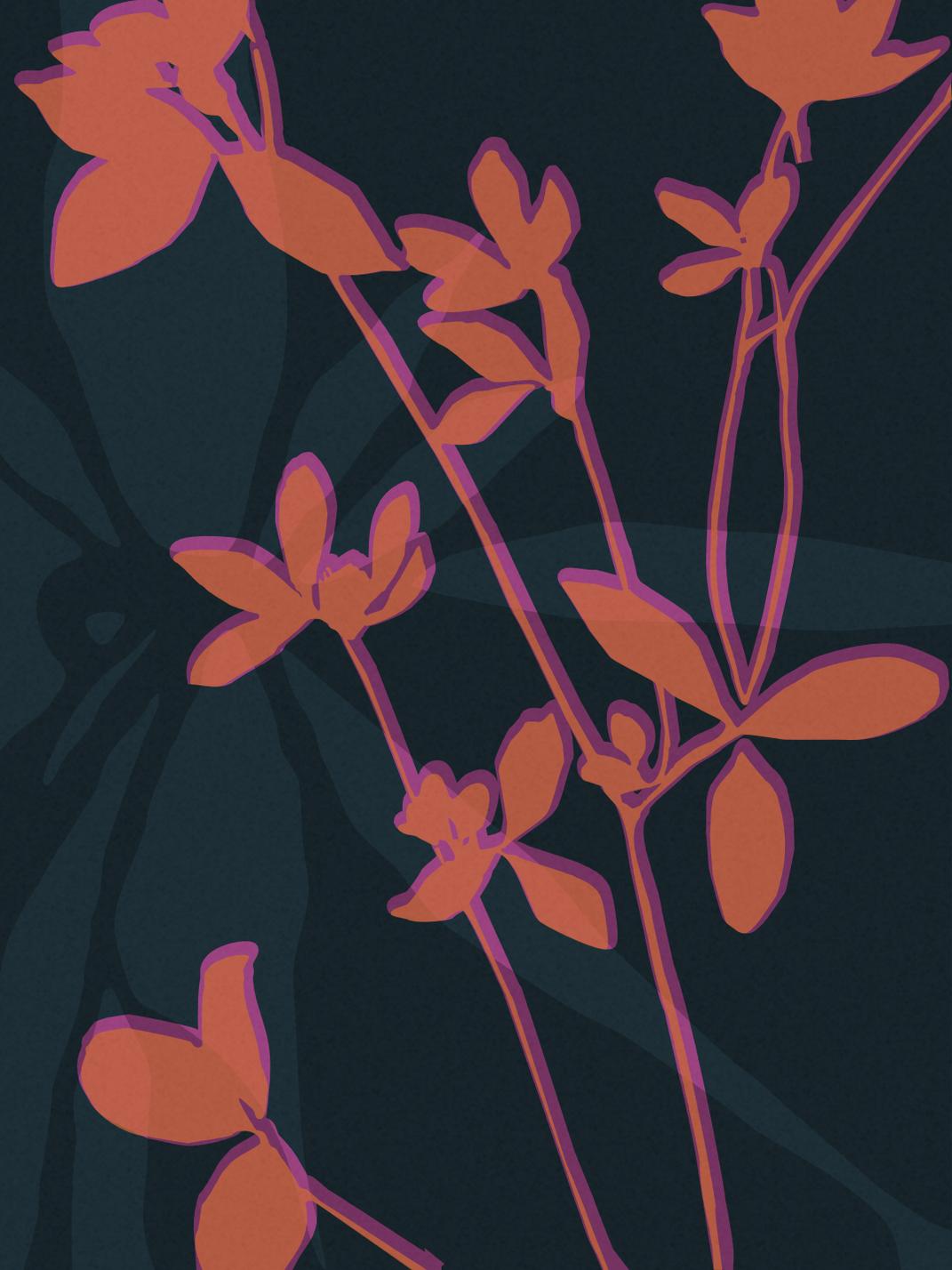


Medicinal Herbs & Food: Cultivation, Harvesting, and Medicinal Preparation

GUIDE TO GROWING AND USING HEALING
PLANTS EFFECTIVELY





Traditional Chinese Medicine & Complimentary Alternative Medicine

Acupuncture • Massage Therapy • Herbal
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7th & Morton, Okmulgee, OK

The logo for 'CAM HOUSE' is the central focus, featuring a yin-yang symbol within a decorative, scroll-like frame. The background of the business card is decorated with vibrant orange and yellow flowers, purple lavender, and white daisies. The text is presented in a clean, sans-serif font, with the contact information highlighted in a green bar at the bottom.

AGENDA ITEMS



- Overview of the Top 10 Medicinal Herbs
- Cultivating Medicinal Herbs in the Garden & Foraging
- Harvesting and Processing Medicinal Herbs
- Transforming Herbs Into Medicine

A large, stylized graphic of a leaf or plant branch in shades of orange and yellow, positioned in the upper right quadrant of the slide. The leaf has several pointed, rounded lobes and a central vein structure.

Overview of the Top 10 Medicinal Herbs

Introduction to Medicinal Herbs and Their Health Benefits

Historical and Cultural Use

Medicinal herbs have been used for thousands of years worldwide for health promotion and ailment treatment.

Global Reliance on Herbal Medicine

About 80% of the global population depends on traditional herbal medicine for primary healthcare needs.

Health Benefits of Herbs

Medicinal herbs offer anti-inflammatory, antimicrobial, antioxidant, and immune-boosting benefits.

Market Growth and Popularity

Interest in natural therapies drives a projected herbal medicine market growth of over 6% CAGR through 2028.



Detailed Profiles of Each Top Herb



Herbal Botanical Details

Each herb is described with detailed botanical information including origin and morphology.

Active Compounds Highlighted

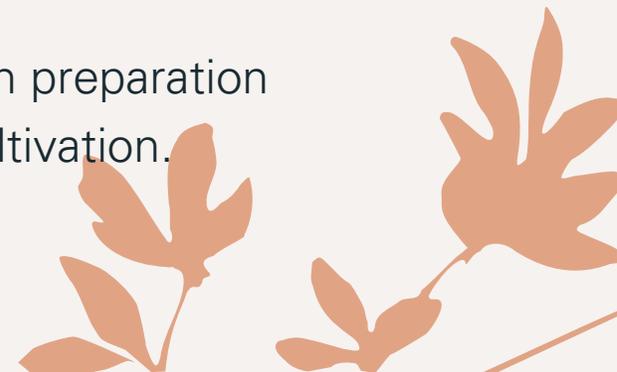
Key active compounds like curcumin and allicin are emphasized for their medicinal properties.

Traditional and Modern Uses

Profiles include traditional uses and modern applications in medicine and therapy.

Cultivation and Preparation

Environmental adaptability and common preparation methods are compared for effective cultivation.



What “Herbal Botanical Details” Mean In Herbalism

Botanical details refer to the scientific and descriptive information about a plant, including:

- 1. **Botanical Name** (Latin binomial) Example: Ashwagandha (*Withania somnifera*)
- 2. **Plant Family** Example: Solanaceae (nightshade family)
- 3. **Plant Part Used** Root, leaf, flower, seed, bark, resin, etc.
- 4. **Growth Habit** Shrub, tree, vine, perennial, annual, etc.
- 5. **Constituents** General categories like: Aromatic oils, Tannins, Alkaloids, Flavonoids, Resins, (High-level only — no medical claims.)
- 6. **Energetics (Traditional Systems)** Warm/cool Dry/moist Light/heavy (Used in Ayurveda, TCM, and folk herbalism)
- 7. **Traditional Uses (Non-medical, general)** For example: “Traditionally used for grounding rituals” “Historically used in teas and incense” “Common in spiritual cleansing practices”
- 8. **Habitat & Origin** Where the plant naturally grows.
- 9. **Appearance** Leaf shape, flower color, scent, texture.



What “Active Compounds” Are

- Active compounds are **substances within a plant or mixture that produce a measurable effect** in biological, chemical, or pharmacological contexts. They’re the components responsible for the plant’s characteristic actions or influence.
- In scientific terms, they are the parts of a substance that **interact with cells, tissues, or organisms** and cause a response.
- In general product chemistry, an “active ingredient” is the component that performs the primary function of the product — the part that creates the intended effect.



EXAMPLE OF WHAT YOU MIGHT SEE IN AN APOTHECARY:

White Sage (*Salvia apiana*)

Botanical details: aromatic oils, resins, flavonoids

Plant part used: leaves

Traditional uses: cleansing rituals, smoke offerings

Aroma: sharp, resinous, earthy



Key Medicinal Properties and Uses

Traditional Western Herbalism “Action” Terms

These are historical descriptors, not medical claims.



Antimicrobial (traditional term)

Antibacterial (traditional term)

Antiviral (traditional term)

Antifungal (traditional term)

Anti-inflammatory (traditional term)

Analgesic (traditional term)

Antispasmodic (traditional term)

Astringent

Diaphoretic – traditionally used to support sweating

Diuretic – traditionally used to support fluid movement

Emmenagogue – traditionally used to support menstrual flow

Hepatic – traditionally associated with liver support

Lymphatic – traditionally associated with lymph movement





Herb	Plant Afer
Basil	2nd April
Chives	15 April
Cilantro	1st March
Dill	15. March
Pargano	15. March



Cultivating Medicinal Herbs in the Garden



LET'S TALK SOIL 101

PLANTING
REQUIREMENTS

How to tell soil texture by forming a ball in your hand

1. Moisten the Soil Take a small handful of soil. Add just enough water so it's damp like a wrung-out sponge. Mix it in your palm until it holds together. **2. Squeeze It Into a Ball** Now observe what the soil does. **Soil Texture Results**

- 1. Sandy Soil** Won't hold a ball — it crumbles immediately. Feels gritty. Water drains quickly; low nutrient holding. **What it means:** Light, fast-draining, needs organic matter.
- 2. Loamy Soil** (Ideal Garden Soil) Forms a ball, but breaks apart easily when poked. Feels smooth with slight grit. Holds moisture but still drains well. **What it means:** Balanced soil — great for most plants.
- 3. Silty Soil** Forms a ball that holds together better than loam. Feels very smooth, almost floury. Can be compact but holds nutrients well. **What it means:** Fertile but may need structure (compost).
- 4. Clay Soil** Forms a firm, solid ball that stays intact. Can be rolled into a ribbon or a "snake" between your fingers. Feels sticky when wet and hard when dry. **What it means:** High water retention, slow drainage, nutrient-rich but heavy.

Quick Ribbon Test (Optional Add-On) After forming the ball: Press it between thumb and forefinger to make a ribbon. **Short ribbon (<1 inch)** → loam **Medium ribbon (1–2 inches)** → clay loam **Long ribbon (>2 inches)** → high clay content

A large, stylized graphic of a leaf or plant branch, rendered in a golden-yellow color, set against a solid orange background. The leaf has several pointed, overlapping lobes and a central vein structure.

Medicinal Herbs

Planting & Harvesting Chicory (*Cichorium intybus*)



PLANTING CHICORY

- **When to Plant** Plant in spring after frost danger has passed, or in late summer for a fall crop. Seeds can be started indoors and transplanted outdoors once the soil warms.
- **Light Requirements** Chicory thrives in full sun, though it tolerates light shade. More sun = sturdier plants and better root development.
- **Soil Needs** Prefers well-drained soil. Not picky, grows even in poor, rocky, or roadside soils. Avoid overly rich soil if growing for roots; it can make them too soft.
- **How to Plant** Sow seeds directly or transplant seedlings. Space plants 8–12 inches apart depending on variety. Keep soil lightly moist until established. Chicory is hardy and low-maintenance once growing.

HARVESTING CHICORY

1. **Harvesting Leaves** Begin harvesting 3–5 weeks after planting when leaves are tender. Pick young leaves for milder flavor; older leaves become more bitter. Radicchio types should be harvested when heads are fully formed.
2. **Harvesting Roots** For coffee-style chicory root: Harvest just before the first fall frost. Lift roots carefully and trim to uniform size if you plan to store. Mature roots are typically 5–7 inches in diameter at the crown and up to 9 inches long.
3. **Forcing Chicons (Witloof)** After harvesting roots in fall: Store them for 1–2 months near freezing. Then place upright in complete darkness in moist sand. New pale leaves (“chicons”) form in 3–5 weeks. These are the tight, pale heads sold as Belgian endive.

CHICORY Medicinal Uses



- **1. Traditional Digestive Support** Chicory root is rich in **inulin**, a naturally occurring prebiotic fiber. Traditional herbalism used chicory to support: Gentle digestive stimulation. Regularity and bowel comfort. Relief of occasional indigestion. Modern sources note its prebiotic activity and digestive support qualities.
- **2. Traditional Liver & Gallbladder Support** Chicory has a long history as a liver tonic in European herbalism. Traditionally used to: Support healthy bile flow. Aid the body's natural detoxification processes. Modern research also explores its potential liver-supportive properties.
- **3. Traditional Anti-Inflammatory & Soothing Uses** Folk herbalists used chicory for: General soothing of irritated tissues. Comforting inflamed areas. Cooling, calming energetics. Some modern studies note antioxidant and anti-inflammatory activity.

CHICORY Medicinal Uses



- **4. Traditional Immune & Wellness Support** Historically, chicory was used to support overall vitality. Traditional uses include: Supporting the body during seasonal challenges. General wellness tonics. Modern research notes antimicrobial and immune-modulating properties.
- **5. Traditional Skin & Topical Uses** Chicory leaves and roots were sometimes used externally for: Minor skin irritations Soothing poultices Gentle cleansing washes
- **6. Traditional Blood Sugar & Metabolic Support** Because of its fiber content, chicory was traditionally used to support: Balanced digestion Healthy metabolism Modern sources note its potential to help stabilize blood glucose.
- **7. Traditional Heart & Circulatory Support** Chicory greens are rich in antioxidants, and historically they were used to: Support healthy circulation Promote overall cardiovascular wellness Modern research highlights antioxidant activity and potential cholesterol-supportive effects.

Edible Uses of Chicory (*Cichorium intybus*)



-  1. Young Leaves (Spring Greens)
-  2. Mature Leaves (Cooked Greens)
-  3. Chicory Root as a Coffee Substitute
-  4. Chicory Root as a Vegetable Beyond coffee, the root itself is edible. Can be boiled, roasted, or sautéed
-  5. Radicchio & Other Cultivated Chicories
-  6. Belgian Endive (Witloof) A specialty chicory created by “forcing” roots in darkness.
-  7. Chicory Flowers Used as garnishes Added to salads for color Slightly bitter, delicate flavor
-  8. Chicory as a Prebiotic Food Because chicory root is rich in inulin, it’s widely used in: Fiber supplements Prebiotic powders “Gut-friendly” food products Low-sugar sweeteners (inulin adds mild sweetness)



PLANTING YARROW

When to Plant Spring or early summer after frost danger has passed. Can also be planted in fall, at least 6 weeks before first frost. Seeds: start 8–10 weeks indoors before your last frost date or plant directly in the ground in spring.

Where to Plant Full sun (6–8+ hours). Produces sturdier stems and more blooms. Tolerates bright partial sun but may get leggy.

Soil Requirements Prefers loamy well-drained soil. Avoid rich or wet soil, it causes stems to flop. Great for dry, rocky, or low-fertility areas.

How to Plant Space plants 12–24 inches apart. Dig a hole slightly wider than the root ball or just sprinkle the seed; keep crown level with soil.

Water well to establish, then reduce watering. Yarrow is drought tolerant once established. **Propagation** Seeds: surface-sow; light helps germination.

Divisions: split clumps in fall. Cuttings: tip cuttings in spring.

HARVESTING YARROW

When to Harvest During peak bloom for best potency and color. Typically, late spring through summer.

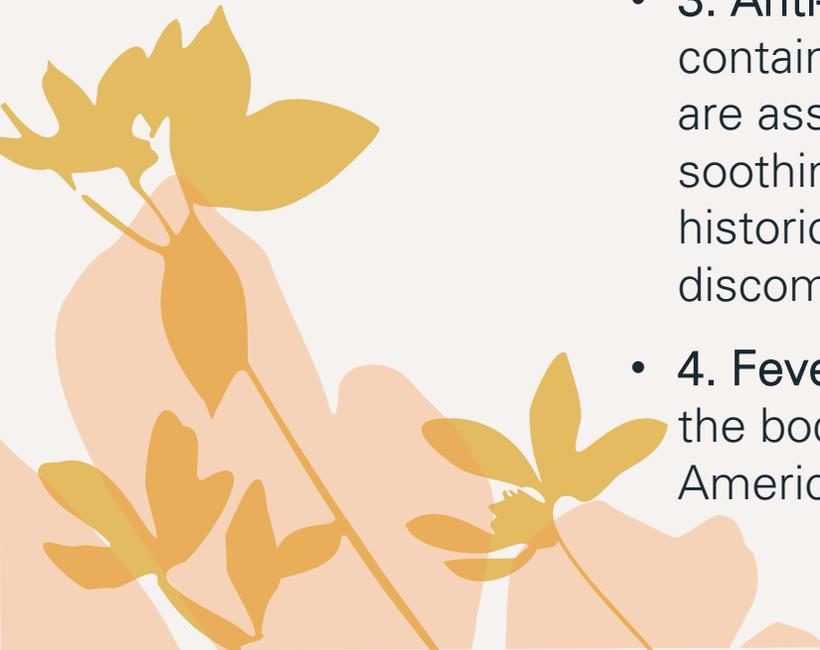
How to Harvest Cut stems in the morning after dew dries. Choose flower heads that are fully open but not fading. Use clean shears and cut above a leaf node to encourage reblooming.

Drying & Storing Hang small bundles upside down in a warm, airy place. Keep out of direct sunlight to preserve color. Store dried yarrow in airtight containers.

Yarrow

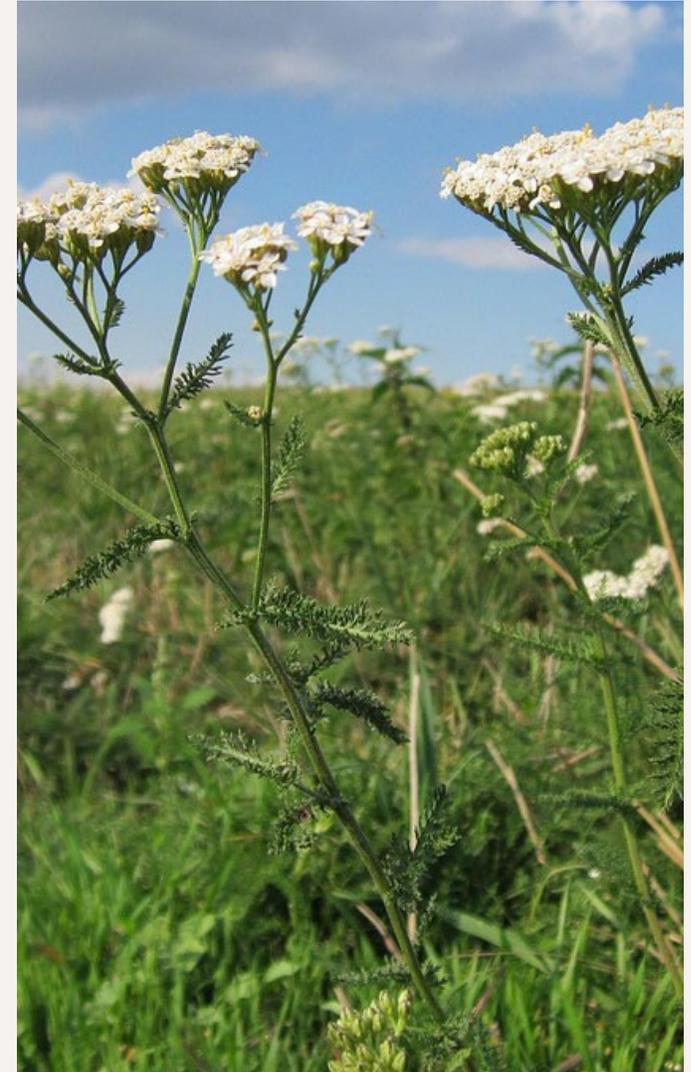
Medicinal Uses

- **1. Wound Support** Yarrow has a long history of being used on cuts and wounds. Fresh leaves were traditionally crushed and applied to help stop bleeding and clean the wound. Its astringent nature helps tighten tissues. Its aromatic oils and tannins were valued for keeping wounds clean.
- **2. Digestive Support** Yarrow has been used in many cultures to support digestion. Historically used for indigestion, cramps, and bloating. Considered a carminative and stomachic herb in traditional herbalism. Believed to support digestive secretions and bile flow.
- **3. Anti-Inflammatory & Comforting Uses** Yarrow contains flavonoids, tannins, and volatile oils, which are associated with general anti-inflammatory and soothing properties in herbal traditions. Used historically for fevers, aches, and general discomfort.
- **4. Fever Support** Many cultures used yarrow to help the body through fevers. Indigenous North American groups used it for fever reduction.



Yarrow Medicinal Uses

- **5. Traditional Anti-Inflammatory & Comforting Uses** Because it contains **flavonoids, tannins, and aromatic oils**, yarrow was used for: General soothing
Muscle and joint comfort Calming irritated tissues
- **6. Traditional Skin & Topical Uses** Applied externally for: Minor burns Bruises Skin irritations Cleansing washes
- **7. Traditional Liver & Circulatory Support** Some systems of herbalism used yarrow to support: Healthy circulation Liver function
Blood flow regulation
- **8. Spiritual & Energetic Uses** Used as a protective herb Associated with courage, boundaries, and clarity Used in divination and ritual cleansing



Yarrow

Edible Uses

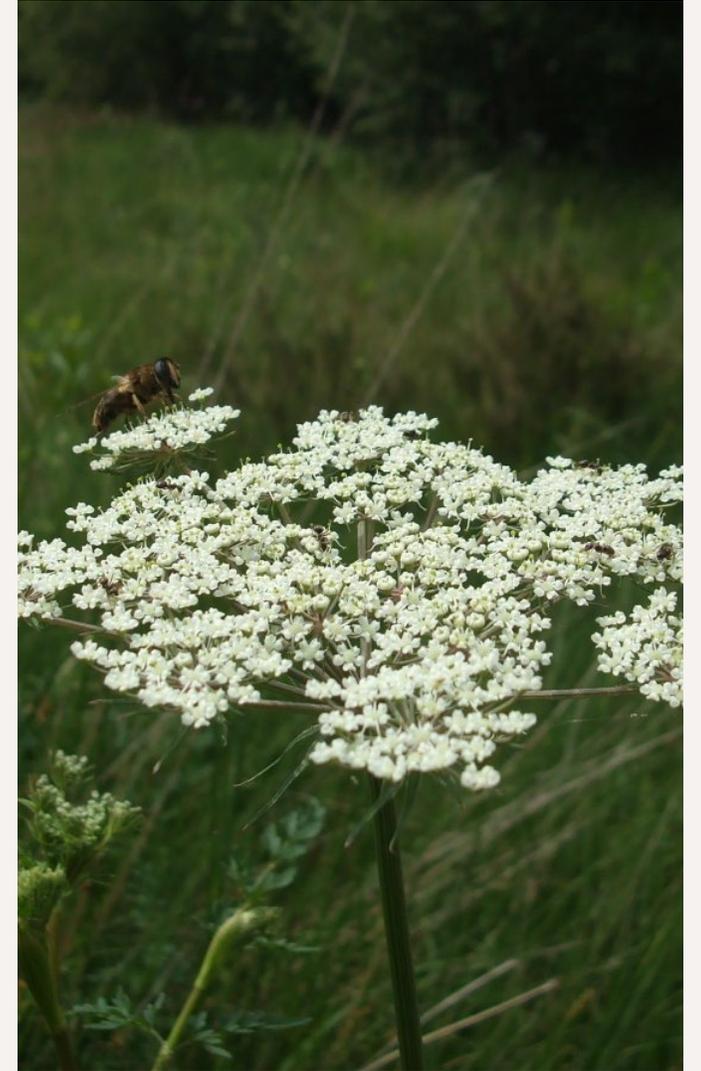
The leaves and flowers of yarrow can be used fresh in salads, soups, and stews. They add a unique flavor that is often described as similar to tarragon, with a sweet yet slightly bitter taste.

Yarrow can be dried and ground into a spice, which can be used to season various dishes. Its strong flavor means it should be used sparingly to avoid overpowering other ingredients.

Yarrow can be used to make infused oils and vinegars, which can enhance dressings and marinades.

Historically, yarrow was used in brewing beer and mead, serving as a substitute for hops. It was also used in cheese-making to help curdle milk.

Cooking Tips: Since yarrow is a soft herb, it is best added at the end of the cooking process to preserve its flavor. High heat can destroy its aromatic qualities.



Planting & Harvesting California Poppy (*Eschscholzia californica*)



PLANTING REQUIREMENTS

When to Plant California poppies thrive when planted in fall or early spring. They love climates with mild, wet winters and dry, warm summers, which is why they naturalize so easily in the West.

How to Plant **Direct sowing** is best simply sprinkle seeds onto open soil and water lightly. They do not transplant well because of their long taproot. Seeds germinate easily and often bloom within 60–70 days.

Light Requirements Needs **full sun** for best flowering. They tolerate heat extremely well.

Soil Needs Prefers sandy or well-drained soil. Not picky thrives even in poor soils. Avoid rich, heavy, or waterlogged soil.

Watering Water lightly at planting, then very little afterward. Once established, they are highly drought-tolerant.

Growth Habit Grows as a perennial in warm climates and as an annual in cooler climates, but self-seeds readily either way.

HARVESTING REQUIREMENTS

When to Harvest Flowers typically bloom mid to late spring, continuing into summer depending on climate. Harvest flowers when they are fully open and vibrant.

How to Harvest Snip flowers or leaves early in the day once dew has dried. For seed collection, allow pods to dry and turn tan, then collect before they burst.

Medicinal Harvest Notes The classic golden-orange variety is considered the most traditionally potent for herbal use.

Traditional Medicinal Uses of California Poppy (*Eschscholzia californica*)



- **1. Traditional Nervine & Relaxant** California poppy has long been used as a gentle calming herb. Traditionally used for: nervous tension, emotional restlessness, general overstimulation, supporting a sense of calm, Herbalists classify it as: a nervine relaxant a mild sedative (traditional term)
- **2. Traditional Sleep Support** Historically used to help the body settle into rest. Traditional uses include: nighttime restlessness, difficulty winding down supporting deeper relaxation before sleep. It was even used traditionally with children because of its gentle nature.
- **3. Traditional Pain-Soothing Herb** California poppy has been described in herbal literature as having **anodyne** and **analgesic** qualities (traditional terms). Historically used for: headaches toothaches menstrual discomfort general aches and tension These uses come from its bitter alkaloids and calming energetics.

Traditional Medicinal Uses of California Poppy (*Eschscholzia californica*)



- **Traditional Antispasmodic** Herbalists have long used California poppy to ease **muscle tension** and **spasms**. Traditional uses include: muscle tightness digestive cramping menstrual cramping spasmodic cough This is tied to its relaxing effect on smooth muscle.
- **Energetic & Herbalist Properties** In traditional herbal energetics, California poppy is described as: **Cooling Drying Bitter Relaxing Soothing Grounding** These qualities explain why it pairs well with herbs like passionflower, skullcap, and wild oats.
- **Indigenous & Cultural Uses** Native Californian tribes used California poppy for: calming the mind, soothing discomfort, ceremonial purposes, as a food source (seeds and greens), It has deep cultural roots in the region.

PLANTING REQUIREMENTS

When to Plant Sow seeds in early spring after frost, or late fall for natural cold stratification. Seeds germinate best after 2–4 weeks of cold exposure, so fall sowing is easiest. **How to Plant** **Direct sow** or start indoors with cold stratification. Press seeds lightly into soil — they need light to germinate.

Space plants 18–24 inches apart; they grow into tall, soft, upright clumps.

Light Requirements Prefers **full sun**, but tolerates **partial shade**. In hotter climates, a bit of afternoon shade keeps it happy.

Soil Needs Thrives in moist, rich, loamy soil. Loves consistent moisture think marsh edges (hence the name). Avoid dry, sandy soil unless you water regularly.

Watering Keep soil evenly moist, especially in the first year. Once established, it's moderately drought-tolerant but still prefers moisture.

Growth Habit Perennial herb, typically 3–5 feet tall. Soft, velvety leaves and pale pink flowers. Roots grow thick and fleshy the traditional part used.

HARVESTING REQUIREMENTS

Leaves Harvest mid-summer when the plant is lush and green. Choose young, tender leaves for the best mucilage content. **Flowers** Pick freshly opened blooms throughout summer. They dry quickly and retain their soothing qualities. **Roots** This is the classic herbal harvest. Dig roots in the fall of the plant's second or third year. Older roots are larger and richer in mucilage. Wash gently, slice, and dry thoroughly.

Why fall? The plant pulls its energy downward as it prepares for winter, concentrating compounds in the root.

Marshmallow (*Althaea officinalis*) – Planting & Harvesting Guide



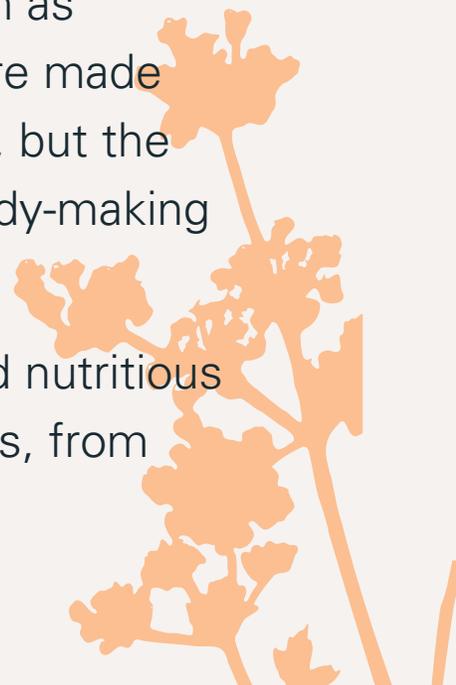
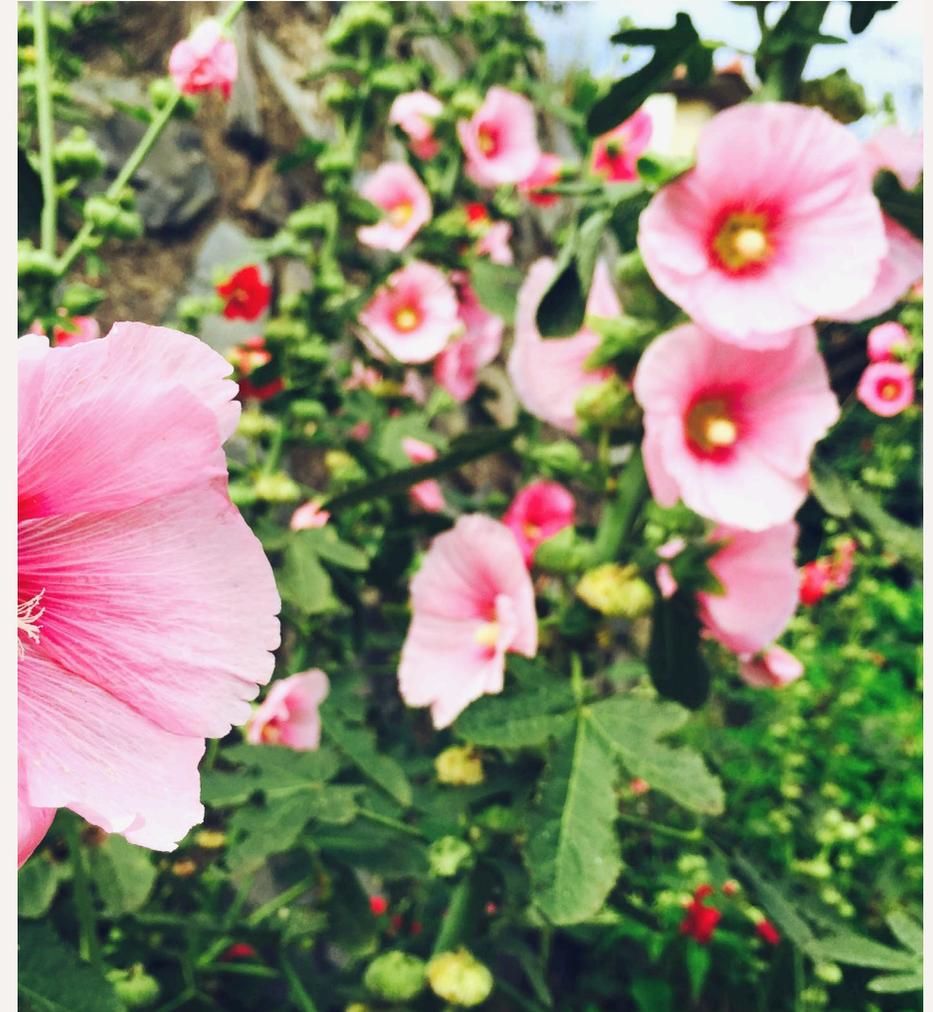
Marshmallow (*Althaea officinalis*) — Traditional Medicinal Properties

1. **Demulcent** *Soothes, moistens, and coats irritated or dry tissues.* This is marshmallow's signature action — especially from the root.
2. **Emollient** *Softens and moisturizes externally.* Used traditionally in poultices and skin preparations.
3. **Soothing to the Digestive Tract** Herbalists have long used marshmallow to comfort dryness, heat, or irritation in the gut.
4. **Soothing to the Respiratory Tract** Traditionally used to ease dryness or scratchiness in the throat and lungs.
5. **Mild Anti-inflammatory (traditional)** Its mucilage has a gentle, calming effect on hot, irritated tissues.
6. **Urinary Tract Support (traditional)** Historically used to soothe dryness or irritation in the urinary system.



- Flowers and Leaves: The flowers and leaves of the marshmallow plant are edible and can be used in salads or cooked dishes. They have a sweet, mild flavor and are often enjoyed raw or cooked.
- Tea and Infusions: The plant can be used to make tea, which has been traditionally used to soothe sore throats and coughs. The tea is made by steeping the leaves in hot water.
- Marshmallows: The plant's roots were historically used to make a sweet confection known as marshmallows. Today, marshmallows are made from gelatin, corn syrup, and cornstarch, but the plant's roots still have a place in the candy-making process.
- The marshmallow plant is a versatile and nutritious plant that can be enjoyed in various ways, from medicinal use to delicious desserts.

Marshmallow (*Althaea officinalis*) – Edible Uses



Chamomile (Matricaria Chamomilla)— Planting & Harvesting Guide



PLANTING REQUIREMENTS

When to Plant Sow seeds in **early spring** after frost. You can also **fall-sow** for early spring germination. Chamomile loves cool weather for germination.

How to Plant Seeds need **light to germinate** sprinkle on soil surface and press gently. Keep soil **evenly moist** until seedlings establish. Thin to **6–8 inches** apart.

Light Requirements Prefers **full sun**, but tolerates **partial shade**, especially in hot climates. **Soil Needs** Thrives in **well-drained, average soil**.

Avoid heavy, waterlogged soil. Chamomile actually prefers soil that isn't too rich too much fertility = fewer flowers. **Watering** Moderate water. Let the top layer of soil dry slightly between waterings. Once established, chamomile is fairly drought-tolerant.

HARVESTING REQUIREMENTS

When to Harvest Flowers Harvest when the flower heads are fully open and the white petals are flat or just starting to bend downward. This is when the aromatic oils are at their peak.

How to Harvest Pinch or snip flower heads off individually. A small harvesting rake or comb works beautifully for larger patches. Avoid harvesting after rain flowers dry best when picked dry. **Drying** Spread flowers in a single layer on screens or trays. Keep in a warm, dark, well-ventilated space. They dry quickly usually within a few days.

Harvesting Leaves or Stems Leaves are technically edible and aromatic, but flowers are the primary harvested part.

Chamomile — Traditional Medicinal Properties



1. Nervine (Calming Herb)

Traditionally used to **relax the nervous system**

Supports a sense of ease and emotional balance

Great for teas, sachets, and calming blends

2. Carminative

Aromatic oils help **relax the digestive tract**

Traditionally used to ease gas, bloating, and digestive tension

Often paired with mint, fennel, or lemon balm

3. Mild Bitter

Stimulates gentle digestive activity

Useful before meals in traditional herbal practice

4. Anti-inflammatory (traditional)

Historically used to calm “hot,” irritated tissues

Applies to both internal and external use

5. Antispasmodic

Traditionally used to ease muscle tension and spasms

Especially noted for digestive and menstrual comfort

6. Soothing to Skin (topical)

Infused oils, salves, and compresses used for calming irritated or sensitive skin

Gentle enough for children and sensitive individuals



Evening Primrose

Oenothera biennis



Light: Prefers full sun, but tolerates light shade

Soil: Needs well-draining soil; can grow even in subpar soil, but good drainage is key

How to Plant Starting Indoors Start seeds indoors before the last frost. Use quality soil mixed with a bit of sand for drainage. Transplant when seedlings have 2+ true leaves.

Direct Sowing Outdoors Sow seeds in early spring once frost danger has passed. Loosen soil and scatter seeds lightly; they need very little soil coverage to germinate. Thin seedlings to 12 inches apart once they sprout.

Care Very low-maintenance. Drought tolerant rarely needs extra watering. Fertilize lightly in early spring to encourage flowering. Blooms in year two, typically May–June.

Harvesting Evening Primrose

Because it's a biennial, harvesting depends on the plant's stage of life.

Harvesting Flowers Flowers open at dusk and last only one night.

Harvest freshly opened blossoms in early evening for best potency.

Pick when just opening or fully open but not wilted.

Harvesting Leaves Best harvested in the first year, when leaves are young and tender. Pick in spring or early summer. Don't remove too many from one plant.

Harvesting Seeds Allow seed pods to fully mature on the plant until they turn brown and dry. This usually happens late summer to early fall.

Harvest before they naturally disperse.

Evening Primrose

Oenothera biennis



- 1. Soothing to Skin & Tissues** Evening primrose has been used topically to calm irritated, dry, or sensitive skin. Traditionally applied as poultices, infused oils, or salves.
- 2. Nourishing Oil (from seeds)** The seeds contain a naturally occurring fatty acid profile (including gamma-linolenic acid) that herbalists value for skin health and overall nourishment. Traditionally used internally and externally for its moisturizing and balancing qualities.
- 3. Traditional Women's Herb** Historically used to support cyclical balance and overall comfort. Often included in blends aimed at supporting women's wellness.
- 4. Calming & Soothing** Leaves and roots were used by various Indigenous groups for their gentle, soothing qualities, especially for irritated tissues.
- 5. Digestive Support** Young roots were sometimes eaten or decocted for mild digestive comfort. Traditionally considered grounding and nourishing.
- 6. Respiratory Soothing** Some traditions used the plant for dry, irritated respiratory tissues, often in combination with other soothing herbs.

Edible Uses of Chamomile



- **Edible Uses:**
- **Roots:** The sweet and slightly peppery roots can be boiled and served with butter, similar to potatoes.
- **Leaves:** Young leaves are tender and can be cooked like spinach, adding a slightly peppery flavor to dishes.
- **Flowers:** The bright yellow flowers can be used in salads or as a garnish, adding color and flavor.
- **Seeds:** The seeds are rich in gamma-linolenic acid (GLA) and can be used in cooking or as a nutritional supplement.
- **Tea:** The leaves can be made into tea, which has potential health benefits.
- **Culinary Pairings** Roots pair well with butter, garlic, thyme, roasted meats Leaves pair well with citrus, vinegar, light dressings Flowers pair well with honey, berries, yogurt, herbal teas

PLANTING LAVENDER

When to Plant Plant in spring once soil warms to about 60°F and frost danger has passed. Fall planting is possible if you use larger, established plants so they overwinter well.

Light Requirements Needs full sun — at least 6–8 hours daily. This is essential for strong growth and oil production.

Soil Needs Lavender's #1 requirement: excellent drainage. Tolerates poor to moderately fertile soil but cannot handle standing water. Amend clay or compacted soil with compost or grit to improve drainage.

How to Plant Plant young starts rather than seeds for easiest success. Space plants 12–36 inches apart depending on variety. Keep the crown slightly above soil level to prevent rot. Water to establish, then reduce — lavender prefers dry conditions once mature.

HARVESTING LAVENDER

When to Harvest Harvest when 40–50% of the buds have opened — usually early to mid-summer. This stage gives the highest essential oil concentration. Morning harvest is best, after dew dries but before heat reduces oils.

How to Harvest Choose stems with fresh, vibrant color. Cut stems just above a leaf node to encourage reblooming.

A mature plant can yield 7–8 bundles per season.

Drying & Storing Gather stems into small bundles.

Hang upside down in a warm, dark, airy place.

Store dried lavender in airtight containers away from sunlight.

Planting & Harvesting Lavender (*Lavandula* spp.)



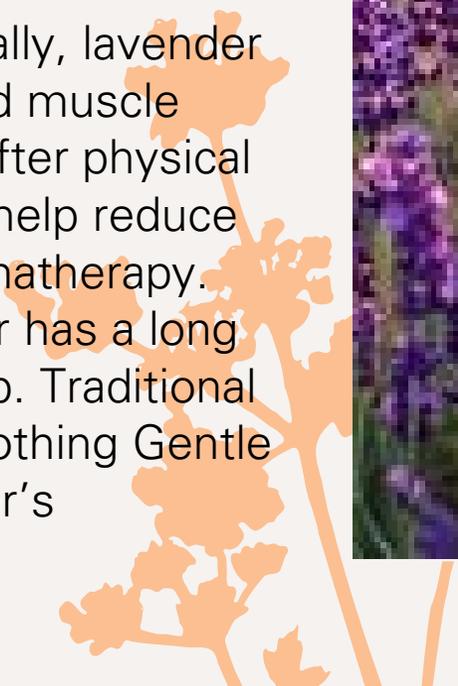
Lavender Medicinal Uses

1. Traditional Relaxation & Sleep Support Lavender is famous for its calming scent. Traditional uses include: Supporting restful sleep Easing nervous tension Promoting a sense of calm and relaxation Modern sources note lavender aromatherapy may support melatonin levels and sleep quality.

2. Traditional Anxiety & Mood Support Lavender has long been used to soothe the mind. Traditional uses include: Easing anxious feelings Supporting emotional balance Calming the nervous system Modern research shows lavender aromatherapy and oral preparations may help reduce anxiety and improve mood.

3. Traditional Pain & Muscle Comfort Historically, lavender was applied topically or used in baths for: Mild muscle tension General body discomfort Relaxation after physical strain Modern sources note lavender oil may help reduce certain types of acute pain when used in aromatherapy.

4. Traditional Wound & Skin Support Lavender has a long history as a vulnerary (wound-supporting) herb. Traditional uses include: Minor cuts and scrapes Skin soothing Gentle cleansing Modern research highlights lavender's antibacterial and antifungal properties.



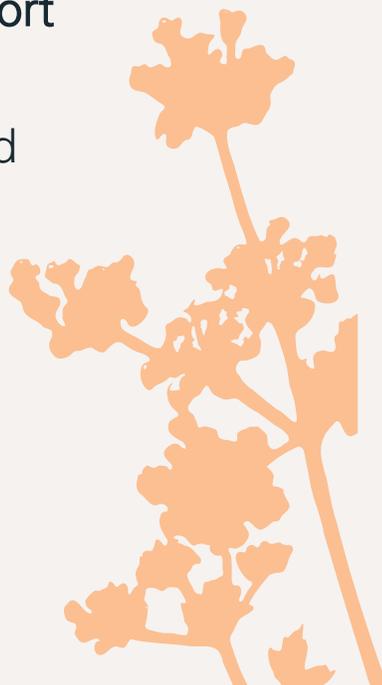
💜 Traditional Medicinal Uses of Lavender (Lavandula spp.)

🌸 5. Traditional Digestive & Nervous System

Support Lavender tea has been used traditionally to support: Mild digestive discomfort Gas and bloating Tension-related stomach upset Modern herbalists still use lavender infusions for gentle digestive support.

🌸 6. Traditional Menstrual & Cramp Support

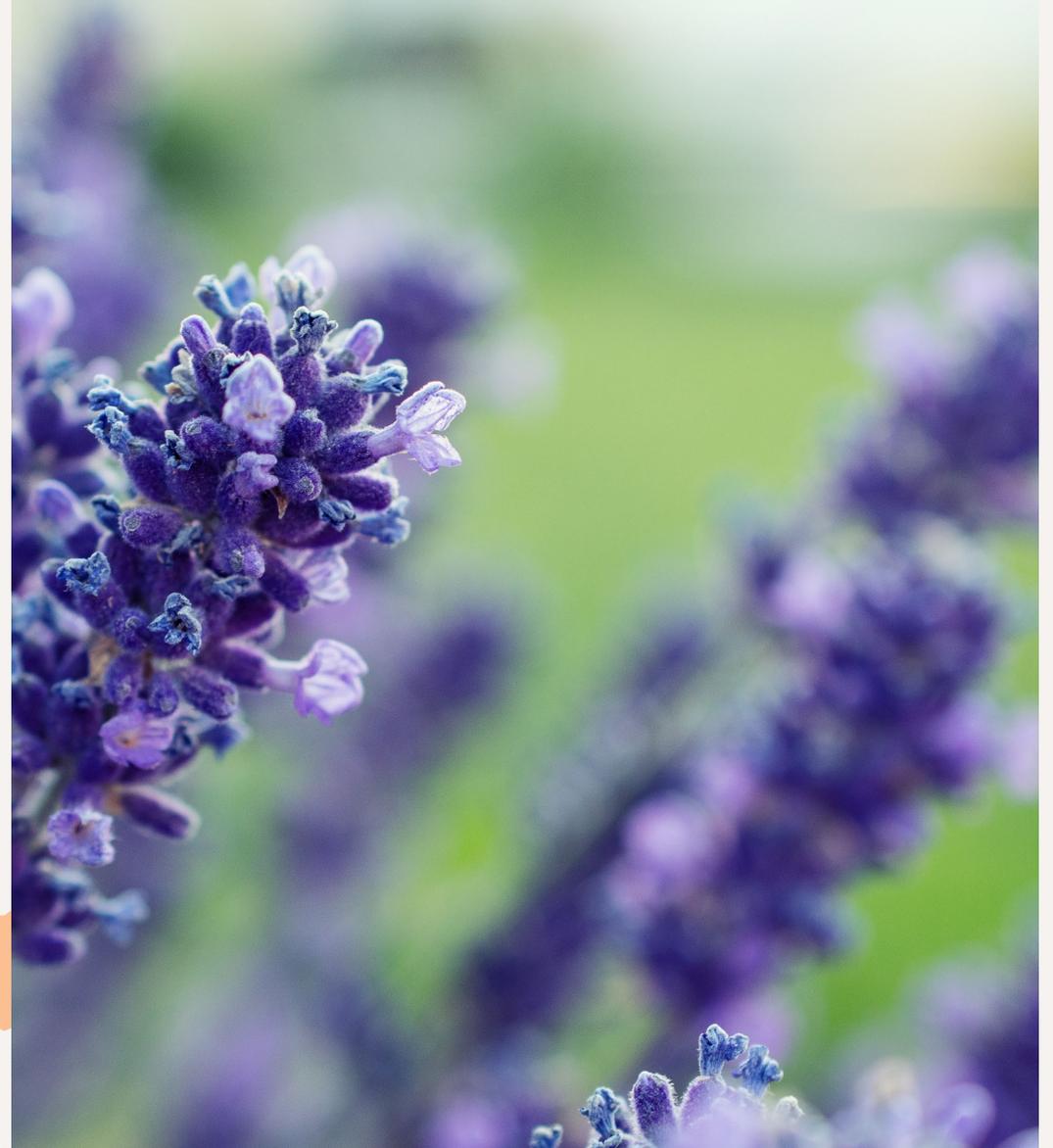
Lavender aromatherapy has been used to ease: Menstrual discomfort Tension-related cramping Modern studies show lavender aromatherapy may help reduce menstrual pain.



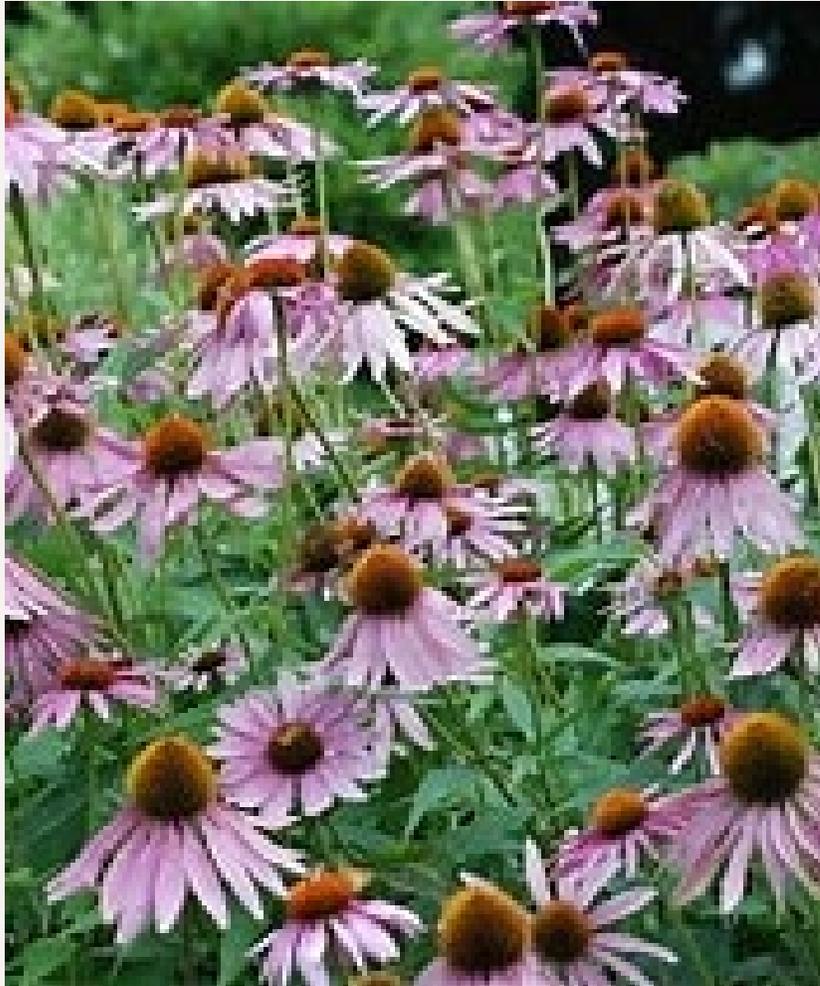
Lavender

Edible Uses:

- **Flavoring Agent:** Lavender is often used to infuse flavor into various dishes. It can be added to baked goods like cookies, cakes, and scones, where its floral notes complement sweet flavors. A common ratio is about 1 teaspoon of dried lavender flowers for every cup of sugar in recipes.
- **Herbal Teas:** Dried lavender flowers can be steeped in hot water to make soothing herbal teas. This is popular for its calming effects and pleasant aroma.
- **Savory Dishes:** Lavender can also be used in savory recipes, such as marinades for meats, particularly lamb, or in herb blends. It pairs well with rosemary and thyme.
- **Infused Oils and Syrups:** Lavender can be used to create infused oils or syrups, which can then be drizzled over desserts or used in cocktails.
- **Garnish:** The flowers can be used as a decorative garnish for desserts, salads, or drinks, adding both visual appeal and a hint of flavor.



Echinacea purpurea (Purple Coneflower)

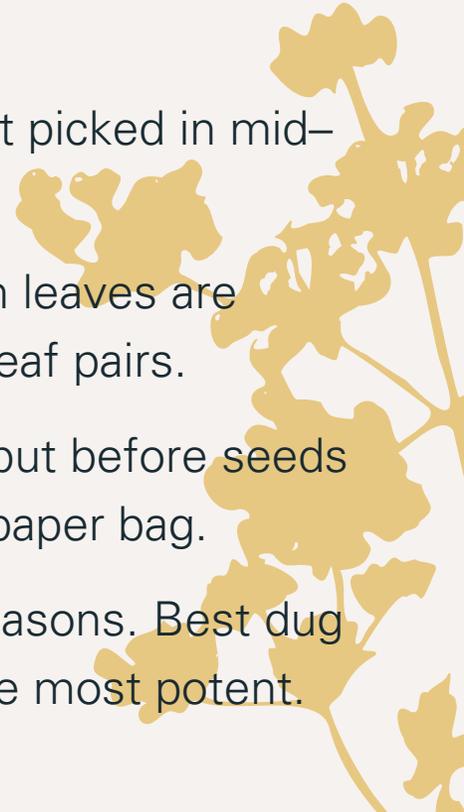


Planting Requirements for Echinacea

- **Light & Soil** Prefers full sun Thrives in well-drained, sandy or rocky soil Very drought-tolerant once established
- **How to Plant** Sow seeds or transplant seedlings in spring after frost. Seeds can be started indoors or direct-sown. Space plants 18–24 inches apart for airflow and strong growth. Water regularly during establishment; minimal care afterward.

Harvesting Requirements for Echinacea

- **1. Flowers** Harvest when fully open and vibrant. Best picked in mid–late summer.
- **2. Leaves** Harvest during the flowering season when leaves are mature but still green. Cut stems above the lowest leaf pairs.
- **3. Seeds** Wait until flower heads are dry and spent, but before seeds fall naturally. Collect seedheads and dry further in a paper bag.
- **4. Roots** Harvest roots only after two full growing seasons. Best dug in fall, once the plant has gone dormant and roots are most potent.

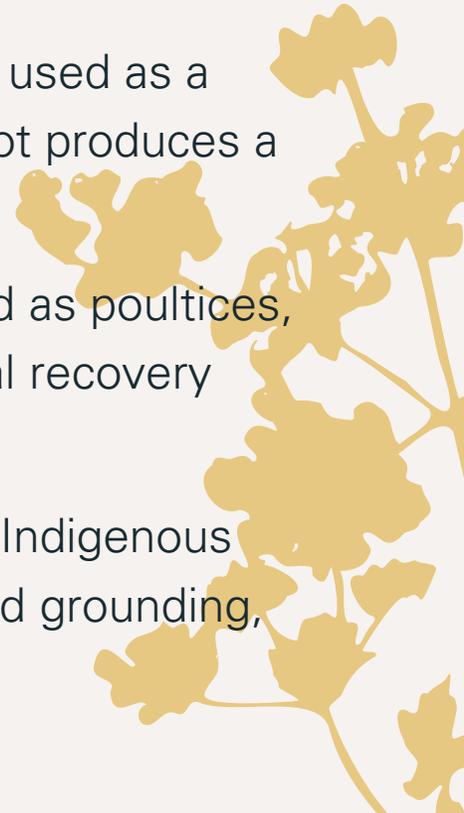


Echinacea purpurea (Purple Coneflower) Medicinal Uses

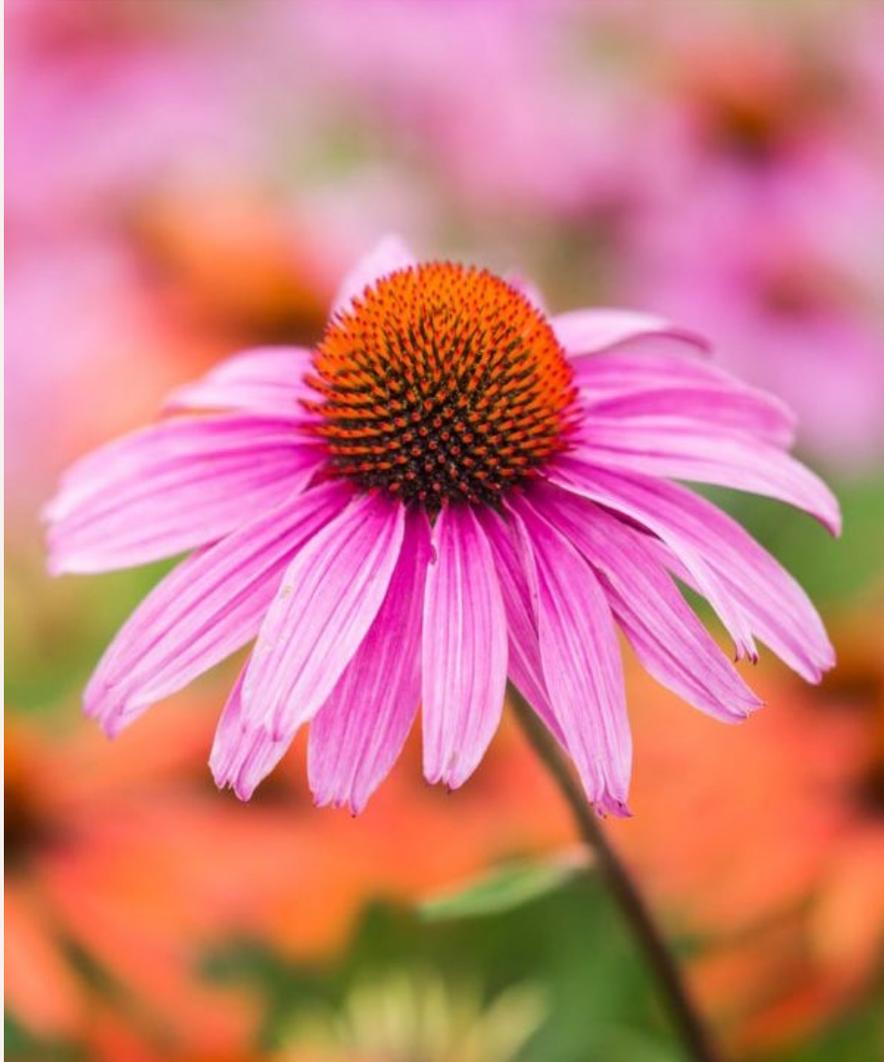


🌿 Primary Traditional Actions

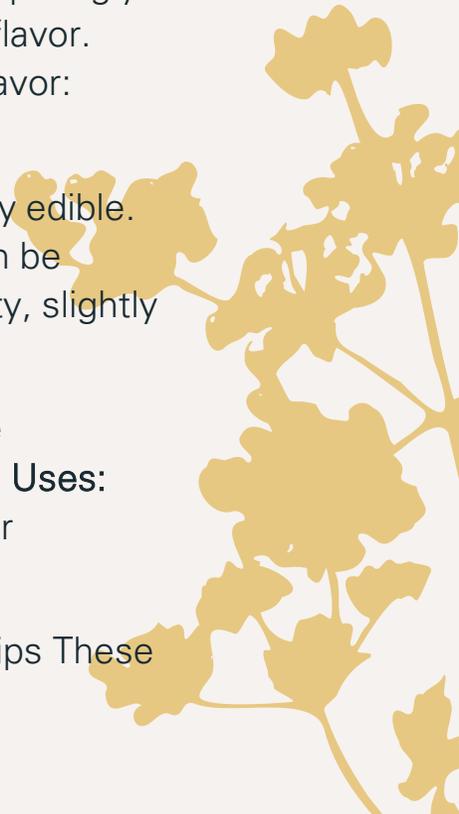
- 1. Immune-Supporting Herb (traditional)** Historically used to **support the body's natural immune response** Often taken at the onset of seasonal challenges Traditionally valued for its "activating" qualities
- 2. Lymphatic Support (traditional)** Used by herbalists to **support healthy lymph flow** Considered a "cleanser" or "mover" in older herbal texts
- 3. Soothing to Throat & Mouth Tissues** Traditionally used as a **soothing herb** for irritated tissues Chewing fresh root produces a characteristic **tingling, numbing** sensation
- 4. Skin & Tissue Support (topical)** Historically applied as poultices, washes, or salves Used to support the skin's natural recovery processes
- 5. General "Strengthening" Herb (traditional)** Many Indigenous traditions used Echinacea as a **tonic herb** Considered grounding, strengthening, and protective



Echinacea purpurea (Purple Coneflower) Edible Uses



- 🌿 **1. Roots (strong, pungent, tingly)** Fresh or dried roots can be chewed for their classic “Echinacea tingle.” Historically used as a stimulating, pungent chew. Can be added in very small amounts to broths or decoctions for an earthy, spicy note. Flavor: earthy, bitter, pungent, numbing/tingly.
- 🌸 **2. Flowers** The petals and flower heads are surprisingly edible. Uses: Petals can be sprinkled on salads for color. Fresh petals can be added to herbal teas for a mild floral note. Coneheads (the central seed cone) can be simmered in teas or decoctions for a stronger flavor. Flavor: mild, slightly floral, lightly bitter.
- 🌱 **3. Leaves** Young leaves are the most palatable. Uses: Added sparingly to salads (young leaves only). Steeped in teas for a gentle herbal flavor. Used in infused vinegars or simple syrups for botanical blends. Flavor: green, slightly bitter, mildly aromatic.
- 🌾 **4. Seeds** Not commonly eaten as food, but they *are* technically edible. Uses: Sometimes added to teas for a mild stimulating quality. Can be lightly toasted and sprinkled on salads (folk use). Flavor: mild, nutty, slightly resinous.
- 🍵 **5. Herbal Teas & Decoctions** This is the most common edible preparation. **Parts used:** Flowers Leaves Roots (in small amounts) **Uses:** Hot or cold infusions Blended with mint, lemon balm, rose hips, or chamomile Adds a grounding, earthy, slightly stimulating flavor
- 🍯 **Flavor Pairings** Honey Lemon Mint Ginger Elderflower Rose hips These help balance Echinacea’s earthy, slightly bitter profile.



Calendula (Calendula officinalis)



🌿 Planting Requirements for Calendula

- **Light** Prefers **full sun** Tolerates partial shade, especially in hot summers **Soil** Thrives in **well-drained, moderately rich soil** Avoid heavy, waterlogged soil Does well in raised beds or containers **Water** Moderate watering Keep soil evenly moist while establishing Once mature, it's fairly drought-tolerant Or start indoors **4–6 weeks before last frost** In Oklahoma, you can also sow again in **fall** for a second bloom cycle **How to Plant** Sow seeds $\frac{1}{4}$ – $\frac{1}{2}$ inch deep Space plants **12–18 inches apart** Germination: **7–14 days** Pinch young plants to encourage bushier growth **Care** Deadhead regularly for continuous blooms Mulch lightly to retain moisture Calendula thrives in cooler temps and may slow down in peak summer heat

🌸 Harvesting Requirements for Calendula

- **1. Flowers (main harvest)** Harvest when flowers are **fully open**, vibrant, and dry Best time: **mid-morning**, after dew has evaporated Pick every 2–3 days to encourage more blooms Use only the **flower heads** (remove stems) **Tip:** The **stickier** the flower base (resin), the higher the quality.
- **2. Petals** Can be plucked individually for culinary or cosmetic use Harvest fresh or dry for later use
- **3. Seeds** Allow flower heads to dry on the plant Harvest when seeds turn **tan/brown** and curl into their signature "C" shape Collect before they fall naturally

Calendula Medicinal Uses:



Primary Traditional Actions

- 1. Skin-Soothing Herb (traditional)** Calendula is best known for its ability to comfort irritated, dry, or sensitive skin. Traditionally used in: Salves Creams Oils Compresses Herbalists value its gentle, cooling, and restorative qualities.
- 2. Supports Skin Recovery (traditional)** Calendula has long been used to support the skin's natural repair processes. Historically applied to: Minor scrapes Dry patches Chapped skin General skin discomfort Its resin content is considered the key to its traditional effectiveness.
- 3. Lymphatic Support (traditional)** Calendula is often described as a lymphatic herb, traditionally used to support: Healthy lymph flow Gentle internal "clearing" and movement Often paired with cleavers or red clover in traditional blends.
- 4. Digestive Comfort (traditional)** Calendula tea has been used historically to: Soothe the digestive tract Support comfort in cases of mild irritation Provide gentle, warming nourishment Its flavor is mild, slightly bitter, and floral.
- 5. Gentle Immune Support (traditional)** Calendula has been used in folk herbalism to support the body's natural defenses, especially during seasonal shifts.

Calendula Edible Uses:



1. Fresh Petals Calendula petals are mild, slightly peppery, and lightly resinous. How they're used: Sprinkled on salads for color and texture Added to grain bowls, pasta, or soups as a garnish Mixed into herbal butters or soft cheeses Added to egg dishes (scrambles, quiches) for color Flavor: mild, slightly bitter, peppery, floral.

2. Calendula Tea Dried petals or whole flower heads can be steeped to make a gentle herbal tea. Uses: Enjoyed alone or blended with chamomile, mint, or lemon balm Used as a base for iced teas Adds a warm, slightly earthy flavor

3. "Poor Man's Saffron" Calendula petals have been used traditionally to color foods. Uses: Added to rice, paella-style dishes, or soups for a golden hue Mixed into bread dough or muffins for color flecks Infused into broths for a warm tint Note: It colors food but does *not* taste like saffron.

4. Calendula-Infused Honey Fresh or dried petals can be infused into honey. Uses: Drizzled over yogurt, fruit, or biscuits Added to teas Beautiful as a retail item in your metaphysical section

5. Calendula-Infused Oils & Butters (culinary) Separate from medicinal oils, you can make culinary-safe infused oils. Uses: Drizzle over roasted vegetables Use in salad dressings Brush onto warm bread Blend into compound butters

6. Baking & Desserts Calendula adds color and a subtle herbal note. Uses: Mixed into cookies, scones, or shortbread Sprinkled on top of cakes or cupcakes Added to custards or panna cotta for color

7. Edible Garnish Calendula is stunning as a garnish. Uses: On charcuterie boards On soups On cocktails or mocktails On fruit plates

Planting Requirements for Feverfew

Light Prefers full sun Tolerates partial shade, especially in hot summers

Well-drained soil is essential Prefers moderately fertile soil Avoid heavy, soggy clay Moderate watering Keep evenly moist while establishing Once mature, it's fairly drought-tolerant Direct sow in early spring after frost Or start indoors 4–6 weeks before last frost Seeds need light to germinate, press into soil but don't cover deeply Sow seeds on the soil surface or cover very lightly Germination: 10–14 days Space plants 12–18 inches apart Pinch young plants to encourage bushiness Deadhead to prolong blooming Or leave some flowers to set seed if you want it to naturalize Cut back in late fall or early spring

Harvesting Requirements for Feverfew

- 1. Leaves** Harvest when plants are fully established, usually late spring Best picked before flowering for strongest aroma Choose healthy, vibrant leaves
- 2. Flowers** Harvest when flowers are fully open Best time: mid-morning, after dew dries Snip flower heads or cut stems just above a leaf node Frequent harvesting encourages more blooms
- 3. Whole Aerial Parts** Many traditional preparations use the entire above-ground portion Harvest during peak bloom for best quality
- 4. Seeds** Allow flower heads to dry on the plant Collect when seeds turn tan and begin to loosen Feverfew self-seeds readily if left alone

Feverfew (*Tanacetum parthenium*)



Migraine Prevention: Feverfew is most commonly recognized for its ability to help prevent migraine headaches. Some studies suggest that it may reduce the frequency and severity of migraines, as well as associated symptoms like nausea and sensitivity to light and sound.

Pain Relief: The herb is also used for general pain relief, particularly for tension headaches and joint pain. Its active compounds may help relax blood vessels and reduce inflammation, contributing to its analgesic effects.

Menstrual Discomfort: Feverfew has been traditionally used to alleviate menstrual cramps and discomfort. It may help reduce inflammation and provide relief from pain associated with menstruation.

Anti-Inflammatory Properties: Feverfew contains compounds that exhibit anti-inflammatory effects, making it potentially beneficial for conditions like arthritis and other inflammatory disorders. It may help inhibit the production of pro-inflammatory substances in the body.

Digestive Support: Historically, feverfew has been used to support digestive health, helping to relieve symptoms like nausea and indigestion. Its bitter compounds may stimulate digestive processes.

Respiratory Health: Feverfew has been used to support respiratory health, potentially helping with conditions like asthma and allergies.

Feverfew Medicinal Uses:



Feverfew — Edible Uses (Traditional & Folk)

- *Feverfew is edible, but strongly bitter and aromatic. It's used sparingly and mostly in traditional preparations rather than everyday cooking.*

 **1. Fresh Leaves (used sparingly)** Historically, small amounts of fresh feverfew leaves were eaten for their strong aromatic qualities. Traditional uses: Chewed fresh (very bitter) Added in tiny amounts to salads in old European folk practice Mixed with honey or placed on bread to mask bitterness Flavor: intensely bitter, pungent, slightly citrus-aromatic. Most people find the flavor too strong to enjoy raw unless blended with other herbs.

 **2. Infusions & Teas (most common edible form)** Dried leaves and flowers can be steeped to make a traditional herbal tea. Uses: Drunk alone (very bitter) More commonly blended with chamomile, mint, or lemon balm Used in folk herbalism for its aromatic, warming qualities Flavor: bitter, herbal, slightly resinous.

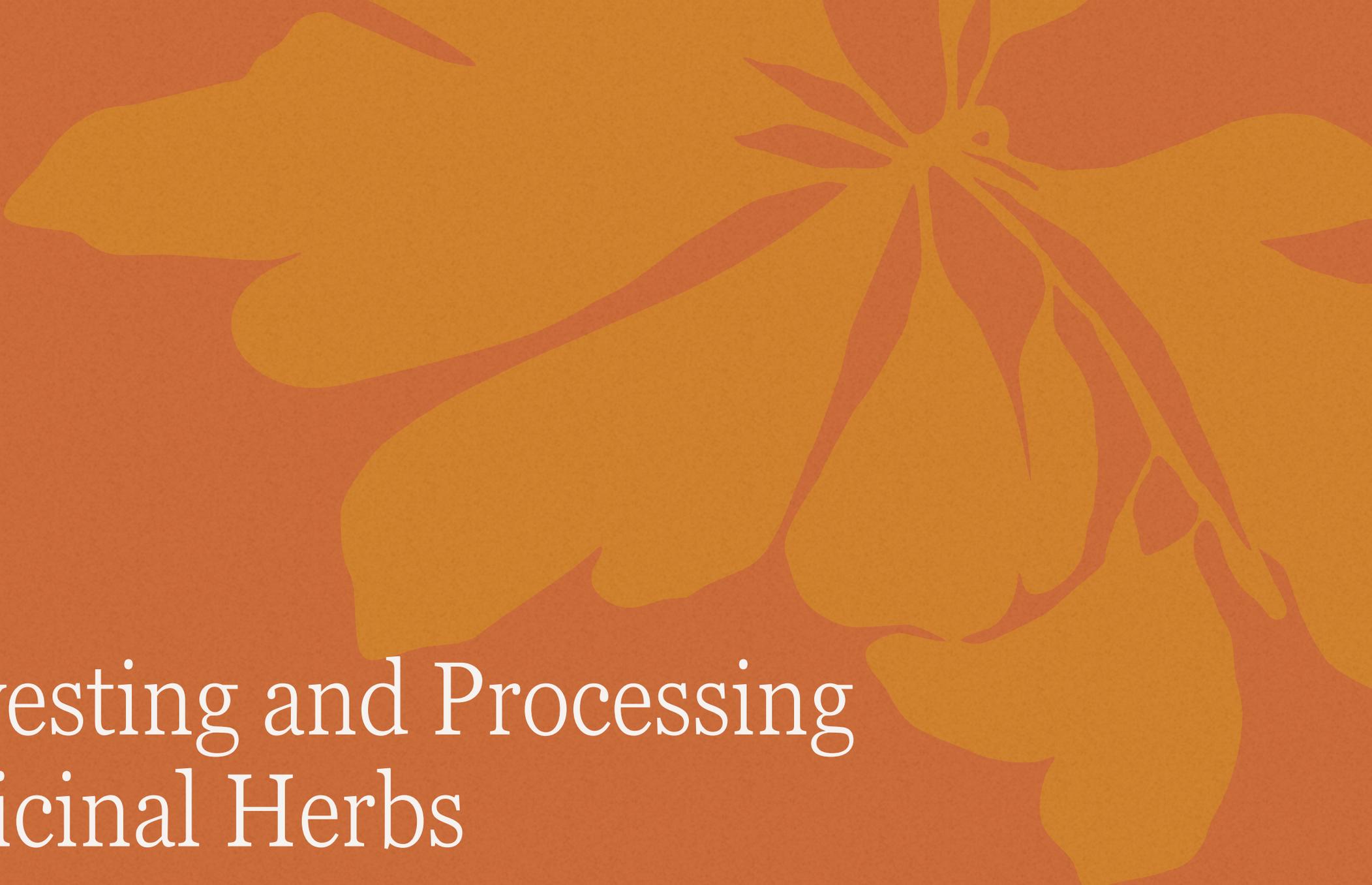
 **3. Flowers** The small daisy-like flowers are technically edible. Uses: Added sparingly to salads for visual appeal Used as a garnish Steeped in teas or vinegars Flavor: mild bitterness with a chamomile-like aroma.

 **4. Feverfew-Infused Honey (folk preparation)** A traditional way to make feverfew more palatable. Uses: Stirred into tea Spread on toast Used as a soothing herbal honey blend This is one of the most approachable edible forms because the honey softens the bitterness.

 **5. Vinegars & Bitters** Feverfew's strong aromatic profile makes it suitable for infused vinegars or homemade bitters. Uses: Added to salad dressings Used in digestive bitters blends Combined with citrus peel, chamomile, or rosemary

Feverfew Edible Uses:



A large, stylized graphic of a leaf or branch, rendered in a golden-brown color, set against a solid orange background. The leaf has several pointed, lobed sections and a central vein structure.

Harvesting and Processing Medicinal Herbs

“Nature itself is the best
physician.”

— HIPPOCRATES



Four of these herbs can be foraged

1. Echinacea (Purple Coneflower) — *Echinacea angustifolia* & *E. pallida*

- Native to the Great Plains, including Oklahoma Found in prairies, open fields, and dry grasslands *E. purpurea* is mostly garden-grown, but the others are wild

2. Yarrow — *Achillea millefolium*

- Common wildflower across Oklahoma Grows in fields, roadsides, and open meadows Very easy to identify once you know the leaf pattern

3. Chicory — *Cichorium intybus*

- Abundant roadside plant with bright blue flowers Naturalized throughout Oklahoma Roots and leaves are traditional edible/medicinal parts

4. Evening Primrose — *Oenothera biennis*

- Native and widespread in Oklahoma Found in fields, roadsides, and disturbed soils Biennial; first-year rosettes are common in wild patches



Optimal Harvesting Periods for Each Herb

Morning Harvest Benefits

Leaves harvested in the morning retain higher essential oil content, enhancing herb potency and efficacy.

Peak Compound Timing

Flowering or pre-flowering stages often yield the highest levels of bioactive compounds in herbs.

Risks of Late Harvesting

Harvesting too late can reduce medicinal efficacy due to degradation of vital compounds.

Growth Phase Monitoring

Optimal harvest windows rely on monitoring specific growth phases to maximize medicinal qualities.



Methods for Drying and Storing Herbs

Effective Drying Techniques

Air drying in shaded, ventilated areas preserves herbs' medicinal properties effectively.

Controlled Oven Drying

Oven drying at low temperatures ensures proper dehydration without loss of potency.

Proper Storage Practices

Storing herbs in airtight containers in cool, dark places prevents spoilage and mold growth.

Impact of Improper Drying

Improper drying can reduce active compounds in herbs by up to 50%, diminishing effectiveness.



Grinding Dried Herbs for Medicinal Use

Increased Extraction Efficiency

Grinding dried herbs increases surface area, enhancing the efficiency of extraction in tinctures or capsules.

Proper Grinding Equipment

Using mortar and pestle or electric grinders produces fine, consistent textures necessary for medicinal preparations.

Preserving Active Constituents

Avoiding overheating during grinding preserves volatile oils and active medicinal constituents in herbs.

Standardized Particle Size

Consistent particle size ensures reliable dosing in medicinal herb preparations like capsules and tinctures.



A large, stylized graphic of a leaf or plant branch, rendered in a golden-brown color, set against a solid orange background. The leaf has several pointed, rounded lobes and a central vein structure.

Transforming Herbs Into Medicine

Preparation of Tinctures, Teas, Syrups, and Honey Infusions

Tinctures Using Alcohol

Tinctures use alcohol to preserve alkaloids and essential oils, maintaining potency for years.

Water-based Teas

Teas extract water-soluble compounds ideal for digestive and calming effects.

Syrups and Honey Infusions

Syrups and honey infusions combine herbs with sweeteners, improving taste and adding antimicrobial effects.

Impact of Preparation Factors

Preparation time, solvent ratio, and storage conditions significantly affect medicinal quality.



Creating Poultices and Salves From Herbs



Poultices Application

Poultices use fresh or dried herb pastes applied topically to reduce inflammation and treat infections effectively.

Salve Preparation

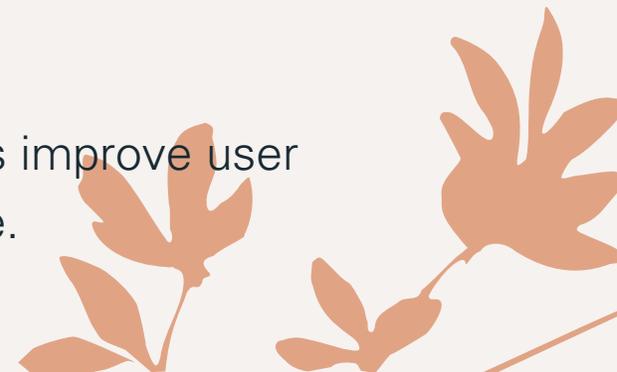
Salves combine herbal extracts with oils and waxes to create protective and healing ointments for skin care.

Herbal Choices and Safety

Traditional herbs like comfrey and calendula are used, with careful preparation to maintain therapeutic and safe skin benefits.

Texture and Aroma Importance

Texture and aroma of poultices and salves improve user compliance and overall healing experience.



Encapsulating Ground Herbs for Oral Use

Standardized Oral Dosage

Encapsulation provides a consistent and convenient oral dosage form, improving patient compliance and masking unpleasant tastes.

Preserving Potency

Capsules help preserve the potency of dried herb powders by protecting active compounds from degradation.

Uniform Capsule Sizes

Pharmaceutical-grade encapsulation equipment ensures uniform capsule sizes for consistent dosing of active compounds.

Regulatory Compliance

This encapsulation method is commonly used in commercial herbal supplements adhering to industry regulatory standards.



CONCLUSION: HARNESSING NATURE'S HEALING POWER THROUGH KNOWLEDGE AND CARE

Health Benefits Overview

Medicinal herbs offer diverse health benefits that promote natural wellbeing and healing.

Cultivation and Harvesting

Proper cultivation and harvesting techniques are essential to preserve the herbs' therapeutic qualities.

Medicinal Preparations

Accurate preparation methods unlock the full healing potential of medicinal herbs.