

Calendula

Calendula officinalis

Compositae (Asteraceae) (Sunflower or Aster) Family

Common Names



Calendula is sometimes called pot marigold, but it is not the same plant as the common garden marigold (*Tagetes* spp.). Hologold, gold-bloom, Marybud, and Marygold are older names referring to the flower's golden hues and association with holy and feminine qualities. My friend Chunpay, a Tibetan Buddhist monk, once told me that the Tibetan name for Calendula is "Meido Dolma" or "Tara's Flower." Meido means "flower" and Dolma is the Tibetan name for Tara, the Great Compassionate Mother. According to Buddhist tradition, Tara was born from the tears of Avalokiteshvara, the Bodhisattva of Compassion, when he contemplated the sufferings of the world. Tara is the goddess of compassion in its most sacred, feminine, gentle, and heartfelt capacity, encompassing the pure qualities of nature, maternal nurturing, and protection.

Early Christians called Calendula "Marybud" or "Marygold" because it bloomed during the Catholic festivals honoring Mary, the mother of Jesus, and the flowers were used to adorn statues of her image. It is interesting that both Christian and Buddhist traditions associate Calendula with Mary and Tara, two archetypes of the all-compassionate and sacred mother. This is a beautiful reflection of Calendula's healing qualities.

Medicinal Part of the Plant

The flower heads contain the primary medicinal constituents, although the leaves may also be used.

Range and Habitat

Calendula is native to Europe and northern Africa. It naturalizes effortlessly in temperate zones, where it has spread throughout the Americas and Asia and is widely cultivated for its vibrant beauty. Several years ago, I was pleasantly surprised to find the familiar and colorful yellow and orange Calendula flowers growing abundantly in a university garden in Hangzhou, China. They looked exactly like the ones in my own garden. I picked some of the seeds to bring home, and the flowers are now flourishing in Indiana soil.

Description of the Plant

Calendula is an annual herb and popular ornamental garden plant. There are about 20 species in the genus, plus many hybrid cultivars that have questionable medicinal properties. *Calendula officinalis* grows up to a height of 2'. A rounded but angular, fairly erect, and multi-branching stem grows from a fibrous root system. The pale-green stems, leaves, and calyx are densely covered with short, erect, soft pubescent hairs. The simple, alternate leaves are rather thick and succulent, and are entire with wave-like and irregular margins. The sessile leaves are lanceolate with pointed or rounded tips. The base of each leaf clasps around the stem.



Dry seeds

Brilliantly colored, solitary, daisy-shaped flower heads are typically 1½-2" in diameter and appear on the ends of branching stems. The cheerful flowers are painted in bright, sunny shades of golden yellow, amber, and orange. Typical of the *Compositae* family, flower heads consist of long ray petals surrounding a central cluster of disc flowers that are tiny tubular florets. The tip of each ray petal has two or three notches. The calyx holding the base of the flower head consists of many narrow, leaf-like sepals. The flowers and leaves emit a sticky resin that can be felt when handling the plant. Under a 16X magnifying glass, oil droplets can be seen "oozing" out of the green parts of the plant, especially visible on a sunny day. Flowers mature into brown achene seeds that are distinctively curved like crescent moons.



Calendula (*Calendula officinalis*)

Calendula begins blooming in June and continues throughout summer. Flowers are sensitive and respond to light by partially closing with the setting sun and on overcast days, and fully opening in sunshine. The delicate-looking flowers are tougher than they seem and are able to withstand the first mild frosts of autumn.

Cultivation

Calendula is a hardy, easy-to-grow annual that is started from seed. Be sure to get your *C. officinalis* seeds from a company that provides the Latin name to avoid horticultural strains that may not have the desired resin content and medicinal properties. The high resin content in *C. officinalis* will make your fingers sticky after handling the flowers and leaves.

The plant likes full sun and fairly rich, well-drained soil. It will tolerate partial shade, but sun increases the amount of medicinal resins. Calendula may be started in greenhouse trays, although the easiest way is to sow the seeds directly into a weed-free outdoor garden bed in early spring after the last frost. Cover the seeds with ¼" of soil and keep moist. Germination usually requires 10-15 days of warm soil temperatures. If allowed to go to seed, Calendula self-sows freely and new seedlings appear the following spring. These can be transplanted or thinned out to allow 8-10" between plants. Deadheading (picking off flower heads after they have faded) stimulates constant blooming until the first hard frost.

Harvest

Gather the flower heads when in full bloom. To ensure maximum resin content, harvest on a sunny day in the late afternoon. Calendula is a continual bloomer, so flowers can be gathered on a regular basis every 4-5 days during the summer and early autumn. A colorful basketful of vibrant, freshly harvested Calendula flowers is a visual delight! The leaves are collected when young and tender. Harvest seeds for future planting by allowing some flower heads to dry out and turn brown. The crescent moon-shaped seeds are large and easy to collect before they fall off the flower heads.

Be sure to maintain a constant supply of Calendula flowers. Harvest flowers for making salve and tinctures, but be sure to leave plenty of flowers to develop into seeds that can be collected for planting the next year.

Preparation of Plant Medicine and Dosages

Calendula flowers and leaves yield their properties to boiling water, alcohol and oil, and can be prepared as tea, tincture, and salve. Typically, the more potent flower heads are used for healing rather than the leaves, and most Calendula products on the market are salves produced from the flowers. For external use, freshly harvested flower heads can be heated in oil with other vulnerary herbs and made into salve. Fresh or dried flowers can also be prepared into a moist mash for poultice application. The tea or diluted tincture can be applied as a topical wash or fomentation.

Rather than drying Calendula flower heads for future use, I always recommend making tincture, oil, or salve with the fresh flower heads. The dried herb is potent for no longer than a year, while the tincture has an unlimited shelf-life. Another method of preservation is to chop up the fresh flower heads and store them in the freezer for several months.

Sometimes drying may be desirable. To dry the flowers for culinary purposes, pick the edible petals off the green center. For medicinal uses, chop the entire flower head into small pieces. Place flowers on screens and dry in a well-ventilated, shady area. Care must be taken to dry the petals thoroughly and quickly or they will lose their color and medicinal properties. Store them in an airtight glass jar out of direct sunlight.

PREPARATIONS

Tea: Steep 2-4 teaspoons of chopped fresh or dried flower petals or leaves in 1 cup of water.

Dosage: 1 cup daily or every 1-2 hours as needed. The plant has a mild, pleasant flavor.

Tincture: Make with freshly harvested flower heads using 50% 190-proof grain alcohol and 50% distilled water. *Dosage:* 30-60 drops in water up to 4 times a day.

Oil and Salve: Chop flower heads, cover with olive oil, and bake at 200°F for 2-3 hours. Add beeswax to solidify oil into ointment. Calendula is typically combined with other vulnerary herbs (refer to "Skin Problems" in the "Index of Health Issues and Herbal Recommendations").

Wash or Fomentation: Saturate a cloth with strong tea or tincture diluted with 5 parts water (1:5) and apply to the skin. Freshly squeezed juice from the leaves and flower heads may also be used.

Poultice: Fresh flowers or leaves are macerated into a paste and spread over the problem area. If the dried plant is used, grind or blend it into a powder and add enough water to make a thick paste.

Culinary Uses

Calendula flower petals and leaves have been used to garnish and flavor food since the days of the Roman Empire. The flowers were known as "poor man's Saffron," and their appetizing color and mild flavor were a common addition to soups, stews, salads, omelets, cakes, cookies, and to color cheese. The flowers and leaves can be eaten fresh or dried. Create a beautiful presentation by decorating cakes and salads with the flowers, or put a few petals in ice cube trays to make a colorful and unique addition to iced drinks.

Chemical Constituents

The primary medicinal constituents in the flower heads of *C. officinalis* are flavonoids, volatile oils, terpenoids, and polysaccharides, which are immunostimulants. Flavonoids are vasoprotective (protect blood vessels) and antioxidant, and include isoquercitrin, isorhamnetin (hepatoprotective, antibacterial), kaempferol (antibacterial, anticancer, anti-inflammatory, antimutagenic, antiseptic, anti-ulcer, choleric), quercetin (anti-inflammatory, anti-allergenic), rutin, narcissin, and neohesperidoside.

Caryophyllene is a volatile oil that is anti-acne, anti-asthmatic, antibacterial, anticancer, anti-inflammatory, antispasmodic, antitumor, diuretic, fungicide, and sedative.

Terpenoids include lupeol (antiviral, anti-inflammatory, antilithic, antimalarial, antioxidant, antitumor, diuretic), oleanolic acid (antibacterial, antimalarial, antitumor, antiviral, cardiogenic, diuretic, hepatoprotective), calenduladiol, and alpha- and beta-amyrin (anti-inflammatory, antitumor, diuretic).

Phytosterols include sitosterol (antibacterial, anticancer, anti-inflammatory, antileukemic, antilymphomic, antimutagenic, antitumor, diuretic, hepatoprotective), stigmasterol (anti-inflammatory, antiviral, anticancer, estrogenic), and campesterol (antioxidant, lowers cholesterol). A triterpene glycoside known as calendulozide B exerts a marked ability to heal ulcers and calm the nerves.

Carotenoid pigments are antioxidant and promote healthy eyesight. These include lutein (anticancer, antitumor in breast and colon cells), carotene, lycopin, zeaxanthin, and calendulin. Lycopene is antioxidant and demonstrates anticancer activity in bladder, breast, cervical, and prostate tissues.

Acids include lauric (antibacterial, antiviral, choleric), caffeic (analgesic, antibacterial, anticancer, antiviral, antihistamine, anti-inflammatory, antimutagenic, antioxidant, antiseptic, antispasmodic, diuretic, vulnerary), malic (antibacterial, antiseptic, antitumor, sialogogue), gentisic (analgesic, antibacterial, antirheumatic, antiviral), and chlorogenic acid (analgesic, antibacterial, anticancer, antihistamine, anti-HIV, anti-inflammatory, antimutagenic, antiseptic, antitumor, choleric, hepatoprotective, immunostimulant, vulnerary). Myristic and palmitic acids demonstrate anti-inflammatory activity and reduce edema. Salicylic acid occurs in the fresh plant and is analgesic and anti-inflammatory. Calendula also contains mucilage, vitamins C and E, calcium, and phosphorous.

Safety, Contraindications, and Drug Interactions

Calendula is a gentle herb that can be used safely by all ages, including young children and the elderly. The authoritative German Commission E herbal regulatory agency has reported no known toxicity, side effects, contraindications or drug interactions, and has approved the herb as safe and effective for wound healing, burns, eczema, and other inflammatory skin conditions (Blumenthal, 1998). Some people assume that the plant causes allergies similar to Ragweed, Marigolds, and other members of the Aster family, but Calendula does not seem to contain the allergenic sesquiterpenoid lactones (Skenderi, 2003). It is best to **avoid use during early pregnancy** due to its mild emmenagogue properties (Brinker, 2001).

Medicinal Uses

History of the Plant

The history of this colorful and cheerful herb is full of poetry and symbolism. Calendula received its name from the ancient Romans, who noticed that it usually bloomed on the first day, or “calends,” of every month. The species name *officinalis* identifies it as the official variety used for medicinal purposes. The ancient Egyptians revered it as a rejuvenating tea, and it was valued by gypsies, monks, and other herbal healers of Old Europe.

Calendula was believed to possess magical properties. It was used in charms and talismans enabling people to see fairies and nature spirits, and to give women foreknowledge of the man they would marry. If people were robbed, they wore an amulet of Calendula, thinking the herb would bestow power to recognize the thief. Because of its association with Mary, the mother of Jesus, people believed the power of this holy plant was so great that by simply gazing upon it, the eyes would be strengthened and evil driven away.

English herbalist, apothecary, and surgeon John Gerard (1545–1612), who used Calendula in his medical practice, wrote, “It strengthens and comforts the heart . . . and is for inflammation and pain” (Gerard, 1633). During this era, the herb was also taken for headaches, jaundice, toothaches, and malaria. A tea of the flowers was administered as eye drops for sore and inflamed eyes. Nicholas Culpeper (1616–1654), the famous European herbalist and astrologer, claimed that it was an herb of the Sun and ruled under the fiery astrological sign of Leo.

The ancient Romans introduced the plant and its medicinal applications to England and the rest of Europe, and eventually Calendula naturalized throughout Asia and across the ocean in the Americas. During its long history of medicinal use around the world, Calendula flowers have traditionally been employed to treat cancers, fevers, swollen and sore lymph glands, suppressed menstruation, spasms, stomach ulcers, indigestion, and most especially as an external application for burns and all types of wounds and skin problems. During the American Civil War and World War I, the flowers were applied as a hemostatic (to stop bleeding) and antiseptic dressing for wounds. The American Eclectic physicians (1880s–1930s)

prescribed it for these conditions as well as liver complaints including jaundice, liver and spleen congestion, headaches, varicose veins, endometriosis (inflammation of uterine tissue), vaginitis (vaginal infection and inflammation), gonorrhea, urethritis (inflammation of ureters), torn perineum during childbirth, toothaches, traumatic injuries to eyes and ears, conjunctivitis (eye infection), mucous congestion or drainage of the sinuses, typhoid fever, and tuberculosis.

Calendula continues to be a popular herb and garden ornamental around the globe. In the United States and Europe, it is a common ingredient in most herbal salves. Current research and animal studies confirm many of its traditional medicinal uses.

Healing Qualities

Alterative, antibacterial, antifungal, anti-inflammatory, antioxidant, antiseptic, antispasmodic, anti-tumor, antiviral, astringent, cardiac, cholagogue, demulcent, depurative, diaphoretic, emmenagogue, exanthematous, febrifuge, hemostatic, hepatic, immunostimulant, lymphagogue, nervine, ophthalmicum, stomachic, tonic, and vulnerary.

Traditional Chinese Medicine (TCM) Perspective

Calendula is a neutral herb encompassing a harmonious blend of warming and cooling properties. The plant's ability to stimulate and normalize circulation generates warmth. The diaphoretic and febrifuge qualities cool feverish and inflammatory conditions. Calendula primarily affects the liver, stomach, lymphatic system, blood, heart, uterus, skin, and blood vessels. It influences the liver, heart and lung meridians, and the conception (Ren) vessel. It is calming to the nervous system, stimulating and decongesting to the liver, blood and lymphatic circulation, and dissolving to tumors and pathogens. The flowers clear toxic and Damp Heat from the internal organs, blood, and lymph. They revitalize the Blood, resolve Liver and Uterine Qi Stagnation, and Heart Qi deficiency. Calendula strengthens Wei Qi (immunity) and is used for Wind Heat conditions of fever, sore throat, the common cold, and flu.

Primary Actions

Calendula is a potent herb that decreases oxidative stress, stimulates immunity and wound healing, and promotes blood and lymphatic cleansing and circulation. Traditional uses of the herb for cancer, fungal, bacterial, and viral infections have been validated by modern research, which has specifically focused on its antioxidant and anti-inflammatory properties. For many years, Calendula has been a valuable and reliable addition to my tincture combinations for cleansing and detoxifying the blood, lymph and liver, and for stomach ailments. The flowers have also been a primary ingredient in my "Herbal Healing Salve."

I have always regarded Calendula as a plant capable of generating balance in our lives. The cheerfully radiant orange-yellow flowers express the vibrant masculine quality of the sun, while the crescent moon-shaped seeds reflect the nourishing and calming feminine qualities of the moon. In its lovely way of manifesting both polarities of male and female energies, the plant points us toward the healing ways of balance and harmony, both physically and emotionally.

Antioxidant and Inflammatory Protection: Calendula's extensive history as a folk remedy for infections, cancers, and tumors has prompted many research studies to investigate the herb's antioxidant properties. Alcohol extracts of the flower heads enhance production of the body's three most important antioxidant enzymes: superoxide dismutase (SOD), catalase, and glutathione. These enzymes are responsible for eliminating free radicals, which damage cells and are a root cause of inflammation, scar tissue formation, diminished immunity, degenerative diseases, and cancers. The herb reduces levels of cytokines, C-reactive protein and COX-2 (cyclooxygenase-2), which are all markers of inflammation (Preethi, 2009 March).

Cigarette smoke causes free radical damage and reduces antioxidant levels of SOD, glutathione, beta-carotene, and vitamins A and C. In a study exploring the activity of Calendula on rats exposed to cigarette smoke, investigators found that the herb protected against cellular injury and maintained normal levels of these antioxidant enzymes and vitamins (Ozkil, 2012). In another study, rats were given monosodium glutamate (MSG), a flavor enhancer used in food industries, to induce nerve toxicity. Treatment with Calendula significantly raised antioxidant levels and demonstrated neuroprotective action by reducing brain damage in the rats (Shivasharan, 2013). These potent antioxidant and anti-inflammatory properties contribute to Calendula's immune support and healing effects throughout the body.

Immune Protection for Infections and Cancer: Calendula is helpful in combating bacterial and viral infections, and fungal infections such as ringworm, Candida yeast, and thrush. Many studies validate the herb's ability to activate the immune system and increase efficacy of white blood cells. Polysaccharides, flavonoids, and volatile oils in the flower heads are partially responsible for these attributes (Wagner, 1985). Several researchers have reported that the polysaccharides stimulate the beneficial TH1 immune response leading to cell-mediated immunity, which responds to allergies, fungi, viruses, and cancers (Danilets, 2010). In mice studies, the flowers also stimulated the humoral immune response involving phagocytic and antibacterial activity (Borsuk, 2009). Alcohol extracts of the flowers demonstrate excellent antimicrobial

activity against Gram-negative and Gram-positive bacteria and fungi (Efstratiou, 2012). Another *in vitro* study showed that essential oils in Calendula are effective against 23 clinical strains of fungi (Gazim, 2008).

The tea is used as a mouthwash for inflamed mouth sores and gingivitis (gum disease), and as a gargle for sore throats. The flowers have demonstrated mild antimicrobial activity against oral *Streptococcus*, *Staphylococcus*, *Pseudomonas*, enterobacteria, and thrush (Candida yeast) when used as a daily mouthwash (Faria, 2011). The tea or tincture can be given for the common cold, influenza (flu), laryngitis, and cystitis (bladder infection). The flowers act as a febrifuge to reduce fevers, while diaphoretic properties increase perspiration to flush poisons from the body and reduce body heat. The herb decreases congestion and excess discharge of mucous from the nasal sinuses and is soothing to raw, irritated mucous membranes.

Oil made from the flowers may be dropped into the ears to treat earaches and infections (Brown, 2002; Sarrell, 2001). For best results, combine this with Garlic oil and place 1-2 drops in each ear 2-3 times a day. For eye inflammation and infections like conjunctivitis (pink eye), make a tea of the flower heads, filter out all sediment, and apply this as eye drops or eyewash several times a day. Combine Calendula with filtered Goldenseal tea for exceptional results in resolving eye infections.

Several *in vitro* studies have not only demonstrated Calendula's antiviral activity against the common cold and stomach infections, but also against some cancers, tumors, and HIV/AIDS (Boucaud-Maitre, 1988; Loggia, 1990 & 1994; Kalvatchev, 1997). The herb's powerful antioxidant properties contribute to cancer prevention and treatment. Calendula exerts cytotoxic action against target cancer cells and promotes apoptosis, the programmed death of cancer and mutated cells (Matic, 2013; Abdel-Aziem, 2013).

When scientists investigated the effects of a *C. officinalis* flower extract on melanoma lung cancer metastasis in mice, they discovered that the herb reduced lung tumor nodules by 74% and increased the life span of the mice by 43.3%. The herb inhibited key enzymes involved in processes of cancer metastasis (Preethi, 2010). In a 32-week study investigating the ability of alcohol extracts of Calendula to treat skin cancer in mice, the herb diminished inflammation, promoted apoptosis, and reduced the number, incidence, and proliferation of tumors (Ali, 2013).

Due to its gentle non-toxic nature, Calendula tea or tincture may safely be taken over a long period of time as part of a protocol for treating cancers, tumors, and HIV. Austrian herbalist Maria Treben, author of *Health Through God's Pharmacy*, cited a mixture of 10.5 ounces of dried Calendula and 3.5 ounces each of Stinging Nettle (*Urtica dioica*) and Yarrow (*Achillea millefolium*) as a cancer preventative and treatment. She recommended drinking two quarts of this tea daily for an extended period of time. Her combination for treating leukemia included Calendula, Speedwell (*Veronica officinalis*), Cleavers (*Galium aparine*), Yarrow, Wormwood (*Artemisia absinthium*), Elderberry shoots (*Sambucus nigra*), Celandine (*Chelidonium majus*), Stinging Nettle, St. John's Wort (*Hypericum perforatum*), Dandelion root (*Taraxacum officinale*), and Goat's Beard (*Aruncus dioicus*). These herbs may be used in conjunction with other cancer therapies, but are not intended to replace medical treatment.

Blood, Lymphatic Fluids, and the Heart: Calendula is a gentle but powerful tonic for the cardiovascular and lymphatic systems. It has a long history of use for heart health, although adequate clinical research on this is lacking. English herbalist and apothecary Nicholas Culpeper regarded it as a beneficial tonic that strengthens the heart. Maria Treben used the flowers for cardiac asthma caused by a weak, congested heart resulting in labored breathing (Treben, 1988). British herbalist Maude Grieve mentions in her book, *A Modern Herbal*, that it was often used by the common people "to strengthen and comfort the heart." For the lymphatic system, Calendula has traditionally been used to promote lymphatic drainage and circulation, and to treat swollen lymph nodes, tonsillitis, lingering low-grade infections, and lymphoma (cancer of lymph tissue and nodes).

American Eclectic physicians noted its calming influence on the nervous system and ability to relax muscles in the blood vessels, allowing vasodilation and increased blood flow to normalize circulation. Astringent properties help strengthen and restore normal tone to weak, protruding blood vessels, reduce bleeding, and benefit conditions of venous blood stagnation, including varicose veins and phlebitis (inflamed blood vessels). A placebo-controlled, double-blind study found that this formula increased circulation and extended the time of pain-free walking in people with intermittent claudication (Smulski, 1995).

In an interesting study, researchers observed that Calendula was cardioprotective against ischemic heart disease due to its antioxidant and anti-inflammatory properties. The herb stimulated left ventricular pressure and aortic flow in rat hearts, reducing the size of the myocardial infarct (the area of dead cells caused by oxygen deprivation) (Ray, 2010).

Although I have not heard other herbalists comment on Calendula's ability to treat mild depression and seasonal affective disorder (SAD), I have found it to be beneficial for some people with these conditions. Growing Calendula in one's garden, being outdoors in nature, and enjoying the beauty of this delightfully cheerful plant is certainly a great way to lift the spirit.

Wound Healing: External applications of Calendula excel at healing wounds and many other skin ailments. Ingesting the herb also benefits external healing from the inside out by reducing oxidative stress, improving immunity, and cleansing the blood and lymphatic fluids. For external use, apply Calendula as

an oil, salve, poultice, or wash made from tea or tincture. The flowers are used most often for this, but the leaves are also beneficial. The plant may also be put through a juicing machine and the expressed juice applied externally.

Calendula was greatly valued by the American Eclectic physicians, who prescribed it as tea or diluted tincture for internal use and external applications for skin rashes, diaper rash, eczema, burns, cancers, ulcers, tetanus, gangrene, and lacerated and post-surgical wounds. William Clary, M.D., an Eclectic physician from Ohio during the 1800s, wrote that “as a local remedy after surgical operations, it has no equal . . . Its forte is its influence on lacerated wounds . . . If applied constantly, gangrene will not follow, and there will be but little danger, if any, of tetanus. When applied to a wound it is seldom that any suppuration [pus] follows. It has been tested by several practitioners, and by one, is used after every surgical operation with the happiest effect. You need not fear to use it in wounds, and I would not be without it for a hundred times its cost. It is made into a saturated tincture with whiskey, and diluted with one-third its quantity of water; lint is saturated with this, applied to the parts, and renewed as often as it becomes dry” (Felter, 1898).

Several research studies validate the herb’s wound-healing abilities (Fronza, 2009; Markvicheva, 2009; Preethi, 2009) and anti-inflammatory benefits (Akihisa, 1996; Loggia, 1994). Oleanolic acid isolated from the flowers inhibited growth and survival of several Gram-positive skin bacteria (Szakiel, 2008). Other antimicrobial constituents in the herb attack bacteria and fungi to allow clean wound healing and reduce incidence of infections, gangrene, and tetanus (Foster & Leung, 1996). During the process of wound healing, Calendula promotes repair and growth of new cells and capillary blood vessels (Patrick, 1996; Parente, 2011) and stimulates the formation of granulation tissue, which fills in and seals over wounds and ulcers (Kiouchek-Popova, 1982).

One study explored the therapeutic efficacy of the flowers on 21 patients suffering from venous ulcers on their lower legs. Patients were treated with an ointment containing Calendula extract that was applied twice a day for 3 weeks. Upon completion of this regimen, the total surface area of all the ulcers was reduced by 41.71%, and complete healing occurred in 7 patients (Duran, 2005).

Calendula soothes the skin and mucous membranes by reducing pain, inflammation, discharge of pus (indicative of infection), and formation of scar tissue. I have found it to be quite helpful for all acute and slow-healing wounds and cuts, bruises, eruptive skin conditions such as eczema, hives, boils, abscesses, pimples and acne, hemorrhoids, fungal infections including athlete’s foot and ringworm, impetigo (a staphylococcus skin infection), and insect stings and bites. Rubbing the fresh juice on warts several times a day for an extended period of time may eradicate them. As a hemostatic and astringent, it helps stop bleeding, bruising, and nosebleeds.

The herb not only helps heal first-degree burns and sunburns, but in an 8-month clinical trial involving 254 women undergoing radiation treatment for breast cancer, Calendula oil significantly reduced mild to severe radiation-induced dermatitis and pain (Pommier, 2004). The herb may also be applied externally to treat skin cancers and pigmented brown spots.

Calendula is an excellent first-aid remedy and is typically prepared as a salve in combination with Comfrey (*Symphytum officinale*) and Goldenseal (*Hydrastis canadensis*). For more than 35 years, these three illustrious wound healers have been primary ingredients in the highly effective salve I produce to treat all types of external problems.

Digestive System: I first witnessed the wonderful healing potential of this herb many years ago, when my youngest son suddenly bent over in severe pain from stabbing stomach spasms. I quickly gave him a couple teaspoons of Calendula and Wild Ginger (*Asarum canadense*) tincture in water, and within a minute or two the pain had dramatically subsided.

Calendula flowers protect the inner mucosal lining of the stomach and intestines to soothe and heal inflamed tissues. As a calming nerve, the herb eases indigestion and spasms (Bashir, 2006). Antimicrobial activity eliminates infectious viruses, bacteria, and yeast throughout the digestive tract. A tea or tincture of the flowers is wonderful for many gastrointestinal problems, including cramps, nausea, vomiting, heartburn, acute and chronic stomach inflammation (gastritis), stomach and intestinal ulcers, diarrhea, colitis, and other inflammatory intestinal conditions.

Several clinical studies confirm the herb’s efficacy in treating digestive problems. Drinking the flower tea or diluted tincture is healing for stomach and intestinal ulcers and colitis (Chakurski, 1981; Krivenko, 1989). *C. officinalis* has also been used as a homeopathic preparation to successfully reduce *Helicobacter pylori* bacteria in treating patients suffering from gastritis and gastric ulcers. (Cwikla, 2010; Hofbauer, 2010). Japanese researchers found that an alcohol extract of the flowers lowered blood sugar levels and protected the stomach lining in rats (Yoshikawa, 2001).

Calendula stimulates and detoxifies the liver. Larger doses of the tincture (one tablespoon daily), taken over time, act as a cholagogue to promote formation of bile and its excretion from the gallbladder into the small intestines. This action improves liver and gallbladder function and is helpful for sluggish digestion, difficulty digesting fats, jaundice, hepatitis, constipation, gallstones, and high cholesterol.

Flower extracts protect both the liver and kidneys from chemically induced toxicity. Animal trials confirm that administration of the herb prior to toxic exposure resulted in diminished levels of liver enzymes normally increased by toxins, including serum glutamic-pyruvic transaminase (SGPT), serum glutamic-

oxaloacetic transaminase (SGOT), and alkaline phosphatase (ALP). Elevated lipid peroxidation and bilirubin are also markers of liver damage, and *Calendula* reduced these. Kidney function markers, including urea and creatinine, were also significantly increased in the animals exposed to toxins. However, these levels were found to be lowered in animals pretreated with *Calendula*. Researchers believed this protection of both liver and kidneys was due to antioxidant activity (Preethi, 2009 March).

Women's Health: *Calendula* promotes blood and lymphatic circulation in the pelvis, eases inflammation, and helps regulate the menstrual cycle. As an emmenagogue, it stimulates delayed menstruation to begin, reduces premenstrual syndrome (PMS) and painful menses, and can help correct amenorrhea (abnormal cessation of menses). By reducing uterine and venous blood congestion, *Calendula* is appropriate for copious menstrual bleeding or clotting, fluid retention, breast tenderness, uterine fibroids, varicose veins, leg cramps, hemorrhoids, phlebitis, and ovarian cysts and tumors. Ingesting the tea and using it as a douche is recommended for yeast infections and other vaginal infections and discharge. Eclectic physicians administered this herb to treat swollen inguinal lymph nodes, gonorrhea, endometriosis, and torn perineum from childbirth (Felter, 1898). The tea is used as a douche and the flower heads made into vaginal suppositories to treat abnormal cervical cells and uterine cancer. A poultice or ointment may be applied to heal cracked nipples from breast feeding, mastitis, breast lumps and cysts, and poor lymphatic drainage (Loggia, 1994). It is excellent for use after a mastectomy. Research on women with lymphedema (chronic fluid retention of the lymphatic system) following mastectomies showed that external application of *Calendula* significantly reduced pain and swelling in the arms and chest (Casley-Smith, 1983).

Teachings from the Calendula Deva

"Greetings, dear one. I am the deva of the *Calendula*. My radiant flowers bring joy and light to the darkness of the heart isolated from the love of Creator. In my gradual yet powerful way, I gently melt the hardness of ignorant beliefs and disruptive, hurtful emotions. This process allows the energy to flow through the body and heal imbalances from distorted views and afflicted emotions that create sickness and suffering.

"My blessings to humans are vast. The beauty of my colorful flowers draws people, insects, and animals to my resinous nectars. My sweetness draws and connects to the inherent goodness of all things. Yes, I am a reflection of love, beauty and balance, and these are my gifts and blessings.

"My nature is of expansive joy and radiance. These drive darkness from the human soul. Take the tea and tinctures of my leaves and flowers to make you whole, to heal a broken and ruptured heart, to heal the stomach and nervous system. On a very physical level, my gentle movement penetrates through the body into very old, deep wounds, traumas, and emotional pain that become locked in the tissues and engulfed by rigid, dense, and stagnated energy. I am powerful medicine to relieve stagnation, release toxins and toxic emotions, and to bring light into dark spaces. For it is in dark spaces, where harmful thoughts and emotions shut out the life force, that cancer cells find a hold and dwell, sometimes to contaminate the whole body.

"The radiance of my flowers potentiates the radiance of the heart and mind, this being my greatest gift to people. On more mundane levels, the physical body will heal as the mind and emotions heal and 'lighten up.'

"I am, in a sense, a reflection of the Christos bringing light to the world. The Tibetans call me Tara's Flower because I embody the heart of the Divine Mother, and joy radiates from my flowers just as joy radiates from the heart of the Mother. I embody the nourishing, bountiful, loving attributes of the female principle, the Earth Mother. I rest in the heart of life and offer the blessings of a strong and loving heart to all who grow me in their gardens, who adorn their homes and sacred spaces with my flowers, and who ingest me for healing. These are my humble gifts offered as a reflection of the benevolence of Creator. For Creator loves all and offers many tools and flowers of beauty to guide people back home to an existence of peace, beauty, and kindness.

"I am strong and hardy, as evidenced by my ability to stay green even in briefly freezing temperatures. I am enduring, as manifested in the power and abundance of my seeds that germinate easily in the warmth of spring.

"My message to humanity is to walk peacefully and gently upon the earth. Life is a blessing not to be taken for granted. Each person has responsibility for his or her actions, and each life unfolds as a result of previous choices and actions. Let my beautiful flowers point the way to a gentle and simple life that radiates loving kindness to all beings. For just as the sun shines on me, it also indiscriminately shines on all people. Each person is responsible to shine love, humility, and compassion on all who cross their path. Yes, I am a pointer of the beauty way. To all those who follow my heart-felt guidance will come peace, love, and serenity. Go now and dwell in peace and beauty on the earth, the Creator's most beautiful garden."