

Medicinal History of Select Traditional Herbs

Common	Latin	Traditional Uses	Contemporary Research Examples	Parts Used	More Information
Garlic	<i>Allium sativum</i>	Most common traditional uses: antiseptic and diuretic/urine related. While traditional uses are topical, it is cautioned against that use now due to the possibility of burns. Since Roman and Greek times, boiled garlic was used to treat ringworm. Also slices of garlic were placed along the soles of feet inside shoes to cure whooping cough. Pliny the Roman said that it relieved hoarseness when eaten alone. In 16th century England, a distilled preparation was used to treat kidney stones. In 17th century England, used to promote urine (as a diuretic). In Cuba, it was said that a child wearing 13 cloves of garlic around his/her neck for 13 days would be protected from jaundice. During World War I, it was used topically for its supposed antiseptic effects. For a long time, garlic planted on Good Friday and boiled in milk was said to cure any disease. (5)	May help reduce the risk of some risk factors for cardiovascular disease. (2) May help to reverse heart disease and reduce the buildup of plaque in the arteries. (34) Associated with a reduced risk for some types of cancer. (3) Stimulates the immune system and has antimicrobial activity. (4) May have antibiotic properties. (33) Scientists believe that a compound called diallyl disulfide that occurs in garlic may work against the enzymes in the body that damage cartilage and cause osteoarthritis. (35) Topical uses should be avoided due to cases of chemical burns. (31) No evidence that garlic can protect people against COVID-19.	Bulb - most common Leaves, flowers, immature flower stalks - sometimes Skin covering each clove and root cluster - rarely	In the onion family. Native to Central Asia and Northeastern Iran. Roman soldiers ate garlic before battle because they believed it provided courage. After it was introduced into South America, the Incas believed no one would charge anyone carrying it. Into the 19th century, German miners used it to protect against evil (including vampires!). Ancient Greeks used it to protect against the evil eye. In the foundation myth of the ancient Korean kingdom of Gojoseon, eating nothing but 20 cloves of garlic and a bundle of Korean mugwort for 100 days let a bear be transformed into a woman. (32)
Turmeric	<i>Curcuma longa</i>	Many digestive uses. Used in Ayurvedic medicine to treat breathing problems. Also used in China and India for improved circulation and digestion and general aches and pains. In Hawaii, used treat sinus infections. Stomach and liver problems, diabetes, inflammation. (13) In Nepal, used externally on wounds/abrasions and to minimize the appearance of scars. (12)	One study of 240 adults with prediabetes showed that taking it prevented them from getting diabetes. (9) Study that followed women for 3 menstrual cycles found that it helped ease PMS symptoms. (10) A trial is currently underway to evaluate safety and effectiveness of turmeric in patients with metastatic disease undergoing active chemotherapy. (6) Laboratory, animal and clinical studies suggest that turmeric reduces inflammation. (7) May be effective against major depressive disorder. (8) Limited information available regarding the clinical efficacy of curcumin (a constituent of turmeric) in neurodegenerative cases. (36) Two different studies examining turmeric's effect on the skin showed that it was effective in reducing fine lines and wrinkles and may help with the appearance of dark spots on the skin. (47) The compounds in turmeric can help with preventing heart disease. (49)	Rhizomes (underground stems)	In the ginger family. Native to the Indian subcontinent and Southeast Asia. In traditional Hindu weddings, the groom ties a yellow string tinted with turmeric around his wife's neck, signaling her ability to watch over her household. Whole chunk worn around neck to ward off evil. Powdered form revered in some Hindu temples in benediction ceremonies. Also used to adorn the body in various ceremonies. (39)
Roseroot	<i>Rhodiola rosea</i>	Largely used for respiratory function. Active ingredients are mostly polyphenols. Effective remedy for scurvy in 18th century Norway. In Alaska, used for treating burns, but it was also taken internally against lung inflammation and as a remedy for urinating. Used in folk medicine for washing the hair since it gave a pleasant scent and was supposed to be good for the hair. In Russia and Asia, used to increase physical endurance, work productivity, longevity, resistance to altitude sickness, and to treat fatigue, depression, anaemia, impotence, gastrointestinal ailments, infections, and disorders of the nervous system. Mongolian doctors prescribed it for tuberculosis and cancer. In Central Asia, its tea was the most effective treatment for colds and flu during severe winters. (14)	Both traditional use and contemporary research indicate mood and neurological benefits. May be a beneficial treatment option for major depressive disorder. (15) Favorably affects various physiological functions, including cognition, work performance, high-altitude sickness, and cardioprotective effects. (16) Dried underground organs also revealed strong antibacterial effects against, for example, <i>Staphylococcus</i> strains. (17) Can impose cellular and systemic benefits similar to the effect of positive lifestyle interventions to normal physiological functions and for anti-cancer. (18) May have neuroprotective effects and may help treat neurodegenerative diseases. (55)	Root	In mountain villages of Siberia, a bouquet of roots is still given to couples prior to marriage to enhance fertility and assure the birth of healthy children. For centuries only family members knew where to gather the wild 'golden roots' and the methods of extraction. Siberians secretly transported the herb down ancient trails to the Caucasian mountains where it was traded for Georgian wines, fruits, garlic and honey. Chinese emperors sent expeditions to Siberia to bring back the 'Golden root' for medicinal preparations. An extract is sometimes added as a flavoring in vodkas. The Vikings depended on the herb to enhance their physical strength and endurance. (54)

Medicinal History of Select Traditional Herbs

Common	Latin	Traditional Uses	Contemporary Research Examples	Parts Used	More Information
Ginger	<i>Zingiber officinale</i>	Known as the universal medicine and an ingredient in half of all Ayurvedic and Chinese medicine. China - reduce coughing and the common cold. Indonesia - reduce fatigue and improve digestion. India and Nepal - cure headaches. United States - alleviate nausea and vomiting due to motion sickness, surgery, and pregnancy. (40)	Several clinical trials support the short-term use of ginger for chemotherapy-associated nausea and vomiting and motion sickness. (41) Health benefits include alleviating gastrointestinal issues, such as nausea, gas, and bloating. (48) May help to ease stomach issues and prevent vomiting. (50) A few studies have been conducted with positive results to treat osteoarthritis and rheumatoid arthritis. (42) Certain compounds in ginger may improve inflammation in respiratory ailments and protect against certain viruses. (43) A small animal study suggests that ginger may help ease withdrawal symptoms from drugs like morphine. (44)	Rhizomes - usual Shoots and leaves - possible	Ginger is in the family Zingiberaceae, which also includes turmeric ( <i>Curcuma longa</i> ), cardamom ( <i>Elettaria cardamomum</i> ), and galangal. Ginger originated in Island Southeast Asia and was likely domesticated first by the Austronesian peoples. Legend has it that the first gingerbread was made by a baker on the Isle of Rhodes near Greece around 2400 B.C. In the 1500's, gingerbread was known to be Queen Elizabeth I's favorite treat and during the Middle Ages, tavern keepers would keep a constant supply of ground ginger powder so customers could sprinkle it on their beer. (46)
Candytuft	<i>Iberis sempervirens</i>	The common theme between traditional and contemporary uses seems to be digestive. Leaves and roots were made into a poultice and applied to area affected by skin allergy. (20) Tonic was used to aid digestion and relieve wind and bloating. Seeds were used in treatment of asthma, bronchitis, and dropsy. Also used for gout, rheumatism, and arthritis. (56) Currently the foliage and stalks are employed in German phytomedicine as a bitter digestive tonic, and it is used in homeopathy for nervousness and muscle soreness. (58)	Can help with stomach acid, stomach and small intestine cramping, and diarrhea caused by IBS. (19) Can be used in rheumatic inflammatory conditions to help reduce the risk of vascular complications. (61)	Seeds - particularly Roots, stems, leaves - also	Mustard family. The name "candytuft" is not related to candy, but derives from Candia, the former name of Iraklion on the island of Crete. (62) In the language of flowers, the candytuft symbolizes indifference. (63)
Hollyhock	<i>Althaea rosea</i>	Ear/nose/throat theme. Anti-arthritis. (21) Hollyhocks were used to soothe the mucous membrane and treat coughs, colds, and bronchitis. They were also used to soothe skin inflammation and rashes. In the 16th and 17th Centuries, hollyhock tea was very popular for many health problems. Hollyhock species have been used since 300 BC to treat earache, mucus issues, hay fever, and allergic rhinitis. (25) Used in Palestine for anticough, laxative, gingivitis, stomatitis. (22)	Can work like estrogen to provoke and regulate menstrual cycles. (23) Could be considered as a potential therapeutic agent useful in the development of immune-stimulatory compounds. (24)	Flowers - most common Roots - also used Shoots - less common	During the Victorian era, the hollyhock symbolized both ambition, fecundity, honesty, and fascination in the language of flowers. (63)
Houseleek	<i>Sempervivum tectorum</i>	Leaves put in poultices for skin ulcers and in ointments (like aloe vera). Rosette leaves were used as an astringent to stop the flow of blood from cuts. (64) Used in Palestinian folk medicine for skin diseases. (26) On the Kosovar side of the Albanian alps, leaves were decocted, cooled, and then placed in an ear for earache. (27)	Similar uses to aloe vera. Fresh leaves are astringent, diuretic, odontalgic, refrigerant, and vulnerary. Emetic in excess. (66) Use for treating ear pain is justified, since the juice possessed antimicrobial activity towards clinical isolates of bacteria linked to otitis. (65)	Leaves - juice expressed like a	Also known as hens and chicks. Tectorum means "of house roofs". Roman tradition claiming that it protects buildings against lightning strikes. In 16th century, still believed that the plant growing on the roofs would keep away lightning (a damp thatch roof would not be easy prey to fire). In England and Germany, you will still see houses and barns green with houseleeks. (64) In Victorian language of flowers, symbolizes vivacity and domestic industry. (63) Legend that a botanist tried to dry it for 18 months and could not, and then he replanted it and it grew as though nothing had happened. (67)

Common	Latin	Traditional Uses	Contemporary Research Examples	Parts Used	More Information
Elderberry	Sambucus canadensis	<p>Elder is long esteemed for medicinal use; old world tradition of planting elder by edge of garden as its protector; its name denotes its status. (122) Native Americans used medicinally for headache, laxative, diuretic, externally on cuts, bruises, burns, and boils (102). Native Americans also found the elderberry plant – the flowers, berries, leaves, bark and wood enormously useful – as food, for dye, basketry, tools, and musical instruments. Tea made from elder flowers was regarded as useful for fevers, colds, the flu, headaches, indigestion, rheumatism and the pain of sprains and bruises; to stimulate perspiration and urination. Poultices made from the flowers was used to treat wounds, improve the complexion, tone and soften the skin, and lighten skin spots. (111)</p>	<p>Clinical studies on fruit extract positive for colds and flu. In Europe, flowers and fruit is used to reduce fever and improve bronchial secretions (102). Small scale studies support reduction in cold symptom severity and duration (107). NIH, NLM, Elderberry effectively treats upper respiratory symptoms (112). Its antiseptic qualities may fight acne (107). High in Vit. A, it may smooth skin and reduce age spots (107). Berries are high in Vitamin C (111). Elderberry flowers contain flavonoids and rutin, which are known to improve immune function, particularly in combination with vitamin “C.” The flowers also contain tannins, which account for its traditional use to reduce bleeding, diarrhea, and congestion. The flowers are the mildest part of the plant, and prepared as a tea, are used to break dry fevers and stimulate perspiration, aid headache, indigestion. Used as a wash, the flowers or leaves are good for wounds, sprains, and bruises, as well as for sores on domestic animals. The leaves, which are stronger, have a slightly laxative property. Applied externally, leaves, flowers, bark and twigs are excellent as a poultice, mixed equally with chamomile, for soreness, inflammations, joint stiffness, and to reduce the swelling of bee stings (111)</p>	<p>Parts used: flowers and berries. Numerous white flowers bloom from late June to August. Fruits ripen from July to September.(111) Collect flowers when in bloom and fruits thereafter in early fall (108).</p>	<p>Bark, root, unripe leaves, and berries are TOXIC in raw state. Elderberries and plant parts MUST BE COOKED before use; consumption of raw elderberries may cause nausea, vomiting, and diarrhea (numerous sources) (108).</p>
Dandelion	Taraxacum officinale	<p>In Western folk medicine, the leaves were used as diuretic and similarly recommended by Arab physicians in the 11th century. The root more recently discovered as supporting the liver (108). Root tea for liver, gallbladder, kidney and bladder ailments, diuretic; tonic for digestion/constipation; leaf tea for anemia and blood purifier (102); The Romans recorded using dandelion and was noted by the Anglo Saxon tribes of Britain and the Normans of France. Historically, dandelion was used for medicine, food and wine. In the 17th century when dandelions were brought to the NewWorld, they were mainly used by the Puritans as a source of medicine to treat fevers, boils, eye problems, diarrhea, fluid retention, liver congestion, heartburn, and skin ailments. The leaves act as a diuretic and roots improve bile flow. It was also used to attract and feed honeybees. (113)</p>	<p>Experimentally/practitioners root is hypoglycemic, stimulates immune system, weak antibiotic vs. yeast infection, stimulates bile, weight loss, antioxidant liver protectant and strong diuretic; recent study confirmed extract increased red blood cell count and normalized white cells (102); limited studies support chemicals and compounds in dandelion may protect skin from UV sun damage, improve digestion, boost immune system with antiviral and antibacterial properties, slow growth of cancer cells (colon, pancreatic, and liver), reduce inflammation and cholesterol, and regulate blood sugar (107). Research published in 1974 Planta Medica confirms leaves are powerful diuretic. A 2004 laboratory study reported dandelion root had marked anticancer activity, i.e. tumor necrosis. (108); Dandelion has been considered a key anti-diabetic plant because of its anti-hyperglycemic, anti-oxidative, and anti-inflammatory properties due to the various bioactive components present in dandelion. Human clinical trials needed, however in vitro and in vivo tests support its effect. (115) Dandelion has numerous therapeutic benefits, including treatment of T2D, blisters, spleen, and liver complaints (116)</p>	<p>Parts used: roots, leaves, and flowers. Leaves may be harvested anytime, but recommend Spring for more tender and less bitter leaves. Roots in Fall maybe dried or pressed for juice (107)(108)(122).</p>	<p>Contact dermatitis possible from latex in leaves/stems (102).</p>

Medicinal History of Select Traditional Herbs

Common	Latin	Traditional Uses	Contemporary Research Examples	Parts Used	More Information
Thyme	Thymus vulgaris	Used by ancient Egyptians as an embalming fluid, in Greece as incense in temples, by Romans to flavor cheese and beer. Hippocrates recommended it for respiratory disease and conditions. Historically used for diarrhea, stomach ache, arthritis, and sore throat. Thought to protect against Black Death. (107) Historically used as nervous curative and antiseptic, gastric upset, bronchial, and throat conditions (101)	Thymol is a powerful antiseptic, strong antibiotic, and effective antifungal and antispasmodic, used in topical ointments and gargles. Thymol combats bacteria causing ulcers (102?). Studies on animals indicate antimicrobial effects on foodborne illnesses; may protect against colon cancer and aid in breast cancer cell death; destroys yeast infections and topically heals fungal infections on skin and acne (107). Strong antibacterial and aids stomach ulcers (108). Two chemicals in thyme (thymol and carvacrol) in isolation show particular effectiveness against food-borne pathogens, including Escherichia coli, Salmonella, and Bacillus cereus. Carvacrol has high antioxidant activity and has been successfully used, mainly associated with thymol, as dietary phytoadditive to improve animal antioxidant status. The anticancer properties of CV have been reported in preclinical models of breast, liver, and lung carcinomas, acting on proapoptotic processes. Besides the interesting properties of CV, to date, human trials on CV are still lacking, and this largely impedes any conclusions of clinical relevance. (117)	Parts used: leaf, flower. Harvest when starting to flower. Leaves and flower tops maybe distilled for oil, or used dried or fresh for other preparations.	Generally not toxic and well tolerated.
Sage	Salvia officinalis	Used to clean wounds, for ulcers/sores, throat irritations, digestive and nerve tonic (101). In ancient Rome, sage was considered to have substantial healing properties, particularly helpful in the digestion of the ubiquitous fatty meats of the time, and was deemed a part of the official Roman pharmacopeia. The herb was used to heal ulcers, to help stop the bleeding of wounds, and to soothe a sore throat.	German scientific panels found sage contains antibacterial, antifungal, antiviral and astringent properties; Human studies used to reduce oral and genital cold sores, chemical in sage present that USFDA approved for Alzheimers; effective managing cognitive loss and agitation (101). A review of human studies, small scale, support positive cognitive and mood enhancing effect on healthy adults and in mild to moderate Alzheimers patients (123). Small scale studies on humans shows blood glucose and cholesterol lowering properties and anti-inflammatory effects on gum disease (107). The NCCIH states that studies on sore throat, mood, memory and cholesterol were preliminary at best (109). A broad review of studies and investigation into the chemistry, pharmacology and medicinal properties of sage have supported chemicals and essential oils in sage are known antioxidants, may inhibit the degradation of memory and cognition, improve calmness, may alleviate diabetes through glucose and reduce cholesterol and has strong anti-bacterial properties (118).	Parts used: leaf. Harvest just prior to bloom; leaves maybe dried or boiled/soaked.	Allergies are possible. High doses of sage oil (officinalis) may cause stomach upset; not recommended for diabetics or persons with high blood pressure (107)(123); sage may interfere with lactation in nursing mothers (123).

Medicinal History of Select Traditional Herbs

Common	Latin	Traditional Uses	Contemporary Research Examples	Parts Used	More Information
Echinacea	<i>Echinacea purpurea</i> (L.) Moench	Native to the U.S., the Native Americans used it for external wounds, burns and bites, toothaches and throat infections. Internal use for coughs, stomach cramps and snake bites. At the beginning of the 20th century, Echinacea was the most frequently used plant preparation in the USA. Commercial cultivation was started in Germany around 1939.(119)	U of Conn. Pharmacy School review of studies concluded echinacea could reduce chance of catching cold by 58% and reduce length of illness by 1.4 days; however other reviews found no such conclusive support (107). Experiments and clinical studies show immune system stimulation, white blood cell response, aids with colds and flus, hard to heal sores (102). The NCCIH is funding research to identify active components in echinacea and notes presently modest evidence of immune system support prior to getting cold symptoms. (109) Various studies support some indicia of immune response and wound healing properties but does not prevent colds.(110)	Parts used: root, leaf, flower, and seed. Harvest leaves and above ground parts while in bloom (midsummer); harvest roots or rhizomes in autumn to be dried.	Allergic response possible (itchiness). Manner of delivery may alter effectiveness; not used for autoimmune diseases such as TB, MS and HIV; may affect absorption of some drugs (102)
Marsh Mallow	<i>Althaea officinalis</i> L.	In the 1700s, the French cooked the gummy roots, and whipped it with sugar and eggs, to make a light, mucilaginous mixture to soothe coughs and calm digestion in babies. (122) Marsh mallow candy got its name from the plant because manufactureres originally used the root's mucilage to make the confection.(107) Roots and leaves used to soothe, in teas for sore throat, expectorant, gastritis, peptic ulcers; poultice for bruises, sprains, inflammation; soothes membrane and skin (102) (108).	Small scale studies on humans suggest herbal cough syrups and drops with marshmallow root treat dry cough, soothe throat, and reduce length of time of respiratory infections; relieves dry mouth, protects gut from ulcers, relieves eczema and UV damage to skin, heals wounds. (107) European plant medicine use the root for cough suppression and throat inflammation; relieves local irritations, digestive tract inflammation, and soothes mucous membrane irritation like sore throat (102). Extracts from roots and flowers have antibacterial, anti-cough, antiviral properties, and can aid in inflammation, reduce gastric ulcers. Positive results found in preventing infection in fish and rats (120).	Parts used: root; leaf and flower may be used also. Harvest roots from 3 year old plants in autumn for drying; leaves before plant blooms, and flowers, maybe used for teas (102) [?]	No known toxicity. Root is high in sugar. Like other mucilage containing plants, may interfere with other drug absorption. Related to common mallow and Hollyhock, which are similarly used (102).
Calendula	<i>Calendula officinalis</i>	Popular in Shakespeare's time as a versatile a remedy. Traditionally an anti inflammatory that effectively treats skins from wounds and burns, to acne and rashes, and even fungal conditions such as athlete's foot. (108) Traditionally used in treatment of inflammation of organs, ulcers, a cleansing diuretic, mouth sores, wounds and burns; evinces anti-fungal and antiseptic qualities(121).	Takend internally, addresses inflammation of digestive system, eg.g. gastritis, ulcers, colitis; detoxifying; helps treat fevers, infections and systemic skin disorders like eczema and acne; considered cleansing for the liver (108). Flower extracts help heal wounds, are often applied as creme or salve, and demonstrate anti-inflammatory, antibacterial, antiparasitic, anti-HIV, and anti-tumor effects (110).	Parts used: flower. Harvest flowers in early summer (108).	No known toxicity (122).