxidants and inulin that are known to help with conditions like skin disorders, inflammation, digestion, and more.

Health Benefits

Burdock root is often eaten, yet, can also be dried and steeped into tea. It works well as a source of inulin, a prebiotic fiber that aids digestion and improves gut health. Additionally, this root contains flavonoids (plant nutrients), phytochemicals, and antioxidants that are known to have health benefits.

In addition, burdock root can provide other benefits like:

Reduce Chronic Inflammation

Potential risks and side effects

There's limited or no research available on the pediatric uses of burdock root, and its safety hasn't been studied in children. Because of this, you should never give your child burdock root unless under the supervision of your healthcare provider.

Some potential risks of burdock include the following:

If you're taking burdock supplements, take only in moderation. More research is needed to determine the safety of the supplement.

Burdock is considered to be safe to eat, but you should only buy it from reputable sellers and should never collect it in the wild. The burdock plant resembles belladonna nightshade plants, which are highly toxic. They often grow together.

Burdock root is a natural diuretic, so you shouldn't take it if you're dehydrated. You also shouldn't take it if you're also taking other diuretics or water pills, as it can increase dehydration.

If you're allergic to chrysanthemums or daisies, you may be at an increased risk of having an allergic reaction to burdock root and should avoid it.

Pregnant women or women trying to become pregnant shouldn't take burdock root or supplements.

Health Risks

Burdock root is considered safe to eat or drink as tea. However, this plant closely resembles belladonna nightshade plants, which are toxic. It's recommended to only buy burdock root from trusted sellers and to refrain from collecting it on your own. Additionally, there is minimal information on its effects in children or pregnant women. Talk with your doctor before using burdock root with children or if you are pregnant.

Here are some other possible health risks to consider if using burdock root:

Increased Dehydration

Burdock root acts like a natural diuretic, which can lead to dehydration. If you take water pills or other diuretics, you should not take burdock root. If you take these medications, it is important to be aware of other drugs, herbs, and ingredients that may lead to dehydration.

Temporary Bloating

Burdock root is high in inulin, which helps with digestion. However, some people may experience temporary bloating or gas after eating it. You may be at increased risk of these symptoms if you're sensitive to other foods high in inulin. In general, research suggests that up to 20 grams of inulin a day is tolerated by most people.

Amounts and Dosage

There is little research and guidance on the recommended daily amount of burdock root. Ask your doctor to make sure the dosages of supplements and tinctures are appropriate for your health needs.

Forms and doses

Incorporating burdock root into your diet can be as simple as learning a few new recipes.

To cook burdock root, you'll first need to peel it. You can then fry, boil, or sauté it.

Drug interactions may occur if salicylanilides such as dibromsalan and niclosamide are co-administered. Abortions in cattle and death in sheep have been reported after using these medications together. Abortions in domestic ruminants have been associated with concurrent use of anti-trematode therapeutic agents. [citation needed]

Fenbendazole (Treatment of MARBURG/Ebola)

Fenbendazole is a benzimidazole that offers a broad spectrum anthelmintic effect primarily used to treat parasites. Some common names for Fenbendazole are Panacur® and Safe-Guard®. Over recent years, Fenbendazole has gained popularity as an alternative form of treatment for cancer. We've broken down the essential things you need to know about this dewormer for cancer in humans.

Fenbendazole is a versatile medication frequently prescribed to treat parasitic infections in both animals and humans. It's categorized under the benzimidazole group of drugs. Its primary function is to disrupt the energy-producing processes of the parasites, causing them to perish.

Globally, parasitic infections pose a considerable health challenge, impacting countless people and animals. Common culprits behind these infections include roundworms, hookworms, whipworms, and tapeworms.

Parasitic infections might not always show signs immediately, but over time, they can lead to various puzzling and challenging health issues:

- Nutrient shortages in diet,
- Cravings for sweets and certain foods,
- Swelling and discomfort in the stomach,
- A drop in red blood cells causing anemia,
- Constant tiredness,
- Elevated body temperature,
- Sweating during the night,
- Aching muscles and joints,
- Skin changes, like a reddish facial blush called rosacea,
- Itchiness near the rear end,
- Itching in the vaginal area.

Fenbendazole has established its reputation as an effective treatment for gastrointestinal parasites. Its broad-spectrum action against various parasites makes it a cornerstone in managing these infections. Frequently, fenbendazole is recommended for the treatment of various worm-related illnesses, including strongyloidiasis, trichuriasis, and enterobiasis.

Fenbendazole for Parasites – How it Works?

Fenbendazole operates differently from other worm-fighting drugs. Its unique way of working targets a particular protein, called beta-tubulin, found in the tiny tube-like structures of parasites. Structures known as microtubules play a big role in many cell activities, including cellular division and reproduction.

When a parasite takes in fenbendazole, the drug attaches to the beta-tubulin inside these microtubules. The formation of microtubules is disrupted by this interference. This throws off the parasite's ability to make more of its kind because it can't reproduce its cells as it should.

Moreover, this drug messes with the parasite's way of using glucose, which is like its fuel. By blocking how it uses this fuel, fenbendazole forces the parasite to run out of energy. Without energy, the parasite starves and dies.

The beauty of fenbendazole lies in its precision. It specifically targets the beta-tubulin found within parasites, rather than affecting the same component in the host. So, while it's doing its job on the parasites, it doesn't harm the host animal's cells. That's why fenbendazole is seen as a safe way to get rid of parasites in many cases.

Side Effects of Fenbendazole Consumption

Many people ask, "Is fenbendazole safe for humans?" According to researchers, fenbendazole is known to be safe and well-tolerated by most species. The absorption rate of the drug is very low in humans, and it has a low degree of toxicity, making fenbendazole treatment for cancer alone a good candidate for anti-cancer therapy. When taking Panacur C for cancer, single oral doses of up to 2000 mg per person for ten consecutive days were well tolerated in humans.

It's important to remember that just because something is poisonous for one species, does not make it poisonous for all. Chocolate is perfectly safe for humans but fatal for dogs in moderate doses.

Possible Side Effects and Risks

There is some concern that fenbendazole can affect the liver. Fenbendazole belongs to the benzimidazole class of anthelmintics, and other drugs within this class have been reported to cause human hepatotoxicity. Due to their structural similarities, it is thought that fenbendazole is hepatotoxic as well. However, research suggests that fenbendazole by itself has no negative effect on the liver any more so than other commonly used drugs.

Dosage for Humans

A man named Joe Tippens, a survivor of lung cancer thanks to fenbendazole, created the Joe Tippens protocol and suggested taking a dose of 222 mg per day, for three days consecutively and four days off. Other components of the protocol are vitamin E, curcumin, and CBD oil. fenbendazole is really hydrophobic and is poorly absorbed from the intestinal tract. Taking it with or after a meal improves absorption. protocol that cured Joe Tippens of his cancer is as follows:

The precise Joe Tipp's Protocol (the original version) – complimentary cancer treatment

Fenbendazole 222 mg. Take 1 capsule three days a week, once a day after a fatty meal.* Then take no fenbendazole for four days. Repeat this cycle every week.

Bio-Available Curcumin 600 mg. Take 1 capsule two times a day after breakfast and lunch with no pauses.

CBD oil 25 mg. Take 1-2 drops (total ~25 mg) under the tongue every day before sleep.

Fenbendazole protocol to kill parasites:

Fenbendazole is commonly employed as an antiparasitic treatment. The typical dosage recommendation is 1 gram for every 10 lbs of body weight, administered consecutively for three days. This cycle is then repeated biweekly for a period of 2-3 months. Research indicates that dosages up to 2000 mg did not result in any harmful side effects. It's noteworthy that 1 gram of Fenbendazole paste contains 100 mg of the active ingredient. A regimen that some adopt (which may be geared more towards cancer, but is possibly addressing parasitic infections) is to take 222 mg daily for three days, pause for 4-5 days, and then recommence the cycle.

In order to effectively combat parasitic infections, it is of utmost importance to embrace a treatment strategy that follows a cyclical pattern. Simply using the fenbendazole improperly might not target the egg sacs, leading to ongoing inflammation in the body.

Starting a treatment for parasites may lead to noticeable symptoms, including changes in bowel movements, the presence of gas, or even diarrhea. It's essential to maintain consistency in treatment by ensuring there's no more than a 2-3 week gap between sessions. This duration is known as the "cycle length." Extending this cycle might provide a window for a more significant number of parasite eggs to hatch and mature. When you eventually administer the next round of treatment, you might end up killing a vast number of parasites at once. This could trigger a significant allergic response, known as the Herxheimer reaction (named after the doctor who first detailed the phenomenon). Symptoms of this reaction can start with minor histamine-induced issues like sneezing or watery eyes but can escalate to more severe symptoms like fever, rapid heartbeat, shortness of breath, brain fog, and even emotional instability. Using shorter treatment cycles can generally help avoid this reaction.

HEALTH BENEFITS OF COMFREY

Comfrey: An Overview

- Botanical Name: *Symphytum officinale*
- Family: Boraginaceae
- Other Common Names: Knitbone, gum plant, healing herb, hipbone, knit back, boneset
- Parts Used: Leaves, roots
- Energetics: Moist
- Thermal Properties: Cool
- Actions: Astringent, anti-hemorrhagic, anti-inflammatory, anti-rheumatic, anti-ulcer, demulcent, expectorant, vulnerary
- Taste: Sweet, salty
- Plant Uses: Wound healing, scar formation/diminishing, broken bones, sprains/strains, bites, stings, rashes, burns, ulcers, eye strain, respiratory conditions, irritable bowel syndrome, fibromyalgia, urinary health
- Plant Preparations: Tea, decoction, cream, lotion, ointment, tincture, liniment, poultice, eyewash, green juice, capsules, various others

Toxicities/Warnings: Ingestion of comfrey is controversial and may be harmful to the liver. If you do ingest comfrey, supplement with liver-supporting herbs. Young children, and pregnant or nursing mothers, should not take comfrey internally.

Comfrey is actually a broader genus scientifically known as *Symphytum*, which is used extensively in herbal medicine. The flowers can range in color from white to purple and the plant is mainly found in northern Europe. Interestingly enough, there is a decent amount of debate regarding the safety of using comfrey, as some of the volatile chemical components can be potentially dangerous to human beings when consumed improperly. Most people only recommend topical use of comfrey, as there have been some traditional suggestions for internal use when done properly.

The root and leaves of the comfrey plant have been used in traditional medicine in many parts of the world. In Japan, the plant has been harvested and used as a traditional treatment for over 2,000 years. It was originally called “knitbone” and people used it to treat:

- *muscle sprains*
- *bruises*
- *burns*
- *joint inflammation*

Europeans have also used comfrey to treat inflammatory conditions, such as arthritis and gout. Some traditional healers have also used it to treat diarrhea and other stomach ailments.

The roots of leaves of the comfrey plant contain chemical substances called allantoin and rosmarinic acid. Allantoin boosts the growth of new skin cells, while rosmarinic acid helps relieve pain and inflammation. Extracts are still made from the roots and leaves and turned into ointments, creams, or salves. These solutions typically have a comfrey content of 5 to 20 percent.

According to the same research review, results also suggested that comfrey can help treat osteoarthritis, as well as some injuries, such as ankle sprains. A study reported in Phytotherapy Research Trusted Source also suggests that creams containing comfrey root can help relieve upper and lower back pain.

Wound Healing

When you apply comfrey to your skin, it can have some benefits on rashes and irritations. The high content of antioxidants, as well as vitamin C, makes comfrey pastes and salves the ideal solution for speeding up the healing of wounds. Antioxidants also help eliminate foreign substances in the body and preventing cell death, while vitamin C's importance in producing collagen means that it is necessary to produce new skin cells for healing.

Some clinical research supports the claim that comfrey has wound-healing powers. For example, a research review published in the journal *Complementary Therapies in Medicine* found some evidence that comfrey can help heal abrasion wounds. The authors note that topical applications of comfrey appear to be safe, but more research is necessary to learn about the potential risks and side effects of using comfrey on your skin and wounds

The most well-known property of comfrey is its ability to help your body heal injuries. Not only does it speed up recovery on the surface level, but the primary constituent, allantoin, penetrates into the tissues of the body to speed healing of sprains, strains, and even broken bones. Not only does comfrey significantly speed up healing, but it also helps to facilitate proper healing. Comfrey can help minimize scarring, and may even be useful for fading established scars.

Those who are hesitant about using comfrey internally may still find it useful in some near-internal applications. A comfrey tea or decoction can be used in the mouth as a rinse or gargle. It's useful for healing bleeding gums, soothing a hoarse voice, and relieving pain from throat infections. Comfrey also can also be used as a soothing and healing eyewash. Comfrey tones and soothes the muscles and other tissues of the eye, while also helping to repair any damage. The cornea of the eye is often said to be the fastest-healing tissue in the human body. Imagine how it can heal with the help of comfrey!

Reduced Pain

If you're suffering from any sort of chronic pain in your body or if you're recovering from an injury or surgery, applying comfrey salves and lotions to those areas can quickly soothe that pain. Analgesic qualities in herbs are particularly valuable, and the organic compounds and antioxidants found in comfrey serve that purpose quite nicely for aches and pains.

Anecdotally, comfrey also seems to help speed up muscle recovery after exercise. This makes sense because muscle recovery is essentially the act of repairing damaged muscle fibers. But proof of comfrey's effectiveness is not limited to anecdotal evidence. Medical research confirms comfrey's value in treating pains and injuries. For example, in a double-blind study, researchers found comfrey to be approximately four times as effective at treating osteoarthritis of the knee as was the placebo.²⁰) Another study found that comfrey may be superior to diclofenac gel, a prescription anti-inflammatory drug.²¹) The medical literature clearly supports comfrey's traditional use as a healing plant.²²)

Anti-inflammatory Activity

In a similar way as the analgesic substances in comfrey, the various organic compounds, like saponins and tannins, also serve as anti-inflammatory components of this powerful herb. If you suffer from arthritis, gout, or other inflammatory disorders, use comfrey salves as often as necessary. The lotion is so potent, however, that you can afford to be quite frugal with the oils and creams.

Comfrey is also an excellent herb for reducing pain. Its anti-inflammatory, demulcent, and astringent attributes combine to reduce swelling, soothe, protect, and tone inured, angry tissues.²³) Use it for musculoskeletal pain, nerve pain, bites, stings, burns, sprains, strains, and just about any other pain. It's astringency also helps to stop bleeding

Boosted Immune System

As mentioned earlier, vitamin C is a major component of comfrey, and ascorbic acid's primary role in the body is to stimulate the production of white blood cells, which is the first line of defense of the body's immune system. By increasing the strength of your immune system, even from topical applications, you can improve conditions like jaundice and various vitamin and immune deficiencies.

Better Bone Growth

One of this herbal remedy's nickname is knitbone because it can help speed up the healing process for broken bones, as well as other injuries. It is also rich in calcium, which is a key ingredient in bone growth. The unique combination of organic compounds found in comfrey can stimulate the regrowth of bone minerals, by facilitating more efficient uptake and use of these minerals within the body.

Anticancer Potential

The antioxidant substances found in comfrey also mean that it has the potential for anti-cancerous activities. Drained Shrotriya, Dr.Gagan Deep, Dr. Kumaraguruparan Ramasamy, et al. published a study in the Carcinogenesis Integrative Research Centre Journal that the antioxidants seek out free radicals, the dangerous byproducts of cellular metabolism, and eliminate them from the system, preventing them from causing other cells to mutate or die. Although this research is still in the early stages, any advances in herbal cancer treatments need to be accounted for.

Improved Respiratory Health

Again, it must be stressed that comfrey should not be consumed, but even inhaling or rubbing it on the chest can work as an expectorant. If you are experiencing clogged sinuses or congestion in your respiratory tracts, this plant can help you cough that out and eliminate it from your system. Those phlegms and fluids can catch bacteria and other pathogens, thus, extending or worsening illnesses, but not if comfrey is administered!

Skin Care

If you are suffering from anything from a spider bite to a bad case of eczema, comfrey can help alleviate the symptoms and reduce irritation. A combination of vitamin C, antioxidants, and anti-inflammatory compounds makes this the perfect solution for skin irritations of all kinds, from psoriasis to acne.

Comfrey Preparation and Usage

Oil

There are two popular ways to make comfrey oil. The slower method involves packing a glass jar with comfrey leaves and then pouring oil over them. Dry leaves work best with this method. They have less moisture, which lowers the chance of spoilage. Screw a lid on the jar, place it in a paper bag to protect it from direct sun exposure, and place it on a warm windowsill. After two weeks, strain out the herbs and rebottle the oil. For the faster method, place your comfrey and oil in a pan and heat them on low until the oil takes on the color of the herbs, around 30 minutes to an hour. Strain out the herbs and bottle the oil.

Decoction

Use 1-3 teaspoons of dried comfrey root per 1 cup of water. Bring the water to a boil, then reduce the heat and let it simmer for 10-15 minutes. Drink this up to three times a day.³⁰ If you do not want to ingest the decoction, you can use it as a mouthwash or gargle for infections, dry mouth, sore throat, and bleeding gums.

Tea/Infusion

For a hot infusion, pour 1 cup of boiling water over 2 teaspoons of comfrey and let it steep for around 10 minutes, until it is cool enough to drink. For cold infusions, pour cold water over the comfrey and let it stand for 6-8 hours. Hot infusions are faster, but cold infusions are better at drawing out the mucilage. Use whichever is most appropriate for your situation.

Tincture

Place the plant material in a glass jar. You can use crushed fresh leaves, chopped-up fresh roots, or powdered comfrey. Pour alcohol over the herbs so that they are covered by an inch or two of liquid. Close the lid and shake it all up. Label the jar, and place it in a dark, warm location for at least 2 weeks, although more time is better. Shake the jar up once a day for the first week or so. After 2 weeks (or longer), strain out the herbs and rebottle your new tincture.

Comfrey root tincture can be used in 2-4 ml quantities, up to 3 times a day.³¹ If you're concerned with PAs, remember that you can also use the tincture topically, as a liniment. If you're sure you will only use it topically, you can save money by using rubbing alcohol instead of more expensive choices, like vodka. Just make sure you label the jar clearly so no one accidentally swallows rubbing alcohol!

Herbal Bath

Put powdered or crushed comfrey into a clean sock or cloth bag and tie it so that water from the faucet will flow through it. Turn the hot water on all the way and let the tub fill to about halfway. Then, adjust the water temperature as desired. Soak as long as you like, enjoying the soothing, pain-relieving, and healing properties of comfrey.

I do have one caution. The mucilaginous nature of comfrey may start to clog up your cloth bag, causing water to be forced out the top of the bag, pulling herbs with it, and generally making a mess in your bath.

This doesn't hurt anything, but it is a bit unsightly. If you notice this starting to happen, just remove the bag, tie it off, and let it float in your bath like a tea bag.

Poultices

You can make a comfrey poultice with the leaf or the root. Crush or powder the plant material and mix with water to form a paste. Apply this thickly and liberally to the desired area. Wrap it with cloth or a bandage to hold it in place. Comfrey poultices should be left in place for several hours (overnight is ideal).

For convenient, ready-made poultices, fill a blender with comfrey leaves and add enough water to blend it into a slurry. Lay out a cloth and pour the mixture onto it. Cover this with another cloth and slide it into a zipper-lock bag. Place this flat in your freezer. You can stack several of these on top of each other and have them ready as needed.

Comfrey poultices are excellent for wounds, sores, bruises, bites, pain, arthritis, and even broken bones. However, you should not use comfrey on a deep puncture wound.

Word of Caution:

There is a high concentration of specific alkaloids in comfrey that makes them controversial and potentially toxic when used inappropriately. These alkaloids are particularly potent when consumed, which is why many medical professionals do not suggest any internal use and only limited topical use instead. As with any new herbal remedy, check with a trained herbalist or medical professional, as some of the complications of this high alkaloid content can affect the health of your liver. Use of comfrey is restricted in some countries such as UK and U.S. so consult your local health specialist before use.

While comfrey is well-known for its health benefits, it also poses some risks. It contains compounds that can harm your liver. It may also be carcinogenic. As a result, many countries have banned the sale of oral comfrey preparations. Many experts also advise against using topical comfrey on open wounds.

But comfrey may be acceptable for short-term use on your skin and closed wounds. You can purchase topical comfrey preparations from many health stores. Talk to your doctor before using them to learn more about the potential benefits and risks.

Ingestion of comfrey is controversial, with views ranging from "it's harmless" to "it's too dangerous to ever use internally." The issue centers around pyrrolizidine alkaloids (PAs). PAs are plant compounds which can range from harmless to deadly. The PAs in comfrey are thought to be hepatotoxic (toxic to the liver).

In one study, rats were force-fed egregiously large amounts of comfrey. Some of these rats were later shown to develop liver tumors.³²) The quantities consumed were entirely unrealistic and do not represent a true-to-life use of the herb. But humans are not rats. We do not always react to chemicals in the same ways. Pigs were fed the same proportion of comfrey and had no ill effects.³³) On the other end of the spectrum, horses appear to be very sensitive to PAs. So, when it comes to PAs, are we more like rats, pigs, or horses?

There simply haven't been human safety trials with comfrey. This is no doubt partially due to ethical and safety concerns. Comfrey's PAs may very well be dangerous to the liver. But we must remember that the

presence of liver damage does not automatically mean that comfrey was to blame. We must also consider lifestyle choices, pharmaceutical use, and pre-existing conditions.

So, is comfrey safe to use internally or not? It's still up for debate. Some herbalists recommend erring on the side of caution and avoiding internal use of comfrey. Some allow for short-term internal use with mature leaves, but never the root. And some, like Susan Weed, have been taking and recommending nourishing herbal infusions of comfrey for years with no apparent ill effects.

The truth is, life is complicated. Some people may be more vulnerable or more resistant to PAs. Different species of *Symphytum* plants have different amounts of different types of PAs. Surprisingly, some may not have any PAs at all.³⁴) Various preparation methods may impart greater or lesser levels of PAs. And other herbs, pharmaceuticals, and lifestyle choices may also have an effect on your body's ability to resist potential damage from PAs.

People with compromised liver health should likely avoid internal use of comfrey. Babies and small children should also avoid internal use, as should pregnant and nursing mothers. If you do ingest comfrey, you would probably benefit from taking it with liver protecting herbs, such as milk thistle or cleavers.

The risks of eating comfrey

Historically, some people have eaten comfrey leaves as a vegetable. Traditional healers have also used oral preparations of comfrey to treat stomach issues, such as ulcers, colitis, and diarrhea. You can also drink dried comfrey root and leaves as tea.

Today, eating or taking any form of comfrey by mouth isn't recommended. It's considered unsafe, due to the pyrrolizidine alkaloids that comfrey contains. These are dangerous chemicals that can cause cancer, severe liver damage, and even death when you consume them. For this reason, the Food and Drug Administration and European countries have banned oral comfrey products.

Modern scientific studies have found some evidence to support comfrey's use in treating minor wounds and joint pain, but oral preparations of the plant have also been linked to liver damage and cancer. You should never take comfrey by mouth. You should also avoid using it on open wounds.

Comfrey may be safe to apply to your skin or closed wounds for short periods. Always talk to your doctor before using products that contain it. They can help you understand the potential benefits and risks. They may advise you to avoid comfrey, especially if you're:

- a child
- an older adult
- pregnant
- breast-feeding
- someone with a history of liver disease

Marshmallow Root health benefits

What Is Marshmallow Root?

It's a plant native to Africa and parts of Europe that's used to make an herbal treatment that's been utilized for centuries.

History

Marshmallow root (*Althaea officinalis*) has a very long history in folk medicine that goes back to ancient Greek and Egyptian times. Over 2,800 years ago, references to this plant were made in Homer's "Iliad," since at the time this "slippery" herb was a popular way to *treat coughs, sore throats and congestion*.

One of the reasons marshmallow candies got their name is because of the "fluffy" qualities of marshmallow root. Fibrous extracts from *Althaea officinalis* swell up in the body and form a soft, gel-like substance.

Today, this plant is still used by holistic practitioners in many of the same ways it was thousands of years ago, since within the plant lay *powerful active ingredients that help break up mucus, reduce inflammation and kill bacteria naturally*. It's also become an important herb in the Ayurvedic medicine and Unani healing practices, which utilize many different plants to boost immunity and prevent disease.

Marshmallow root, or *Althaea officinalis*, is a flowering plant that has played a role in herbal medicine for centuries. Many people use marshmallow root for various ailments, including coughs, skin irritation, and digestive problems, such as ulcers. It comes in the forms of a powder, capsule, tea, and cough syrup.

Known throughout the ancient Egyptian, Arab, Greek, and Roman cultures, this herb has been used continually for at least 2000 years. In traditional folk practices it was given to soothe and moisten mucous membranes of the respiratory, digestive, and urinary tracts, and also as an external poultice. This plant has been used in beverages, desserts, candies, cosmetic creams, and was the "root" of the original marshmallow confectionery. Marshmallow root provides natural mucilage that supports, soothes, and moistens mucous membranes of the respiratory, digestive, and urinary tracts.

Most of the mallows are considered edible and have been used as a food source. The Romans considered a dish of mallow a delicacy. Further, the 16th century Italian physician and botanist, Prosper Alpinus, reported that the Egyptians also ate mallow. Mallow was boiled and fried with onions and butter in the Arabic speaking countries of the middle east and Asia in times of famine or crop failure. The use of the herb spread from Greece to Arabia and India, where it became an important herb in the Ayurvedic and Unani healing tradition. In Ayurveda, the root was used to reduce vata (dry constitutional type) and increase kapha (wet constitutional type) and was considered to be energetically cold, sweet tasting, and moistening.

Marshmallow root comes from the marshmallow plant and looks like a brown, fibrous husk. The flowers, root, and leaves of the marshmallow plant are edible. The medicinal properties of marshmallow root come from the mucilage, or sap-like substance, that the plant produces. The mucilage of the plant contains antioxidants, and research suggests that it forms a coating over skin and the digestive tract. By doing this, it may help with skin irritation and digestive issues, such as ulcers.

Just as the ancients did, we too can eat all parts of the marshmallow. The seeds, leaves, and flowers can all be put in salad. The leaves are tasty steamed like kale or collard greens, and the root can be boiled and then fried. As the story goes, marshmallows are one of the oldest desserts known to man, with accounts of ancient Egyptians making candies of marshmallow root and honey. These delicacies were naturally reserved for the gods and royalty. However, the first confection which resembled our modern-day treat was made in France

around 1850. Made by hand until 1900, marshmallow root was added to corn syrup, egg whites, and water and was heated, and poured into molds. By 1955 there were 35 manufacturers in the US creating what we know today as the puffy, white, indispensable addition to s'mores.

Researchers have not yet thoroughly investigated the effects of marshmallow root in humans. Most of the research to date has involved animal studies or very small-scale human studies, so more studies are necessary to confirm how effective the root is in humans.

[According to naturopath John Lust (the nephew of naturopathic pioneer Benedict Lust), "Althea's particular excellence is in soothing irritated tissues." He further praises the tea of leaf and flower as a superb gargle, and a cold infusion of the root to soothe the throat. The roots contain a greater amount of mucilage than leaves and thus each lends itself to slightly different preparations and uses. The leaves are diuretic and expectorant and are used to *relieve lung dryness and to soothe the urinary tract*. Various herbalists have differing ideas regarding the best use of the root and plant. According to the late Michael Moore, the leaves of the similar plant *A. rosea*, are best topically as a poultice, and the root, for urethral stimulation. David Hoffman suggests the root to support digestion and for topical applications, and the leaf for supporting the lungs and urinary system. According to herbalists Paul Bergner and Simon Mills, marshmallow stimulates a "vital reflex" which instructs the body to moisten the mucous membranes.]

Health Benefits

One 2023 review on therapeutic herbs for wound healing found that marshmallow root has immune-system enhancing and antibacterial properties that can kill gram-positive bacteria (characterized by the color the bacterial turn when staining in the lab) and speed healing.

- Contact Dermatitis
- Aiding in Metabolism
- Marshmallow root affects hormones. One animal study from 2014 found marshmallow root extract impacted thyroid-stimulating hormone (TSH) and may aid in metabolism (the body process that changes what you eat and drink into energy).³
- Irritable Bowel Syndrome
- Treating Cough and Sore Throat

Marshmallow root is used in herbal remedies to relieve coughs and throat pain. Researchers say the effects of marshmallow root's medicinal extracts are immediate and offer a protective, antioxidant-rich film that coats inflamed mucosa (the inner lining of the nose, throat, and lungs), soothes irritation, and helps relieve coughs. This film protects the respiratory tract, promoting faster symptom relief and healing.

- dry coughs and colds
- dry mouth and low saliva production
- bacterial infections, including bladder infections, urinary tract infections and respiratory infections
- bronchitis and tonsillitis
- joint pain caused by swelling/inflammation
- inflammation of the lining of the stomach
- digestive issues, including diarrhea, stomach ulcers, constipation
- inflammatory bowel disease, leaky gut syndrome and autoimmune disorders
- burns, wounds, insect bites or poultices on the skin
- eczema and dermatitis of the skin
- water retention, bloating and PMS

Here's more about some of the top marshmallow root benefits:

Marshmallow root comes from the marshmallow plant and looks like a brown, fibrous husk. The flowers, root, and leaves of the marshmallow plant are edible. The medicinal properties of marshmallow root come from the mucilage, or sap-like substance, that the plant produces. The mucilage of the plant contains antioxidants, and research suggests that it forms a coating over skin and the digestive tract. By doing this, it may help with skin irritation and digestive issues, such as ulcers.

Health Benefits of Marshmallow Root

Marshmallow root supplements are primarily used to ease discomfort relating to inflammation in the throat and lungs, in the digestive tract, and in the urinary tract.

Marshmallow root contains the following beneficial plant compounds:

L-rhamnose

D-galactose

D-galacturonic acid

D-glucuronic acid

Dosing of Marshmallow Root Tea

You can find marshmallow root online and in health food and grocery stores in teas, tinctures, capsules, and other extracts, as well as in creams, balms, and and salves for the skin. Dosing depends on method of use and includes teas and salves. Marshmallow root is considered safe with side effects being rare.

General Guidelines for dosing Marshmallow Root

Dosing is based on guidelines from the European Scientific Cooperative on Phytotherapy (ESCOP), an organization that reviews the therapeutic uses of herbal products based on scientific evidence and leading expertise. Marshmallow root has been dosed at 0.5–5 grams in 150 milliliters of water given three times daily. Root syrup, or liquid marshmallow root, is commonly dosed at 2–8 milliliters a day.

If taking internally -- 1920 mg daily= .07 ounce

Marshmallow root can be found in the following:

Tea

Capsules

Tinctures

Salves, creams, or skin balms

You can find commercial marshmallow root tea in single-serving tea sachets (a small, scented cloth filled with herbs). Follow the steeping directions, which usually are to pour boiling water over the tea bag and let steep for five to 10 minutes.

Helps Treat Coughs and Colds

Some natural and herbal cough syrups and cough drops contain marshmallow root. The mucilage may have a soothing effect on the esophagus by coating it. Marshmallow root appears to act as an enzyme to loosen mucous and inhibit bacteria.

The results of several small studies have suggested that herbal cough remedies that contain marshmallow root can have this effect. One study found that marshmallow root lozenges or syrup helped treat a dry cough.

Another study found that children who took an herbal mixture that *contained marshmallow and other herbs, including chamomile and common mallow, had a less severe cough and fewer nighttime awakenings* than those who received a placebo instead. This study did not, however, look at the effects of marshmallow root alone, so other herbs in the mixture could have been responsible for the medicinal effects.

For anyone suffering from a sore throat, cough or cold, marshmallow root can be taken orally to reduce pain, swelling and congestion. The high mucilaginous content of marshmallow root may make it a useful remedy for treating coughs and colds.

A small study from 2005 found that an herbal cough syrup containing marshmallow root was effective in relieving coughs due to colds, bronchitis, or respiratory tract diseases with formation of mucus. The active ingredient of the syrup was dry ivy leaf extract. It also contained thyme and aniseed.

How to use: Take 10 milliliters (mL) of marshmallow root cough syrup each day. You can also drink a few cups of bagged marshmallow tea throughout the day.

According to a 2020 in vitro study published in *Frontiers in Pharmacology*, its antitussive properties and mucilage abilities allow it to *decrease inflammation and irritation of the throat*, reduce swelling in the lymph nodes, speed up healing time and *reduce aggravating dry coughing*. It also tends to have immediate effects due to forming a protective film on the inflamed mucosa.

It also seems to help stop the urge to cough and facilitates the process of producing more saliva, allowing it help reduce symptoms of dry mouth in research involving cats. It can safely be used by people with chronically low levels of salivary flow and chronic coughs.

Improving dry mouth

Chronic dry mouth, which the medical community calls xerostomia, can cause an increase in cavities, gum disease, and dental infections. Dry mouth usually means that a person has too little saliva in their mouth. Antihistamines, blood pressure medications, neurological problems, and autoimmune diseases are among its many causes.

The authors of one study concluded that people who have hyposalivation, or low levels of saliva, may benefit from using marshmallow root. The herbal remedy helped with dry mouth symptoms, although it was not more effective than the other two treatments in the study, which were both over-the-counter dry mouth treatments.

Alternatively, people can make *an herbal tea using either marshmallow root tea bags or the dried herb* in a tea strainer and drink 2 to 3 cups daily.

Studies also suggest it can help treat tonsillitis, including among children.

Marshmallow is especially effective at beating a cold or the flu when combined with other anti-inflammatory and antibacterial herbs and essential oils for sore throat, such as slippery elm and echinacea or lemon, myrrh, oregano, cypress and frankincense essential oils. When combined, these target the underlying cause of the sickness (including bacteria) and coat the throat to ease discomfort.

Fights Bacterial Infections

The antibacterial properties in marshmallow root also treat coughs from *bacterial infections such as bronchitis or pneumonia*. If you feel symptoms of *tonsillitis, bronchitis, a urinary tract infection or respiratory infection* coming on, taking marshmallow root at the first sign of discomfort like swelling, burning and tenderness may help ease symptoms. It can help speed up the healing process and naturally kill bacteria that can cause various ailments.

Once ingested, it helps increase the secretion of urine, which improves the body's ability to draw bacteria out of the urinary tract. This is the reason *it's also recommended for treating kidney stone symptoms*.

Helps Repair the Gut Lining, Preventing Leaky Gut Syndrome, helps with colitis and Crohn's disease

Research suggests that marshmallow is an effective way to help treat certain digestive disorders, including *leaky gut syndrome*, which develops when particles leak outside tiny openings in the gut lining, allowing them to enter the bloodstream where they can trigger autoimmune reactions.

Marshmallow helps *restore integrity of the gut lining* by forming a protective layer around small junctions, as shown in research on rats. In addition, it seems to be beneficial for other forms of *inflammatory bowel diseases, including ulcerative colitis and Crohn's disease*.

Reduces Digestive Issues

Is marshmallow root good for acid reflux? Yes — digestive uses for marshmallow root include *lowering or preventing heartburn, stomach ulcer symptoms, diarrhea and constipation*. Animal research shows it coats the inside of the stomach and prevents acid from causing discomfort and "burning," while also providing anti-inflammatory effects.

Interestingly, the mucilage properties of marshmallow seem to remain stable in the body all the way through the digestive system until they reach the colon. This means they don't change form while passing through the digestive tract and therefore are useful for soothing symptoms of inflammatory digestive disorders.

For most forms of indigestion, **marshmallow root tea tends to work the best** and is usually soothing to the stomach while not causing any side effects. For even more stomach-soothing effects, you can mix marshmallow with other digestive aids, *such as peppermint essential oil or steeped/raw ginger root*. A 2015 study found that marshmallow flower extract could help protect the gut from gastric ulcers.

Researchers tested the effects of the extract on rats, using nonsteroidal anti-inflammatories (NSAIDs) to induce ulcers in the rodents. Rats that received marshmallow root were less likely to develop stomach ulcers than rats who did not get the extract.

Treating Digestive Ulcers

One in vitro and in vivo (animal) study from 2019 demonstrates that marshmallow root has protective properties for treating gastrointestinal (mouth, throat, and stomach) ulcers. Research from 2011 found that marshmallow flower extract demonstrated potential benefits in treating gastric ulcers in rats. Anti-ulcer activity was noted after taking the extract for one month. More research is needed to expand upon these findings.

It may aid in digestion

Marshmallow root also has the potential to treat a wide range of digestive conditions, including constipation, heartburn, and intestinal colic.

***How to use:** Take 2–5 mL of liquid marshmallow extracts 3 times per day. You can also take the extract at the first sign of any discomfort.*

It may help repair gut lining

Marshmallow root may help soothe irritation and inflammation in the digestive tract. Researchers determined that the benefits of marshmallow root for digestive issues are derived from its components, including vitamins and antioxidants, which prevent cell damage, and plant compounds like tannins, which promote a healthy mucosal lining within the digestive tract.

Protecting the throat from gastric reflux

When gastric reflux occurs, acid from the stomach flows back up into the throat, which can cause damage to the esophagus. The demulcent effect, whereby the mucilage coats a person's esophagus, can protect it from the stomach's damaging acids.

The powdered root form of the plant may be *more effective than a tea or tincture*, as the herb needs direct contact with the membranes to coat the throat.

Soothes Skin Troubles

By helping soothe the nerve-sense system of the skin, marshmallow has anti-irritant properties and is even well-tolerated by those with allergies and hypersensitive skin. For many years, it's provided relief from itching, swelling, redness and chaffing. A review study suggests that its topical application can help with eczema and damage from UV radiation, or sun exposure. A review from 2013 found that using an ointment containing 20 percent marshmallow root extract reduced skin irritation. Researchers suggested that the herb stimulates certain cells that have anti-inflammatory activity.

The anti-inflammatory effect of marshmallow root may also help relieve skin irritation caused by furunculosis, eczema, and dermatitis.

When used alone, the extract was slightly less effective than an ointment containing an anti-inflammatory synthetic drug. However, an ointment containing both ingredients had higher anti-inflammatory activity than the ointments containing only one or the other.

***How to use:** Apply an ointment containing 20 percent marshmallow root extract to the affected area 3 times per day.*

Healing wounds

Marshmallow root has antibacterial activity that may make it effective in wound healing.

The results of one 2015 animal study suggest that marshmallow root extract has the potential to treat gram-positive bacteria. These bacteria are responsible for over 50 percent of the infections that occur and include the antibiotic-resistant "super bugs." When applied topically to rat wounds, the extract significantly increased

wound healing in comparison to antibiotic controls. It's thought to speed up the healing time and reduce inflammation, but further research is needed to confirm these findings.

A study on rats found that applying marshmallow extract topically helped wounds heal compared with controls. The same study found that the extract was effective in killing specific types of bacteria, which could help prevent infection.

According to a 2019 report, marshmallow can be used topically to treat a number of skin problems:

- insect bites
- wounds
- burns
- scrapes
- dry/chapped skin
- peeling
- treating sore or cracked skin and reducing pain associated with breastfeeding

The roots and stem of the marshmallow plant secrete mucilage, which softens skin, lowers swelling and kills bacteria. Some in vitro evidence shows its anti-inflammatory effects are also beneficial for treating eczema and dermatitis. Polysaccharides in marshmallow roots are absorbent fibers that combine with liquid to form a soft and slippery base that acts like a skin buffer, moisturizer and protective layer for ultra-sensitive skin.

How to use: Apply a cream or ointment containing marshmallow root extract to the affected area three times per day.

You'll find marshmallow in many lip balms, hair conditioners, salves and after-sun products. If you can't find a natural ointment made with marshmallow extracts, try creating your own homemade moisturizer for dry skin by adding several drops to a coconut or jojoba oil-based cream. Used along with natural skin-savers like tea tree oil and aloe vera, marshmallow has an even bigger impact.

Lowers Inflammation and Supports Heart Health

A 2011 study examined the effects of marshmallow root supplementation on blood lipid profiles and liver function over a one-month period. Researchers found that marshmallow had anti-inflammatory effects that worked against both acute and chronic inflammation.

Marshmallow also showed anti-ulcer activity, anti-lipidemic abilities and resulted in an increase in HDL cholesterol (the "good" kind). *When given a dosage of 50 milligrams marshmallow per kilogram of body weight*, the subjects experienced significant increases in serum HDL cholesterol level with no side effects and adverse effects on liver enzymes.

Reduces Water Retention

Marshmallow seems to have diuretic effects and acts similar to "water pills" that are intended to lower fluid retention, edema and bloating. If your diet or hormone levels (such as experiencing PMS or menopause) cause you to retain water and feel uncomfortable, marshmallow can help increase urination and balance fluids.

Marshmallow root also has the potential to act as a diuretic. Diuretics help the body to flush out excess fluid. This helps to cleanse the kidneys and the bladder.

Other research suggests that the extract can support overall urinary health. One 2016 study suggests that the soothing effect of marshmallow can relieve internal irritation and inflammation in the urinary tract. Research from 2015 also suggests that its antibacterial effect may be useful in treating urinary tract infections.

Has Antioxidant Effects

Researchers have recently learned that antioxidants such as flavonoids found within marshmallow allow it to help prevent the formation of oxidative damage that leads to chronic diseases, including cancerous tumor growth and inflammatory disorders, as well as neurodegenerative diseases.

It protects healthy cells through a combination of mechanisms, including forming cell adhesions, affecting growth of cells and the extracellular matrix, managing cytokine release, and destroying harmful cells (apoptosis). Marshmallow also speeds up healing by activating the immune system, specifically by facilitating a process called phagocytosis, which removes damaged or dead cells from the body.

Recently, studies have also shown that it has potential neuroprotective effects that *may defend against formation of Parkinson's due to its antioxidant properties.*

New Tea Research Boasts Heart, Brain, and Immune Benefits

Taking Marshmallow Root Extract

Directions can vary for every capsule, tincture, or extract. Also, some products contain just marshmallow root, while others are a blend of marshmallow root and other herbal ingredients.

How to make marshmallow root tea

People can make dried marshmallow root into a tea.

Using dried marshmallow root for loose-leaf tea is very straightforward. People can pour boiling water over the dried root before covering and steeping it for 5 to 10 minutes. It will then be ready to strain and drink.

Another option is to use ready-made marshmallow root tea bags. A person will just need to cover a tea bag with boiling water and allow it to steep for up to 10 minutes.

How to make marshmallow root syrup

Alternatively, they can mix marshmallow root with water, pour it into a jar or container with a lid, and allow it to steep at room temperature overnight. As it sits, the mucilage creates a thick, slippery liquid that works well to soothe the throat and mouth. It is possible to store the liquid in an airtight container in the refrigerator for up to 2 weeks.

How to make marshmallow skin salve

People can make a skin salve by combining cooled marshmallow tea or liquid marshmallow extract with coconut oil. They can apply this salve directly to the skin. One study found 1% marshmallow root ointment was effective in treating skin irritation in children. The ointment was applied topically (to the skin) twice a day for a week and then three times per week for three weeks. *However, in rare instances, people may be allergic to marshmallow root. To check for a skin allergy, they can apply a small amount of marshmallow root to the area of skin inside the elbow. If no reaction occurs within 24 hours, it should be safe to use elsewhere on the skin.*

Summary

Due to its low risk of side effects and long history of medicinal use, marshmallow root is a good natural option for treating minor ailments. As with any herbal remedy, ask a doctor before using it, and do not use herbs in place of a doctor's recommended treatment.

Side Effects and Drug Interactions from Marshmallow Root

Marshmallow root is generally considered safe for use and is well tolerated in adults, with rare reports of allergic reactions. However, it can interact with certain drugs. For instance, it should not be used when taking lithium and diabetes drugs *or when taking drugs that act as diuretics, such as blood pressure medication.*

Marshmallow root is generally well tolerated. In some cases, it can cause upset stomach and dizziness. Starting with a low dose and gradually working your way up to a full dose can help reduce your risk of side effects.

Taking marshmallow root with an 8-ounce glass of water can also help reduce your risk of side effects.

You should only take marshmallow root for four weeks at a time. Be sure to take a one-week break before resuming use.

Can You Take Marshmallow Root While Breastfeeding?

The LactMed database of the Department of Health and Human Services (HHS) provides no data on the safety of marshmallow root during breastfeeding, but it is unlikely to be harmful to the breastfed infant.

Marshmallow root is a natural remedy that's been used for centuries to help relieve symptoms and treat conditions. Marshmallow root is particularly useful in relieving symptoms related to respiratory, digestive, and skin health. It is antibacterial and rich in antioxidants.

Precautions

Should be taken with at least 250mL (8 oz) of liquid. *Orally administered drugs should be taken 1 hour before use or several hours after, as marshmallow may slow the absorption.* We recommend that you consult with a qualified healthcare practitioner before using herbal products, particularly if you are pregnant, nursing, or on any medications.

Avoid use if you:

- are pregnant or breastfeeding
- have diabetes
- have a scheduled surgery within the next two weeks

Talk to your doctor if you're taking other medications before starting marshmallow root, as it's been found to interact with lithium and diabetes drugs. It can also coat the stomach and interfere with absorption of other medications. Marshmallow root is unlikely to cause side effects when a person uses it properly. Most research has shown that people have a very low risk of adverse reactions.

Always talk to your healthcare provider before starting any new supplement to make sure it will not have a negative impact on your other medications.

French Clay Can Kill MRSA And 'Flesh-Eating' Bacteria

ScienceDaily (Oct. 26, 2007) — French clay that kills several kinds of disease-causing bacteria is at the forefront of new research into age-old, nearly forgotten, but surprisingly potent cures. Among the malevolent bacteria that a French clay has been shown to fight is a "flesh-eating" bug (*M. ulcerans*) on the rise in Africa and the germ called MRSA, which was blamed for the recent deaths of two children in Virginia and Mississippi.

"There are very compelling reports of clay treating infections, but that's anecdotal evidence, not science," said Lynda Williams, an associate research professor in the School of Earth and Space Exploration at Arizona State University, Tempe. Williams is coordinating three teams of U.S. researchers (at ASU, USGS, and SUNY-Buffalo) studying healing clays under a two-year, \$440,000 grant from the National Institutes of Health-National Center for Complementary and Alternative Medicine. Her ASU colleague Shelley Haydel is lending her expertise in clinical medicine to perform the microbiological research.

For thousands of years, people have used clay to heal wounds, soothe indigestion, and kill intestinal worms. Though the practice has declined in modern times, the recent rise of drug-resistant germs has scientists looking more closely at these ancient remedies to learn exactly what they can do and how they do it.

Rossman Giese, Ph.D., professor of geology in UB's College of Arts and Sciences, and Tracy Bank, Ph.D., assistant professor of geology at UB, are using several techniques to study the clays, including atomic force microscopy. The researchers are studying the weak interactions that are responsible for the stickiness of clay particles.

"We look at the attraction or repulsion between natural and modified clays and bacteria," said Giese.

Unlike antibiotics, which are essentially a chemical weapon against bacteria, antimicrobial clays kill through purely physical means, he explained. "The bacterium has to come into physical contact with the clay in order for something to happen." Giese said. That contact turns deadly.

"The antimicrobial agents in the clay poke a hole in the cell wall of the bacterium causing the bacterium to leak to death," he explained. "The nice thing about that is that there is no way that the bacterium can evolve to avoid it, so resistance to the antimicrobial clay is unlikely to become a problem."

The clay developed by UB researchers has been very effective in lab testing.

"Our studies show that when we mix a bit of our modified clay at very low levels into sewage sludge that contains all kinds of bacteria, the modified clay kills everything," said Giese.

"Nothing will grow in it."

"We're beginning to generate the first scientific evidence of why some minerals might kill bacterial organisms and others might not," said Williams.

In laboratory tests at ASU's Biodesign Institute, co-PI Haydel, an assistant professor in the School of Life Sciences, showed that one clay killed bacteria responsible for many human illnesses, including: *Staphylococcus aureus*, methicillin-resistant *S. aureus* (MRSA), penicillin-resistant *S. aureus* (PRSA), and pathogenic *Escherichia coli* (*E. coli*).

It also killed *Mycobacterium ulcerans*, a germ related to leprosy and tuberculosis that causes the flesh-eating disease Buruli ulcer. This effect was first described in 2002, by Line Brunet de Coursou, a French humanitarian working in the Ivory Coast, Africa, who cured Buruli ulcers with daily applications of French clay she knew from childhood. Currently, advanced cases of Buruli ulcer can only be cured by surgical excision or amputation.

Serrapeptase is an enzyme isolated from bacteria found in silkworms.

It has been used for years in Japan and Europe for reducing inflammation and pain due to surgery, trauma, and other inflammatory conditions.

Today, serrapeptase is widely available as a dietary supplement and has many purported health benefits.

This article reviews the benefits, dosage, and potential dangers and side effects of serrapeptase.

May Reduce Inflammation

Serrapeptase is most commonly used for reducing inflammation — your body's response to injury.

In dentistry, the enzyme has been used following minor surgical procedures — such as tooth removal — to reduce pain, lockjaw (spasming of the jaw muscles), and facial swelling

Serrapeptase is thought to decrease inflammatory cells at the affected site.

One review of five studies aimed to identify and confirm the anti-inflammatory effects of serrapeptase compared to other drugs after the surgical removal of wisdom teeth

Researchers concluded that serrapeptase was more effective at improving lockjaw than ibuprofen and corticosteroids, powerful drugs that tame inflammation.

What's more, though corticosteroids were found to outperform serrapeptase in reducing facial swelling the day after surgery, differences between the two later on were insignificant.

Still, due to a lack of eligible studies, no analysis could be performed for pain.

In the same study, researchers also concluded that serrapeptase has a better safety profile than the other drugs used in the analysis — suggesting that it could serve as an alternative in cases of intolerance or adverse side effects to other medications.

May Curb Pain

Serrapeptase has been shown to reduce pain — a common symptom of inflammation — by inhibiting pain-inducing compounds.

One study looked at the effects of serrapeptase in nearly 200 people with inflammatory ear, nose, and throat conditions (5Trusted Source).

Researchers found that the participants who supplemented with serrapeptase had significant reductions in pain severity and mucus production compared to those who took a placebo.

Similarly, another study observed that serrapeptase significantly reduced pain intensity compared to a placebo in 24 people following the removal of wisdom teeth

In another study, it was also found to reduce swelling and pain in people following dental surgery — but was less effective than a corticosteroid

Potential Dangers and Side Effects

There are few published studies specifically on the potential adverse reactions to serrapeptase.

However, studies have reported several side effects in people taking the enzyme, including

skin reactions

muscle and joint pain

poor appetite

nausea

stomach pain

cough

blood clotting disturbances

Serrapeptase should not be taken along with blood thinners — such as Warfarin and aspirin — other dietary supplements like garlic, fish oil, and turmeric, which may increase your risk of bleeding or bruising

May Be Useful for Chronic Respiratory Diseases

Serrapeptase may increase the clearance of mucus and reduce inflammation in the lungs in people with chronic respiratory diseases (CRD).

CRDs are diseases of the airways and other structures of the lungs.

Common ones include **chronic obstructive pulmonary disease** (COPD), asthma, and pulmonary hypertension — a type of high blood pressure that affects the vessels in your lungs

While CRDs are incurable, various treatments can help dilate the air passages or increase mucus clearance, improving quality of life.

In one 4-week study, 29 people with chronic bronchitis were randomly assigned to receive 30 mg of serrapeptase or a placebo daily.

Bronchitis is one type of COPD that leads to coughing and difficulty breathing due to the overproduction of mucus. People who were given serrapeptase had less mucus production compared to the placebo group and were better able to clear the mucus from their lungs

Dosing and Supplements

When taken orally, serrapeptase is easily destroyed and deactivated by your stomach acid before it has a chance to reach your intestines to be absorbed.

For this reason, dietary supplements containing serrapeptase should be enteric-coated, which prevents them from being dissolved in the stomach and allows for release in the intestine.

The doses typically used in studies range from **10 mg to 60 mg per day**

The enzymatic activity of serrapeptase is measured in units, with 10 mg equaling 20,000 units of enzyme activity.

You should take it on an empty stomach or at least 30 mins before eating or two hours after finishing a meal.

The Bottom Line

Serrapeptase is an enzyme that's been used in Japan and Europe for decades for pain and inflammation.

It may also decrease your risk of infections, prevent blood clots, and aid certain chronic respiratory diseases.

While promising, more research is needed to confirm the efficacy and long-term safety of serrapeptase.

Sophora Flower (Huai Hua) (Marburg/Ebola)

Sophora japonica benefits: Increases endurance of blood vessels

In Traditional Chinese Medicine (TCM), Huai Hua belongs to the 'Herbs that stop bleeding' category. Like the name indicates these herbs tend to have hemostatic properties, meaning that they help stop various types of hemorrhages and echymosis. Unlike other herbs they often tend to be used externally.

Huai Hua, scientifically known as Flos Sophorae Immaturus, is a traditional Chinese herb with numerous potential benefits. This herb has been used for centuries in traditional medicine for its various healing properties. In this academic response, we will explore ten potential benefits of Huai Hua.

Antioxidant Properties: Huai Hua contains a rich array of bioactive compounds, including flavonoids and phenolic acids, which possess potent antioxidant properties. These antioxidants help combat free radicals in the body, reducing oxidative stress and protecting cells from damage.

- **Anti-inflammatory Effects:** Studies have suggested that Huai Hua possesses anti-inflammatory properties. The herb's active components inhibit the production of pro-inflammatory molecules, thereby potentially alleviating inflammation-related conditions.
- **Hemorrhoid Relief:** Huai Hua has long been recognized for its traditional use in the treatment of hemorrhoids. It is believed to promote blood circulation, reduce swelling, and relieve pain associated with hemorrhoidal inflammation.
- **Anti-diabetic Potential:** Research indicates that Huai Hua may exhibit anti-diabetic effects. Active compounds found in the herb have been shown to help regulate blood sugar levels by enhancing insulin sensitivity and inhibiting glucose absorption in the intestines.
- **Digestive Health:** Huai Hua has been used traditionally to support digestive health. It is thought to aid in the digestion of food, promote bowel regularity, and alleviate gastrointestinal discomfort.
- **Skin Health:** The topical application of Huai Hua extracts may offer benefits for skin health. Its antioxidant and anti-inflammatory properties can help protect the skin from damage caused by UV radiation and oxidative stress, potentially improving the overall appearance of the skin.
- **Antimicrobial Activity:** Huai Hua has demonstrated antimicrobial activity against various pathogens, including bacteria and fungi. This suggests its potential use as a natural alternative for combating microbial infections.
- **Cardiovascular Support:** Some studies have indicated that Huai Hua may have cardiovascular benefits. Its active constituents are thought to help lower blood pressure, improve blood flow, and reduce the risk of cardiovascular diseases.
- **Liver Protection:** Research suggests that Huai Hua may possess hepatoprotective properties. It may help protect the liver from damage caused by toxins, oxidative stress, and inflammation.
- **Anticancer Potential:** Preliminary studies have shown that Huai Hua extracts may possess anticancer properties. Its active compounds have exhibited cytotoxic effects against certain cancer cell lines, indicating potential use in cancer treatment and prevention. However, further research is necessary to fully understand its mechanisms of action.

Rutin in sophora japonica has the effect of stabilizing capillary walls, reducing capillary permeability. In addition, Rutin is used to increase the stability of red blood cells, so Rutin is mainly used to prevent atherosclerotic events or in cases of impaired venous. So sophora japonica tea is used to control bleeding phenomena: epistaxis, hemoptysis, uterine bleeding, urinary bleeding. In addition to using sophora japonica, you can use supplements that contain Rutin components independently *or in combination with vitamin C* because Rutin helps the body support the absorption of vitamin C, helps increase the activity of vitamin C, supports blood circulation, increase vascular endurance.

Improves Skin And Wound Healing can help with wound healing by increasing mRNA levels of growth factors such as IGF-1 and KGF in skin. Huai Hua also helps with wound healing by pro-inflammatory cytokines

Has Antimicrobial Properties; has antibacterial against:

- Aggregatibacter actinomycetemcomitans
- Escherichia coli
- Fusobacterium nucleatum
- Mycobacterium aurum
- Prevotella intermedia
- Porphyromonas gingivalis
- Staphylococcus aureus
- Streptococcus anginosus
- Streptococcus criceti
- Streptococcus gordonii
- Streptococcus mutans
- Streptococcus ratti
- Streptococcus sanguinis
- Streptococcus sobrinus

Has antiviral against:

- Cervical HPV
- Coxsackievirus B3
- HBV
- Human type 1-3 reoviruses (HRV1-3)
- Influenza A Virus (H1N1)
- Korean porcine reovirus (PRV)
- Porcine circovirus type 2 (PCV2)
- Porcine reproductive respiratory syndrome virus

Preparation: Remove impurities and dry

Dosage: 4.5-16g

Tincture: 2-4ml

Main actions according to TCM*: Cools the Blood to stop bleeding and eliminates excessive Fire in the Liver

Primary conditions or symptoms for which Huai Hua may be prescribed by TCM doctors: **Hematochezia, Dysentery, Bloody sputum, Nosebleed Headache.**

It is important to note that Sophora can be toxic when ingested by humans and animals alike. For this reason, it should be kept away from children and pets at all times. It is also wise to consult a healthcare professional before using Sophora as part of your health regimen¹.

Sophora can be consumed in various forms such as tea, tincture or capsule. The dosage and form of consumption depend on the condition being treated. It is recommended to consult a healthcare professional before consuming Sophora.

Sophora Japonica and Hemorrhoids

Hemorrhoids, which are categorized by swollen and uncomfortable blood vessels around the anus, are an unpleasant, but an extremely common concern. Topical creams, ointments, and cushions are common therapies but many people understandably prefer herbal remedies that promote venous health, rather than simply temper unpleasant symptoms.

The beneficial compounds contained within Sophora japonica may make it one of the best herbal supplements for hemorrhoids. Troxerutin has vasoprotective properties and is a therapy for hemorrhoids. Oxymatrine is known to help reduce the swelling associated with unhealthy blood vessels.

Sophora Japonica and Cardiovascular Health

Although Sophora japonica promotes healthy blood vessels, it also promotes overall cardiovascular system health. It supports normal heartbeat and helps create an environment that's less susceptible to blood clot formation. Preliminary animal models suggest that oxymatrine may even protect the heart and improve its functionality.

How to make sophora japonica tea?

Sophora japonica tea is a popular drink because of its taste and effects. Flower buds after being collected are pale yellow with a very characteristic aroma. First, remember to rinse with clean boiling water and then pour this water away. Next, put boiling water in the teapot, cover for 5-7 minutes, you can enjoy it. Take it daily for the best cardiovascular health.

What is quercetin? Quercetin is part of a group of plant pigments called flavonoids, and it's found in a range of foods such as fruits, vegetables, nuts, and grains. In supplement form, quercetin is often derived from the dried flowers and buds of the Sophora japonica (or Japanese pagoda) tree.

Like all flavonoids, quercetin is an antioxidant, meaning it helps scavenge and neutralize free radicals that might otherwise accelerate aging, contribute to inflammation, and fuel a range of chronic diseases from cancer to heart disease.

Sophora flower may cause side effects such as headaches, flushing, rash, or stomach pain. Overdose may cause vomiting and digestive disorders². It should be avoided during anorexia and diarrhea due to spleen deficiency. If you are pregnant or breast-feeding, you should only take the medication as recommended by your doctor.

Cautions:

Huai Hua flower contains a chemical called cytosine, which is like nicotine and can be toxic when taken in large doses. It should not be taken for long periods of time. It should not be taken by women who are pregnant or nursing mothers.

Top 9 Benefits of NAC (N-Acetyl Cysteine)

Cysteine is a semi-essential amino acid.

It's considered semi-essential because your body can produce it from other amino acids, namely methionine and serine. It becomes essential only when the dietary intake of methionine and serine is low.

Cysteine is found in most high-protein foods, such as chicken, turkey, yogurt, cheese, eggs, sunflower seeds and legumes.

N-acetyl cysteine (NAC) is a supplement form of cysteine.

Consuming adequate cysteine and NAC is important for a variety of health reasons — including replenishing the most powerful antioxidant in your body, glutathione. These amino acids also help with chronic respiratory conditions, fertility and brain health.

Here are the top 9 health benefits of NAC.

1. Essential for Making the Powerful Antioxidant Glutathione

NAC is valued primarily for its role in antioxidant production.

Along with two other amino acids — glutamine and glycine — NAC is needed to make and replenish glutathione.

Glutathione is one of the body's most important antioxidants, which helps neutralize free radicals that can damage cells and tissues in your body.

It's essential for immune health and fighting cellular damage. Some researchers believe it may even contribute to longevity.

Its antioxidant properties are also important for combatting numerous other ailments caused by oxidative stress, such as heart disease, infertility and some psychiatric conditions.

SUMMARY

NAC helps replenish glutathione, arguably your body's most powerful antioxidant. Therefore, it can improve a variety of health conditions.

2. Helps With Detoxification to Prevent or Diminish Kidney and Liver Damage

NAC plays an important role in your body's detoxification process.

It can help prevent side effects of drugs and environmental toxins.

In fact, doctors regularly give intravenous (IV) NAC to people with an acetaminophen overdose to prevent or reduce kidney and liver damage.

NAC also has applications for other liver diseases due to its antioxidant and anti-inflammatory benefits.

SUMMARY

NAC helps detoxify your body and can treat acetaminophen overdoses.

3. May Improve Psychiatric Disorders and Addictive Behavior

NAC helps regulate levels of glutamate — the most important neurotransmitter in your brain.

While glutamate is required for normal brain action, excess glutamate paired with glutathione depletion can cause brain damage.

This may contribute to mental health conditions, such as bipolar disorder, schizophrenia, obsessive-compulsive disorder (OCD) and addictive behavior.

For people with bipolar disease and depression, NAC may help decrease symptoms and improve your overall ability to function. What's more, research suggests that it may play a role in treating moderate to severe OCD.

Likewise, an animal study implied that NAC may minimize negative effects of schizophrenia, such as social withdrawal, apathy and reduced attention spans.

NAC supplements can also help decrease withdrawal symptoms and prevent relapse in cocaine addicts.

Additionally, preliminary studies show that NAC may decrease marijuana and nicotine use and cravings.

Many of these disorders have limited or currently ineffective treatment options. NAC may be an effective aid for individuals with these conditions.

SUMMARY

By regulating glutamate levels in your brain, NAC may alleviate symptoms of multiple psychiatric disorders and reduce addictive behavior.

4. Helps Relieve Symptoms of Respiratory Conditions

NAC can relieve symptoms of respiratory conditions by acting as an antioxidant and expectorant, loosening mucus in your air passageways.

As an antioxidant, NAC helps replenish glutathione levels in your lungs and reduces inflammation in your bronchial tubes and lung tissue.

People with chronic obstructive pulmonary disease (COPD) experience long-term oxidative damage and inflammation of lung tissue, which causes airways to constrict — leading to shortness of breath and coughing.

NAC supplements have been used to improve COPD symptoms, exacerbations and lung decline.

In a one-year study, 600 mg of NAC twice a day significantly improved lung function and symptoms in those with stable COPD.

Those with chronic bronchitis can also benefit from NAC.

Bronchitis occurs when the mucous membranes in your lungs' bronchial passageways become inflamed, swell and shut off airways to your lungs.

By thinning mucus in your bronchial tubes and boosting glutathione levels, NAC may help decrease the severity and frequency of wheezing, coughing and respiratory attacks.

In addition to relieving COPD and bronchitis, NAC may improve other lung and respiratory tract conditions like cystic fibrosis, asthma and pulmonary fibrosis, as well as symptoms of nasal and sinus congestion due to allergies or infections.

SUMMARY

NAC's antioxidant and expectorant capacity can improve lung function by decreasing inflammation as well as breaking up mucus.

5. Boosts Brain Health by Regulating Glutamate and Replenishing Glutathione

NAC's ability to replenish glutathione and regulate brain glutamate levels can boost brain health.

The brain neurotransmitter glutamate is involved in a broad range of learning, behavior and memory actions, while the antioxidant glutathione helps reduce oxidative damage to brain cells associated with aging.

Because NAC helps regulate glutamate levels and replenish glutathione, it may benefit those with brain and memory ailments.

The neurological disorder Alzheimer's disease slows down a person's learning and memory capacity. Animal studies suggest that NAC may slow the loss of cognitive ability in people with Alzheimer's.

Another brain condition, Parkinson's disease, is characterized by the deterioration of cells that generate the neurotransmitter dopamine. Both oxidative damage to cells and a decrease in antioxidant ability contribute to this disease.

NAC supplements appear to improve both dopamine function and disease symptoms such as tremors.

While NAC may improve brain health, more human research is needed to make strong conclusions.

SUMMARY

By helping replenish the antioxidant glutathione and regulate glutamate, NAC has the potential to treat diseases like Alzheimer's and Parkinson's.

6. May Improve Fertility in Both Men and Women

Approximately 15% of all couples trying to conceive are affected by infertility. In almost half of these cases, male infertility is the main contributing factor.

Many male infertility issues increase when antioxidant levels are insufficient to combat free radical formation in your reproductive system. The oxidative stress can cause cell death and reduced fertility.

In some cases, NAC has been shown to improve male fertility.

One condition that contributes to male infertility is varicocele — when veins inside the scrotum become enlarged due to free radical damage. Surgery is the primary treatment.

In one study, 35 men with varicocele were given 600 mg of NAC per day for three months post-surgery. The combination of surgery and NAC supplement improved semen integrity and partner pregnancy rate by 22% compared to the control group.

Another study in 468 men with infertility found that supplementing with 600 mg of NAC and 200 mcg of selenium for 26 weeks improved semen quality.

Researchers suggested that this combined supplement should be considered as a treatment option for male infertility.

In addition, NAC may improve fertility in women with polycystic ovary syndrome (PCOS) by inducing or augmenting the ovulation cycle.

SUMMARY

NAC may help improve fertility in men by reducing oxidative stress that damages or kills reproductive cells. It may also aid fertility in women with PCOS.

7. May Stabilize Blood Sugar By Decreasing Inflammation in Fat Cells

High blood sugar and obesity contribute to inflammation in fat tissue.

This can lead to damage or destruction of insulin receptors and put you at a higher risk of type 2 diabetes.

Animal studies show that NAC may stabilize blood sugar by decreasing inflammation in fat cells and thereby improving insulin resistance.

When insulin receptors are intact and healthy, they properly remove sugar from your blood, keeping levels within normal limits.

However, keep in mind that human research on NAC is needed to confirm these effects on blood sugar control.

SUMMARY

By decreasing inflammation in fat tissue, NAC may reduce insulin resistance and improve blood sugar regulation, but human-based research is lacking.

8. May Reduce Heart Disease Risk by Preventing Oxidative Damage

Oxidative damage to heart tissue often leads to heart disease, causing strokes, heart attacks and other serious conditions.

NAC may reduce heart disease risk by reducing oxidative damage to tissues in your heart.

It has also been shown to increase nitric oxide production, which helps veins dilate and improves blood flow. This expedites blood transit back to your heart and can lower your risk of heart attacks.

Interestingly, a test-tube study showed that — when combined with green tea — NAC appears to reduce damage from oxidized “bad” LDL cholesterol, another contributor to heart disease.

SUMMARY

NAC can reduce oxidative damage to your heart, which can — in turn — decrease your risk of heart disease.

9. Ability to Boost Glutathione Levels May Improve Immune Function **NAC and glutathione also boost immune health.**

Research on certain diseases associated with NAC and glutathione deficiency suggests that immune function might be improved — and potentially restored — by supplementing with NAC.

This factor has been studied most in people with human immunodeficiency virus (HIV).

In two studies, supplementing with NAC resulted in a significant increase in immune function — with an almost complete restoration of natural killer cells.

High levels of NAC in your body may also suppress HIV-1 reproduction.

A test-tube study indicated that in other immune-compromised situations, such as the flu, NAC may hamper the virus’s ability to replicate. This could potentially reduce the symptoms and lifespan of the illness.

Similarly, other test-tube studies have linked NAC to cancer cell death and blocked cancer cell replication.

Overall, more human studies are needed. Therefore, be sure to talk to your doctor before taking NAC during cancer treatment (43Trusted Source).

SUMMARY

NAC’s ability to boost glutathione levels may improve immune function in a variety of diseases.

Dosage

There is no specific dietary recommendation for cysteine because your body can produce small amounts.

For your body to make the amino acid cysteine, you need adequate amounts of folate, vitamin B6 and vitamin B12. These nutrients can be found in beans, lentils, spinach, bananas, salmon and tuna.

While most protein-rich foods, such as chicken, turkey, yogurt, cheese, eggs, sunflower seeds and legumes, contain cysteine, some people choose to supplement with NAC to increase their cysteine intake.

NAC has low bioavailability as an oral supplement, meaning that it’s not well absorbed. The accepted daily supplement recommendation is 600–1,800 mg of NAC.

NAC can be administered as an IV or taken orally, as an aerosol spray or in liquid or powder form.

SUMMARY

Eating high-protein foods can provide your body with the amino acid cysteine, but NAC can also be taken as a supplement to help treat certain conditions.

Side Effects

NAC is likely safe for adults when provided as a prescription medication.

However, high amounts may cause nausea, vomiting, diarrhea and constipation (47Trusted Source).

When inhaled, it can cause swelling in the mouth, runny nose, drowsiness and chest tightness.

People with bleeding disorders or taking blood thinning medications should not take NAC, as it may slow blood clotting (48Trusted Source).

NAC has an unpleasant smell that makes it hard to consume. If you choose to take it, consult with your doctor first.

SUMMARY

While NAC is considered safe as a prescription medication, it can cause nausea, vomiting, gastrointestinal disturbances, as well as mouth issues if inhaled.

Yarrow Medicinal Uses

What is Yarrow?

Yarrow is a perennial herb scientifically known as *Achillea millefolium*, and nearly every part of the plant is useful from a medicinal standpoint. Native to many areas in the Northern hemisphere, the use of this herb dates back thousands of years – even to ancient Greek legends. There are many common names for this herb, including old man's pepper, the nosebleed plant, milfoil, soldier's woundwort, and Thousand-seal, among others. Both the leaves and flowers of the yarrow plant are edible, as are the stalks, which can be crushed into a topical salve.

Yarrow leaves have a peculiar smell that is slightly spicy or peppery, particularly when they are crushed to release their aromatic compounds. Native Americans and ancient Britons used this herb extensively, and it is also present in Chinese traditional medicine, largely as an astringent substance. However, it remains one of the most versatile and recommended herbs in natural healing around the world.

Yarrow is a perennial herb that has been used medicinally for centuries. The leaves and flowers of the plant are used to make teas, tinctures, and ointments that are thought to have a wide range of medicinal benefits. Yarrow is most commonly used as an herbal remedy for colds and flu, as it is thought to help reduce fever and promote sweating. It is also used topically for wounds and skin conditions such as eczema. Some people also take yarrow internally for digestive problems, cramps, and anxiety.

In addition to the leaves and flowers, the root of the yarrow plant can also be used medicinally. Yarrow root is thought to have a number of benefits, including promoting sweating and reducing fever. Yarrow root can be taken internally as a tea or tincture, or it can be applied externally as a compress.

As with any herbal remedy, it is important to talk to your healthcare provider before taking yarrow root or flower

Nutrition Facts of Yarrow

The nutritional profile of yarrow includes a variety of flavonoids, rutin, and tannins, as well as coumarins, saponin, cineole, lactones, eugenol, terpineol, and other antioxidants. Furthermore, this herb can provide iron, phosphorous, and sulfur from its leaves.

Health Benefits of Yarrow

The many health benefits of yarrow include the following:

Faster healing of wounds

Blood clotting

Maintaining periods

Reducing inflammation

Lowering high blood pressure

Regulating asthmatic symptoms

Reducing anxiety

Let us discuss them in detail below.

Wound Healing

Famed for its ability to heal all of Achilles' wounds in Greek myth, this herb is known to speed the healing process of topical wounds.

Blood-Clotting

When used in moderation, this herb is able to stimulate blood-clotting, making it quite valuable for acute injuries; however, in excess, this herb can act as a blood-thinner in the body, so caution should be taken.

Amenorrhea

If you are struggling with maintaining a regular period, the use of this herb, particularly in tea form, can help to increase regularity and protect your reproductive health.

Anxiety

Since ancient times, this herb has been used to lower stress hormones and induce a feeling of calmness in the body and mind.

Mastitis

If your breasts are producing too much milk, to the point where the condition is painful, topical or oral ingestion of this herb is known to clear up the symptoms.

Inflammation

This herb has long been used to reduce inflammation in various parts of the body, including symptoms of arthritis, gout, and irritable bowel syndrome. Both topical and oral use can help to relieve these issues.

Gastrointestinal Health

Yarrow is known to stimulate the release of gastric enzymes and bile, which can speed the digestive process and reduce symptoms of constipation, bloating, cramping, and diarrhea.

Hypertension

Research has found that the regular use of yarrow can help to modulate blood pressure, which can lower your risk of atherosclerosis, heart attacks, strokes, and coronary heart diseases.

Uses of Yarrow

There are many impressive uses of yarrow, including in cooking, as an herbal substitute, in vinegar oils and for cosmetic use, among others.

Soups – The peppery smell of this herb makes it a very popular flavor addition to soups, stews, and curries.

Cooking Herbs – It can generally be compared to rosemary and oregano and is often added to dishes with those spices.

Sautéing Food – When you sauté food, it can take on many of the flavors from the herbs around it, so people often use this as a sautéing complement.

Infused Vinegar – If you want to make slightly peppery vinegar, you can infuse the oils with this herb by letting it steep for a few weeks in the vinegar.

Salads – While not a common “salad green”, yarrow herb can be added to salads for a spicy bite.

Cosmetics – When the stalks of yarrow are crushed, the oils that are released can be added to various cosmetics to enhance their astringent effects on the skin.

Tea – Yarrow can be steeped in hot water to release its wealth of antioxidants and active ingredients for a peppery brew.

Side Effects of Yarrow

While there are many positive benefits of yarrow, there are a number of side effects to consider, including the following:

Drowsiness

Bleeding disorders

Blood pressure problems

Dermatitis

Topical inflammation

Increased urination

Since yarrow can slow blood clotting in some cases, so for those with bleeding disorders, it can be dangerous, as well as those undergoing surgery. Negative interactions with drugs that induce drowsiness, treat high blood pressure, reduce stomach acid or thin the blood may also occur, so speak with your doctor before adding this herbal remedy to your health regimen.

Yarrow is a flowering plant that has been used for centuries in traditional medicine as an anti-inflammatory agent and to heal skin wounds. Other medicinal uses of yarrow include easing digestive disorders, relieving anxiety, and helping neurological conditions.

There is research showing some support for yarrow's wide range of therapeutic uses, but it is very preliminary.

Medicinal Uses for Yarrow

Yarrow plants have been researched for a wide range of health problems and ailments that it has been traditionally used for. The following uses all have some studies associated with them. However, most of them have been performed on animals or on isolated cells in a lab.

A 2017 review of the medical literature on the yarrow plant called *Achillea millefolium* L. listed several medicinal uses of the plant that have shown promise in studies. One of those uses is as a topical anti-inflammatory.

Multiple studies support its anti-inflammatory action. A 2017 paper in *The Journal of Ethnopharmacology* said it had an "evident anti-inflammatory property" with a positive impact on the pH balance of the skin and its moisture content.

Wound Healing

Achillea millefolium and *Achillea asiatica* both have had positive preliminary results in a topical application for wound healing. In a 2017 study on *Achillea asiatica* extract, researchers concluded that the herb was effective at improving skin wounds in rats through multiple effects at the cellular level.

A 2018 study in the *Journal of Maternal-Fetal & Neonatal Medicine* demonstrated a positive effect of *Achillea millefolium* ointments on the healing of episiotomies. (An episiotomy is a small incision in the perineum that healthcare providers sometimes make during childbirth.)

Digestive Disorders

A study out of Africa demonstrated an anti-spasmodic effect of *Achillea millefolium* L. in part of the digestive system, which means it may be beneficial in conditions that involve spasms in the digestive tract, such as irritable bowel syndrome.

Anxiety

A 2015 review of the anti-anxiety properties of essential oils found that two varieties of yarrow—*Achillea umbelata* and *Achillea wilhemsii*—did appear to help lessen anxiety. Researchers said it appeared to have this effect with a different mechanism of action than the popular anti-anxiety drug class benzodiazepines.

Neurological Conditions

A 2017 study out of Iran supports the use of *Achillea millefolium* in neurodegenerative disease, including multiple sclerosis, Parkinson's disease, stroke, and epilepsy. This conclusion is based on findings in animal studies.

In multiple sclerosis, researchers say the supplement lessened disease severity, lowered neuroinflammation, and reduced the number of demyelinating lesions.

In Parkinson's, they say it improved motility and muscle tone. In strokes, it appeared to reduce the infarct volume, and in epilepsy, it reduced the seizure severity.

Other Possible Benefits

The 2017 review and other studies support yarrow's effectiveness for:

Immune-system support

Regulating blood sugar in diabetes

Protecting the liver and gallbladder

Stimulating menstruation

Helping with sleep

Treating hemorrhoids

Alleviating hay fever

Speeding elimination of urine

The name yarrow applies to about 140 closely related varieties in the genus *Achillea*. According to one study, this is a complicating factor when it comes to research. Some reviews state that reports haven't always been clear enough about the exact variety studied, making it difficult or impossible to compare research and draw conclusions.²

Possible Side Effects

While a "natural" product, keep in mind that even natural substances can have side effects and drug interactions and you should treat these products as you would pharmaceutical drugs. Yarrow is generally considered safe to use medicinally but possible side effects may include:

Drowsiness

Increased urination

Skin irritation when used topically (such as for wound healing)

However, some groups of people may face additional risks from taking yarrow supplements.

Slowed Blood Clotting

Theoretically, yarrow could slow blood clotting. It's recommended that you stop taking yarrow at least two weeks before a scheduled surgery. If you need emergency surgery, make sure the medical staff knows of this potential risk.

Similarly, people with known bleeding disorders should avoid the use of yarrow without first speaking to a healthcare provider, as it could increase the risk of bleeding.

Allergies

If you're allergic to plants that are members of the Asteraceae/Compositae family, you may also be allergic to yarrow. Other plants in the family include:

Chrysanthemums

Daisies

Marigolds

Ragweed

If you have plant allergies but don't know for sure about this particular group of plants, talk to your healthcare provider before taking yarrow.

Pregnancy and Breastfeeding

Yarrow is not recommended for use during pregnancy or breastfeeding. When taken orally, yarrow is believed to be able to stimulate a woman's menstrual cycle. That means it could put you at risk for miscarriage if you take it while you'll pregnant.

So far, we don't know enough about the risk of yarrow during breastfeeding, so it's safest to avoid using it until after your baby is weaned.

Drug Interactions

Yarrow is believed to have a negative interaction with the following medications.

Lithium: Yarrow may cause this drug to stay in your system longer.

Anti-inflammatories, anticoagulant/antiplatelet drugs: These can also slow blood clotting.

Sedatives: Yarrow may act as a sedative as well.

Antacids and other medications that decrease stomach acid such as H2-blockers and proton pump inhibitors: Yarrow may increase stomach acid, and therefore, decrease the effectiveness of antacids.

Avoid yarrow if you're taking any of these and be sure to talk to your healthcare provider before adding it to your treatment regimen.

Dosage

There's no established standard dosing for yarrow, **although daily dosing of 250 milligrams (mg) to 500 mg has been used safely for up to a year in some studies.** The amount that's needed to be effective may vary from person to person depending on several factors as well as what the yarrow is being taken for.

Serrapeptase is an enzyme isolated from bacteria found in silkworms.

It has been used for years in Japan and Europe for reducing inflammation and pain due to surgery, trauma, and other inflammatory conditions.

Today, serrapeptase is widely available as a dietary supplement and has many purported health benefits.

This article reviews the benefits, dosage, and potential dangers and side effects of serrapeptase.

May Reduce Inflammation

Serrapeptase is most commonly used for reducing inflammation — your body's response to injury.

In dentistry, the enzyme has been used following minor surgical procedures — such as tooth removal — to reduce pain, lockjaw (spasming of the jaw muscles), and facial swelling

Serrapeptase is thought to decrease inflammatory cells at the affected site.

One review of five studies aimed to identify and confirm the anti-inflammatory effects of serrapeptase compared to other drugs after the surgical removal of wisdom teeth

Researchers concluded that serrapeptase was more effective at improving lockjaw than ibuprofen and corticosteroids, powerful drugs that tame inflammation.

What's more, though corticosteroids were found to outperform serrapeptase in reducing facial swelling the day after surgery, differences between the two later on were insignificant.

Still, due to a lack of eligible studies, no analysis could be performed for pain.

In the same study, researchers also concluded that serrapeptase has a better safety profile than the other drugs used in the analysis — suggesting that it could serve as an alternative in cases of intolerance or adverse side effects to other medications.

May Curb Pain

Serrapeptase has been shown to reduce pain — a common symptom of inflammation — by inhibiting pain-inducing compounds.

One study looked at the effects of serrapeptase in nearly 200 people with inflammatory ear, nose, and throat conditions (5Trusted Source).

Researchers found that the participants who supplemented with serrapeptase had significant reductions in pain severity and mucus production compared to those who took a placebo.

Similarly, another study observed that serrapeptase significantly reduced pain intensity compared to a placebo in 24 people following the removal of wisdom teeth

In another study, it was also found to reduce swelling and pain in people following dental surgery — but was less effective than a corticosteroid

Potential Dangers and Side Effects

There are few published studies specifically on the potential adverse reactions to serrapeptase.

However, studies have reported several side effects in people taking the enzyme, including

skin reactions

muscle and joint pain

poor appetite

nausea

stomach pain

cough

blood clotting disturbances

Serrapeptase should not be taken along with blood thinners — such as Warfarin and aspirin — other dietary supplements like garlic, fish oil, and turmeric, which may increase your risk of bleeding or bruising

May Be Useful for Chronic Respiratory Diseases

Serrapeptase may increase the clearance of mucus and reduce inflammation in the lungs in people with chronic respiratory diseases (CRD).

CRDs are diseases of the airways and other structures of the lungs.

Common ones include **chronic obstructive pulmonary disease** (COPD), asthma, and pulmonary hypertension — a type of high blood pressure that affects the vessels in your lungs

While CRDs are incurable, various treatments can help dilate the air passages or increase mucus clearance, improving quality of life.

In one 4-week study, 29 people with chronic bronchitis were randomly assigned to receive 30 mg of serrapeptase or a placebo daily.

Bronchitis is one type of COPD that leads to coughing and difficulty breathing due to the overproduction of mucus. People who were given serrapeptase had less mucus production compared to the placebo group and were better able to clear the mucus from their lungs

Dosing and Supplements

When taken orally, serrapeptase is easily destroyed and deactivated by your stomach acid before it has a chance to reach your intestines to be absorbed.

For this reason, dietary supplements containing serrapeptase should be enteric-coated, which prevents them from being dissolved in the stomach and allows for release in the intestine.

The doses typically used in studies range from **10 mg to 60 mg per day**

The enzymatic activity of serrapeptase is measured in units, with 10 mg equaling 20,000 units of enzyme activity.

You should take it on an empty stomach or at least 30 mins before eating or two hours after finishing a meal.

The Bottom Line

Serrapeptase is an enzyme that's been used in Japan and Europe for decades for pain and inflammation.

It may also decrease your risk of infections, prevent blood clots, and aid certain chronic respiratory diseases.

While promising, more research is needed to confirm the efficacy and long-term safety of serrapeptase.