

How to Use the Top 10 Medicinal Plants and Herbs

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STORY AT-A-GLANCE

- > Before the advent of drugs, plant remedies were the go-to medicines, and they can serve you just as well today as in the past; I review the use and benefits of 10 important herbs and medicinal plants, many of which you can grow yourself
- > Aloe vera can soothe skin conditions such as burns, rashes, cuts and scrapes, and more serious skin conditions such as psoriasis; lemongrass has been used traditionally to treat stomach aches, high blood pressure, common cold, convulsions, pain and vomiting
- > Dandelion leaf tea has diuretic, mild laxative and digestive aid properties, while tea made from dandelion roots has detoxifying properties, and can help relieve liver, gallbladder and prostate problems
- > Chamomile tea offers valuable support for DNA repair, and is known to promote relaxation, relieve stress, ease inflammation and more; sage also has calming effects and can ease digestive problems, strengthen immunity and fight inflammation
- Echinacea has a long history of use for various infections, and has immune boosting effects; ashwagandha is a powerful adaptogen that helps your body manage and adapt to stress by balancing your immune system, metabolism and hormonal systems

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Before the advent of drugs, plant remedies were the go-to medicines, and they can serve you just as well today as in the past. While there are many thousands of plants, any one

of which can serve a medicinal purpose, some are better known than others, and can provide relief from common ailments.

Here, I'll review the use and benefits of 10 important herbs and medicinal plants, many of which you can grow yourself to ensure you always have some on hand.

No. 1 — Aloe Vera

Aloe vera¹ is a succulent plant well-known for its soothing qualities, especially for skin conditions such as burns, rashes, cuts and scrapes, but also for more serious skin conditions such as psoriasis. I have hundreds of aloe plants at my home and harvest them every day for topical use on my skin and also for eating. It is one of my medicinal plants.

In one animal study,² an ethanolic extract of aloe vera gel had an overall antipsoriatic activity of 81.9%. Its wound healing abilities stem from the gel's disinfectant, antimicrobial, antiviral, antifungal, antibiotic and antibacterial properties.

Properties related to a compound called glucomannan also help accelerate wound healing and skin cell growth. As an adaptogen,³ aloe vera gel may also be used internally to help your body adapt to stress.

Aloe vera contains about 75 potentially active compounds, including lignin, saponins, salicylic acids and 12 anthraquinones (phenolic compounds traditionally known as laxatives). It also provides campesterol, β -sisosterol and lupeol, and the hormones auxins and gibberellins that help in wound healing and have anti-inflammatory action.⁴

The pulp contains most of the healing compounds, including^{5,6} polysaccharides⁷ such as mannose (which is great for gut health and has immune-boosting benefits), essential amino acids your body needs but cannot manufacture, polyphenol antioxidants, sterols (valuable fatty acids), vitamins and minerals.

While you can purchase aloe vera gel at most health food stores and pharmacies, if you grow your own, you'll always have fresh aloe on hand when cuts, scrapes or even

psoriasis flare-ups occur. For medicinal use, be sure to select an aloe species with thick, "meaty" leaves. A good choice, and one of the most popular, is Aloe Barbadensis Miller.8

To harvest, select an outer, mature leaf, and using a sharp knife, cut the leaf as close to the base as possible. Remove the spines by cutting along each side.

- For topical use Simply cut a 1- to 2-inch piece off, then slice it down the middle, revealing the gel, and apply it directly to your skin. Aside from soothing burns, including sunburn, or cuts and scrapes, it also works great as an aftershave for men. For sunburn, fresh aloe gel is the most effective remedy I know of, besides prevention.
- For internal use If you're going to eat it, you can use a potato peeler to peel off
 the outer rind, then scrape off the gel and place it in a small glass container. I like
 mixing mine with some lime juice. Simply blend together with a handheld blender
 for a delicious immune-boosting aloe shot.

While fresh aloe vera is very safe, you should not use it internally or externally if you're allergic. If you're unsure, perform a patch test on a small area and wait to make sure no signs of allergic reactions occur.^{9,10,11}

No. 2 — Lemongrass

Lemongrass, an herb noted for its distinctive lemon flavor and citrus aroma, has been used traditionally to treat stomach aches, high blood pressure, common cold, convulsions, pain and vomiting.¹² Lemongrass benefits listed by Organic Facts include:¹³

"[R]elief from insomnia, stomach disorders, respiratory disorders, fever, pain, swelling, and infections. The antioxidant activity of the lemongrass herb maintains the immune system and protects against antibiotic-resistant Staphylococcus aureus.

It even helps in maintaining optimum cholesterol levels, managing type 2 diabetes, and promoting healthy skin. It is extensively used in aromatherapy

and helps combat fatigue, anxiety, and body odor."

The leaves and extracted essential oil are the parts most commonly used, and depending on the form can be taken orally, applied topically or inhaled (as aromatherapy) for the following conditions:

Relieve stress, anxiety, irritability and insomnia by diffusing a few drops of lemongrass essential oil.¹⁴

Relax and tone your muscles; relieve muscle pain, period cramps and headaches by rubbing a few drops of the essential oil mixed with carrier oil onto the area, or diffuse as an aromatherapy treatment.

Energize tired feet by mixing essential oil and 2 tablespoons of Epsom salts in a bowl of warm water — You can also create your own foot massage oil by mixing diluted lemongrass oil with a carrier oil such as coconut oil, and adding other essential oils as desired, such as sweet almond, geranium and sandalwood.¹⁵

Treat cuts and scrapes by rubbing a small amount of diluted essential oil over the area — Lemongrass essential oil has antibiofilm properties against staphylococcus aureus¹⁶ and interrupts the growth of bacteria in the body.¹⁷

Treat gastrointestinal problems by consuming lemongrass tea or lemongrassinfused water — Lemongrass oil has anti-ulcer effects,^{18,19} stimulates digestion and helps regulate bowel function.²⁰

Improve sleep by drinking a cup of lemongrass tea or lemongrass-infused water before bed.²¹

Relieve pain associated with headaches, muscle and joint pain, muscle spasms and sprains, either by applying diluted essential oil topically, inhaling the scent by diffusing the essential oil, or by drinking lemongrass tea or infused water.

Improve insulin sensitivity by drinking lemongrass tea or infused water — The citral present in lemongrass has demonstrated ability to regulate blood glucose and improve insulin sensitivity,²² and testing shows the citral content of decoctions and infusions are the same as that of fresh lemongrass.²³ Tea is basically a weak infusion. You could also make your own lemongrass decoction. For basic instructions, see The Herbal Academy.²⁴

Keep in mind, however, that since lemongrass essential oil can lead to lowered blood glucose,²⁵ it may be contraindicated for people taking oral diabetes or antihypertensive medications, as well as those who are diabetic and hypoglycemic. Take special precautions if you have been diagnosed with diabetes or hypoglycemia or if anyone in your family suffers these conditions.

Treat oily hair by massaging a few drops of diluted essential oil to your scalp and let sit for 15 minutes before washing as usual.²⁶

Fight body odor naturally — With its antifungal and antibacterial properties, diluted lemongrass essential oil can be used as a natural deodorant.

No. 3 - Dandelion

Dandelions contain vitamins A, B, C and D, and can be used as a remedy for fever, boils, diarrhea and diabetes.²⁷ Dandelion leaf tea has diuretic, mild laxative and digestive aid properties, while tea made from dandelion roots has detoxifying properties, and can help relieve liver, gallbladder and prostate problems.²⁸

Dandelion root is also antirheumatic, and may help dissolve urinary stones.²⁹ Dandelion leaves are usually picked during the spring,³⁰ while the roots are often harvested in autumn or winter, since they're believed to be sweeter during these seasons.³¹

Since dandelions are widely available and are extremely simple to grow, you can easily harvest them to make a tea of your own from fresh ingredients. You may also opt to buy tea bags made from dried organic dandelion roots or leaves.

While dandelion tea is considered generally safe to consume, it may cause allergic reactions like itching, rashes and runny nose in people who are allergic to ragweed and other related plants, including chamomile, chrysanthemums and marigold.

No. 4 — Sage

Sage has been used as a medicine for thousands of years and boasts a long list of potential health benefits, including the following:32

Aids digestion — The rosmarinic acid found in sage acts as an anti-inflammatory agent, soothing your stomach and preventing gastric spasms. Sage can help reduce the incidence of diarrhea and gastritis.

Boosts cognitive function — Research has shown even small amounts of sage, taken as food or inhaled as an essential oil, can be an effective brain booster, increasing concentration, memory recall and retention.

In vitro and animal studies have confirmed several sage species contain active compounds shown to enhance cognitive activity and protect against neurodegenerative diseases such as Alzheimer's and other types of dementia.³³

Improves bone health — Sage contains a superior level of vitamin K, which along with its high calcium content supports strong bones and teeth.

Aids diabetes management — Sage possesses compounds known to mimic the drugs typically prescribed for managing diabetes. As such, it appears to regulate and inhibit the release of stored glucose in your liver, which balances your blood sugar, helping to prevent Type 2 diabetes or assist in managing the condition if already present.

Authors of a study published in the British Journal of Nutrition³⁴ said, "[I]ts effects on fasting glucose levels ... and its metformin-like effects ... suggest sage may be useful

as a food supplement in the prevention of Type 2 diabetes mellitus by lowering the plasma glucose of individuals at risk."

Promotes healthy skin — Given its many antioxidant properties, sage is useful to counteract the signs of aging such as age spots, fine lines and wrinkles. These antioxidants protect against free radicals known to damage your skin cells and cause premature aging. Some have had success using sage in the form of a tincture or topical salve to treat skin conditions such as acne, eczema and psoriasis.

Strengthens immunity — Sage contains antimicrobial properties researchers suggest, when applied in the form of an essential oil, is effective in inhibiting the growth of bacteria such as Staphylococcus aureus.³⁵

In addition, sage is a natural expectorant and useful to clear mucus and reduce coughs.³⁶ Consider adding a drop of sage essential oil to a cup of tea or hot water the next time you have a cold.

Treats inflammation — Antioxidant compounds in sage can help neutralize free radicals and prevent them from creating oxidative stress in your body.³⁷ Sage is effective with respect to inflammation that affects your brain, heart, joints, muscles, organ systems and skin. To reduce inflammation, chew fresh sage leaves, drink sage tea or apply a sage tincture.

Eases pains — Sage essential oil can be used in a bath or incorporated into a massage oil to help relax muscles. When combined with a carrier oil and applied to your lower abdomen, sage essential oil can also help soothe menstrual cramps and pain.

No. 5 — Chamomile

Chamomile is one of the highest sources of the polyphenol apigenin, a powerful inhibitor of an enzyme on the surface of your cells called CD38. While CD38 is useful for

your immune function it also is a major consumer of NAD+ which is the most important coenzyme in your body.

You need NAD+ to fuel another enzyme called PARP, an enzyme instrumental in the repair of damaged DNA. When you are regularly exposed to electromagnetic fields, PARP is regularly activated and consumes NAD+, which is one of the reasons it is so low in most of us, aside from the fact that simply aging tends to lower it.

When NAD+ is lowered, then PARP doesn't function, and you don't repair your DNA damage. This is one of the reasons why I pay attention to keeping my NAD+ levels high and why I use chamomile every night.

Additionally, the volatile oils found in chamomile flowers are said to be responsible for most of its beneficial properties,³⁸ which include an ability to:

- Calm nerves, promoting general relaxation, relieving stress³⁹ and controlling insomnia
- Ease allergies, inflammation⁴⁰ and infections
- Alleviate muscle spasms
- Relieve nausea and flatulence
- Ease stomach ailments, gastritis, ulcerative colitis, diverticular,⁴¹ Crohn's disease and irritable bowel syndrome

Chamomile must not be taken by people who are allergic to daisies, asters, chrysanthemums or ragweed. Chamomile is also known to interact with some drugs and substances, so exercise caution if you're taking anticoagulants, antiplatelet medication, blood pressure medicines, diabetes drugs, sedatives, drugs broken down by your liver such as statins and antifungals.

No. 6 — Echinacea

Before antibiotics, echinacea was used as a general cure for various infections and wounds, including malaria, scarlet fever and syphilis.⁴² Centuries ago, Native Americans primarily used echinacea to help treat the common cold. Today, common uses include:

- Boosting your immune system The compounds in echinacea may help improve your immune system. In a study⁴³ published in Integrative Cancer Therapies, echinacea has been shown to help reduce the severity and duration of colds if it is administered right away once symptoms appear. However, if you use echinacea several days after getting a cold, it won't have much of an effect.
- Fighting against bacteria and viruses Echinacea contains a compound called echinacein, which can help against bacterial and viral infections. According to a study⁴⁴ in Pharmaceutical Biology, echinacea exhibited antimicrobial properties and is effective against 15 different pathogenic bacteria and two pathogenic fungi.
- **Speeding up wound healing** When applied to a wound, echinacea may help speed up the formation of new skin cells, while helping prevent an infection thanks to its antibacterial properties. According to a study⁴⁵ in the Journal of Ethnopharmacology, the compound responsible for echinacea's wound-healing benefit is echinacoside, which is present in several varieties of the flower.

One of the easiest ways to obtain the benefits of echinacea is brewing homemade tea by simmering one-fourth cup dried echinacea flowers in 8 ounces of filtered water for 15 minutes.

No. 7 — Ashwagandha

Ashwagandha, known as a multipurpose herb and "rejuvenator," has been used in ancient Ayurvedic and Chinese medicine for thousands of years.⁴⁶ It's a powerful adaptogenic⁴⁷ herb, meaning it helps your body manage and adapt to stress⁴⁸ by balancing your immune system,⁴⁹ metabolism and hormonal systems.⁵⁰

Ashwagandha also has natural pain reliever (analgesic) properties,⁵¹ which can help increase physical strength, and its rejuvenating effects can promote general health

when used regularly.

Flavonoids and other compounds are the active ingredients that give ashwagandha its many powerful properties. In one study,⁵² bioactive withanolides — naturally occurring steroids — in ashwagandha were identified as agents that suppress pathways responsible for several inflammation-based illnesses, including arthritis, asthma, hypertension, osteoporosis⁵³ and cancer.

Withanolides in ashwagandha also have immunomodulating properties,⁵⁴ described as substances that can either stimulate or suppress your immune system to help fight infections, cancer and other diseases.

One of the alkaloids in ashwagandha, called somniferin, helps promote relaxation and sound sleep. A study⁵⁵ at the University of Tsukuba in Japan found it can relieve insomnia and restless leg syndrome.

As an adaptogen, ashwagandha is frequently used to support healthy adrenal function, which can be adversely affected by persistent stress, be it physical or psychological. Research shows the root reduces cortisol levels, restores insulin sensitivity and helps to stabilize mood.⁵⁶

Ashwagandha also supports sexual and reproductive health in both men and women, and may be used as an aid to boost your libido. In men struggling with infertility, ashwagandha has been shown to balance their luteinizing hormone,⁵⁷ which controls reproductive organ function in both men and women.

It's been shown to improve the quality of semen in infertile men,⁵⁸ in part by inhibiting reactive oxygen species and improving essential metal concentrations, including zinc, iron and copper levels. Other research⁵⁹ suggests ashwagandha improves semen quality by regulating important reproductive hormones.

Ashwagandha can also help boost testosterone levels in men,^{60,61} which can have a beneficial effect on libido and sexual performance. In otherwise healthy women,

ashwagandha has been shown to improve arousal, lubrication, orgasm and overall sexual satisfaction.⁶²

In addition, ashwagandha's ability to rebalance hormones (including thyroid hormone, estrogen and progesterone) has been shown to improve polycystic ovary syndrome⁶³ and relieve symptoms associated with menopause.⁶⁴

Ashwagandha also has antitumor and blood production (hemopoietic) capabilities, and benefits the cardiopulmonary, endocrine and central nervous systems, all "with little or no associated toxicity."65

Ashwagandha is contraindicated⁶⁶ for, and should not be used by pregnant women, as it may induce abortion; breastfeeding women, as it may have an effect on your child; and people taking sedatives, as ashwagandha may augment the sedative effects.

Also, while ashwagandha appears to be beneficial for thyroid problems, if you have a thyroid disorder, use caution and consult with your doctor, as you may need to tweak any medications you're taking for it.

No. 8 — CBD Oil and/or Whole Hemp Oil

The medical benefits of cannabidiol (CBD) are now increasingly recognized, and we now know the human body produces endogenous cannabinoids and that this endocannabinoid system (ECS) plays an important role in human health by regulating homeostasis between your bodily systems, such as your respiratory, digestive, immune and cardiovascular systems.

According to Project CBD, at least 50 conditions⁶⁷ are believed to be improved by CBD, including pain, seizures, muscle spasms, nausea associated with chemotherapy, digestive disorders, degenerative neurological disorders such as multiple sclerosis and Parkinson's disease, mood disorders, anxiety, PTSD and high blood pressure.

CBD is nonpsychoactive, nonaddictive, does not produce a "high" and has few to no dangerous side effects. In states where CBD is becoming widely used, there are also

few reports of negative social or medical consequences, in fact, CBD has been shown to provide valuable benefits for those struggling with opioid addiction.

Endogenous cannabinoid production declines with age and, according to clinical nutritionist and expert on phytocannabinoids, Carl Germano, endocannabinoid deficiency has been identified in people who have migraines, fibromyalgia, irritable bowel syndrome, inflammatory and neurological conditions and a variety of treatment-resistant conditions.

A paper⁶⁸ in Translational Psychiatry also found low levels of anandamide (one of the endocannabinoids your body produces naturally) are a statistically positive indicator for stress-induced anxiety.

According to Germano, one of your best and healthiest options may be to use whole hemp oil rather than isolated CBD (from either hemp or cannabis). The reason for this is because CBD is just one of more than 100 different phytocannabinoids found in whole hemp, and the synergistic action between them is likely to produce better results.

According to Germano, CBD alone cannot fully support your body's ECS. You need the other phytocannabinoids and terpenes, which are very complementary to the phytocannabinoids, as well.

In the past, before the signing of the new Farm Bill that legalizes the growing of hemp in the U.S., the leaf, flower and bud of the hemp plant could not be used in the production of CBD-rich hemp oil. The oil had to be pulled from the stalk and stem of the plant only — the less concentrated part.

With the new law, all parts of the plant can be used, which will make processing easier and more economical, as the cannabinoids are more concentrated in the leaves, flowers and buds. The law also makes it legal to grow hemp in every state, so if you wanted to, you could grow it in your backyard.

While the raw unprocessed plant could be juiced, processing will convert the cannabinoids into more usable forms. Germano offers the following advice:

"[To process it], you can take the leaf, flower and bud. You can blend it and store it in the refrigerator. Over a day or two of exposure to heat, air, light and moisture, it'll decarboxylate to some extent and you'll benefit more from that ... [P]robably an ounce or two [of raw plant] would do the trick as a healthy plant beverage."

No. 9 — Milk Thistle

While most people consider milk thistle a pesky weed, it actually possesses remarkable medicinal benefits^{69,70} that make it worth keeping around. Notably, milk thistle has been prized for centuries for its anti-inflammatory, antioxidant and antiviral properties.

It is also highly regarded as a liver tonic due to high amounts of a chemical compound known as silymarin. Silymarin is a group of flavonoids known to help repair liver cells damaged by toxic substances. As such, milk thistle greatly improves the overall functioning of your liver, with specific applications related to cirrhosis of the liver, chronic liver inflammation and liver damage from alcohol and other intoxicating substances.

Silymarin has also been shown to prevent the formation of gallstones,⁷¹ support prostate health and treat prostate cancer.⁷² Under the direction of your doctor, you may want to consider adding milk thistle to your diet if you are dealing with a liver-based problem such as cirrhosis, hepatitis, jaundice and nonalcoholic fatty liver disease.⁷³

Silymarin also activates AMP-activated protein kinase (AMPK), an enzyme inside your cells that plays an important role in metabolism,⁷⁴ energy homeostasis and cellular repair.⁷⁵ It also inhibits the mammalian target of rapamycin (mTOR)which, when chronically activated, may increase your risk of cancer.

While all parts of the milk thistle plant are edible, silymarin is contained in the seeds only. Whether or not you are able to grow your own, high-quality, organic milk thistle is inexpensive and readily available at your local health food store. Below are some ways you can incorporate this unique herb into your diet:⁷⁶

- Powdered Use a mortar and pestle to crush milk thistle seeds into a powder that can be added to soups, stir-fries and other dishes
- Salads Because the entire plant is edible, you can add milk thistle flowers, leaves,
 roots and stalks to salads or incorporate them into cooked dishes
- Smoothies For a healthy liver smoothie, soak 2 tablespoons of milk thistle seeds
 in filtered water overnight; the next morning, add the milk thistle (and soaking
 water), 1 cup of lemon juice, one-third cup of lycium berries and 1.5 cups of ice to
 your blender and combine until smooth
- Snacks Although it may be a bit of an acquired taste, milk thistle seeds can be eaten dry, as is
- Tea Crush either or both milk thistle seeds and dried leaves to make a loose tea blend you can steep in an infuser with hot water; add a healthy sweetener of your choice to tone down the somewhat bitter flavor, or add a peppermint teabag for a different taste sensation⁷⁷

No. 10 - Tulsi

Tulsi, also known as holy basil, is an Ayurvedic herb considered vital in India. Like ashwagandha, it's a powerful adaptogen with antibacterial, antiviral, antifungal, anti-inflammatory, analgestic, antioxidant and adaptogenic properties, just to name a few.⁷⁸

There are many tulsi products available today, including tea, tablets, powder, extracts and tulsi essential oil. Among its many benefits, tulsi may help:

Manage blood glucose levels — Tulsi has hypoglycemic and hypolipidemic effects, which may be beneficial to diabetics. One study noted that after being given the tulsi leaf powder, diabetic rats had "a significant reduction in fasting blood sugar, uronic acid, total amino acids, total cholesterol, triglyceride, phospholipids and total lipids."^{79,80}

Boost immunity — The leaf extract of tulsi was found to have immunotherapeutic

potential in mammal subjects. The researchers noted the "crude aqueous extract of O. sanctum (leaf) possesses some biologically active principles that are antibacterial and immunomodulatory in nature."81

Ease stress and anxiety — Compounds found in tulsi leaf extract, namely ocimarin and ocimumosides A and B, have anti-stress effects.⁸² A test done on human subjects found that taking the plant extract may help ease generalized anxiety disorder.⁸³

Improve dental health — Using tulsi tea as a mouth rinse may have benefits for your oral health. A study⁸⁴ found an herbal mouth rinse of natural herbs like neem, clove oil, tulsi and more were able to inhibit oral bacteria like Actinomyces sp., E. nodatum, P. intermedia and more.

Boost cognitive function — One study⁸⁵ found dementia-induced rats had improved cognition after being given tulsi leaf extract.

Promote liver health — Tulsi may have hepatoprotective effects, and was found to help protect against induced liver damage among rat subjects.⁸⁶

Protect against different kinds of infections — Tulsi is believed to help alleviate various bacterial infections, including urinary tract infection,⁸⁷ dermal infections caused by Staphylococcus aureus and other bacteria⁸⁸ and respiratory tract infections like pneumonia.⁸⁹

Ease pain — Sipping tulsi tea may help you acquire its antipyretic, anti-inflammatory and analgesic properties. One study notes that it may be a potential alternative to nonsteroidal anti-inflammatory drugs (NSAIDs).⁹⁰

Sources and References