



## Selected Culinary Herbs

### Harvesting, Preservation and Usage

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Culinary herbs are the aromatic, fresh, dried or processed leaves and flowers of herbaceous plants that enhance the flavor and fragrance of food. There are literally hundreds of plants that can be grown for this purpose, and there are no steadfast rules that must be applied when cooking with herbs. Both plate and palate can be diversified with the subtle culinary flavorings and delicious teas that are made from herbs.

#### Selected Herbs

Anise (*Pimpinella anisum*) is an annual plant grown for its small, oval, greenish-brown seeds with licorice-like flavor. Anise is a potent spice common in Asian and Indian cuisine. Its seeds are used to flavor cookies, candies, pickles, breads and rolls.

Basil, sweet (*Ocimum basilicum*) is an annual plant with dark green leaves that have a sweet flavor with mild pungency. Basil is used liberally in Italian and Greek food. Basil leaves are excellent with tomatoes, cheese, meats, soups and green salads.

Bay (*Laurus nobilis*) is a perennial plant that is used as a hedge in the landscape. The leaf of this evergreen shrub is aromatic, with a sweetish odor and pungent taste. Bay is a classic ingredient in the French bouquet and is one of the most common herbs in North Indian cooking.

Caraway (*Carum carvi*) is a biennial plant with feathery foliage and creamy white flowers. It is grown for its hard, brown, savory seeds. Caraway is widely used in Scandinavian, German, Russian and Indian cuisines. Caraway seeds are used whole in rye breads, sauerkraut, cheeses, potato salads, meats and stews.

Chervil (*Anthriscus cerefolium*) is an annual plant that resembles a fine leaved parsley/fennel combination. It has a light licorice flavor with a mild taste of pepper. Chervil is used particularly in French cooking and gives a delightful flavor to salads, salad dressings and meats.

Chives (*Allium schoenoprasum*) are an attractive, perennial border plant similar to green onions with narrow leaves and edible lavender flower heads. Chives are used whenever a light oniony flavor is desired in salads, dips, sauces, vegetables, soups and fish.

Coriander (*Coriandrum sativum*) is an annual plant with delicate, lacy foliage and pinkish-white flowers. The name coriander is used to refer to the plant and also its small orange-flavored seeds; the name cilantro is used when referring to the leaves of the plant. Coriander is used in French dressing and Scandinavian cooking. Cilantro is delicious in Vietnamese spring rolls, Thai curries and Mexican foods such as guacamole and salsas.

Dill (*Anethum graveolens*) is an annual plant with feathery foliage and large flower umbels. Dill is often used in German, Russian, English and Scandinavian dishes. Dill seeds have a slightly bitter taste and are used in soups, pickles, cheese dishes, breads, sauces, meats and fish. Dill weed has a delicate bouquet and is used to flavor fish sauces, salads, dips, potatoes and meats.

Fennel (*Foeniculum vulgare*) is an annual plant with bright green feathery foliage and yellow flowers. The plant produces yellowish-brown seeds with a sharp, sweet licorice-like flavor. Fennel is one of the most important spices in Kashmiri Pandit and Gujarati Indian cooking and is an essential ingredient in Chinese five-spice powders. The leaves are used as garnish or flavoring in sauces and salads. The seeds are commonly used to flavor sausages, breads, salads, salad dressings, soups and sauces.

Marjoram, sweet (*Origanum majorana*) is a small perennial bush with white flowers and gray-green leaves that have a slightly bitter undertone. It is widely used in Mediterranean, Greek, Egyptian, Polish, Italian, German, English and French cuisine. Marjoram is used to season vegetables, lamb, sausage, eggs, poultry, cheese dishes, potato salad and soups.

Mint (*Mentha spp.*) is a perennial plant with purple flowers that has a refreshing odor and flavor. Mint is widely used in the Mediterranean Basin, the Middle East, India and Southeast Asia. Mints flavor combines well with lamb, peas, fish sauces, candies, chocolate and vegetables.

Oregano (*Origanum vulgare*) is a perennial in warmer climates but treated as annual where it cannot survive the winter. The flavor is similar to sweet marjoram, but stronger and more sagelike. Oregano is used liberally in Spanish, Mexican and Italian dishes and is a component of chili powder.

Parsley (*Petroselinum crispum*) is an annual plant that looks lovely in the landscape as a border plant. It has finely curled aromatic leaves that are rich in vitamins A and C. Parsley is widely used in Middle Eastern, European, Asian and American cooking. Parsley is used as a flavoring or garnish for soups, salads, eggs, meat and poultry dishes, creamed vegetables and hot breads.

Rosemary (*Rosmarinus officinalis*) is a small, perennial, pine-like bush with pale blue flowers, belonging to the mint family. The leaves have a spicy odor and a warm, piny taste. Rosemary is used in vegetable and meat dishes, cream soups, sauces and jellies. Rosemary makes a delicious tea.

Sage (*Salvia spp.*) is a perennial shrub with grey leaves that has a strong, bitter flavor. Sage appears in many European cuisines, notably Italian, Balkan and Middle Eastern cookery. Sage is used sparingly in stuffings, soups, stews, sausage and herb breads.

Summer savory (*Satureja spp.*) is an annual, bushy plant with long narrow leaves and weak woody stems. Its leaves are used to season poultry, soups, gravies, stuffings, salads, bean dishes and sauces for fish or veal.

Tarragon (*Artemisia dracunculoides*) is a perennial plant with slender, dark green leaves that have a sweet anise scent. It is considered an essential ingredient in many French dishes. Tarragon's flavor complements eggs, poultry, fish, shellfish and many vegetables. Tarragon is also used as a flavoring in pickles and vinegar.

Thyme (*Thymus spp.*)  
Thyme is a small, perennial shrub with tiny brownish-green leaves. The leaves have unsurpassed aroma and flavor. Thyme is good with roast meats, fish chowders, sauces, soups, stews, stuffings and salads.

## Harvesting

Although most culinary herbs may be harvested at any stage during the growing season, it's best to harvest herbs when their oil is at maximum and the flavor at its peak. For most leafy herbs the optimum stage for picking is when the flower buds are just starting to open. Mints are an exception. Their flavor peaks when in full flower. The stage to harvest herb seed is after they have changed color, from green to brown, but before they drop. Herb roots are most flavorful when fully developed toward the end of their growing season. If growing the herb for its root's flavor, wait until the flower is in full bloom before harvesting.

If possible, cut herbs on a dry, sunny morning after the dew has dried, but before the sun becomes too hot. Dry, sunny days will help maximize the essential oil content of the plants. When cutting, it's important to use clean, sharp scissors or pruners and to avoid ripping or tearing the plants. Clean cuts help the plant to repair quickly and prevent the spread of disease. Cut leafy annual herbs back quite severely when harvesting them. Cut just above a leaf or pair of leaves, leaving approximately 4 to 6 inches of the stem for later growth.

Conversely, use caution when harvesting perennial herbs to carefully prune so that new growth will be produced and a compact habit of growth maintained. For perennial herbs, cut only about one-third of the top growth at a time and, in some cases, only the leafy tips. Never leave a large amount of naked stalk on the plant. It will only die back and leave an unattractive stub.

If an herb is grown for its seed (such as dill), do not cut it back and use the leaves. In this case, allow the plants to mature fully and form their seeds, and then harvest them. Collect the seed heads when they are turning brown. Cut them from the plants and place in a paper bag. After the seeds drop off into the bag, spread them out on a

screened drying rack until they are thoroughly dry.

## Preservation

**Bundle-dried herbs:** (recommended for long-stemmed, leafy herbs). Wash herb stems. Shake off excess water. Using household string, tie stem ends together forming small bundles. Label bunches for easy identification after drying. Hang bundles upside down in warm, well-ventilated area out of direct sunlight. Sun will fade color and dissipate oils. When completely dry, unbundle and strip leaves from stems. Store dried leaves in an airtight container.

**Rack-dried herbs:** (recommended for short-stemmed and very large herbs and flowers). One way to dry herbs are on racks. If you don't own a drying rack, an old window screen works great; otherwise you can make a drying rack. Spread herbs on drying racks. Elevate trays from ground with bricks, blocks, 1-inch by 2-inch boards or set on a table. Select a warm area with good air circulation, out of direct sunlight. Dry the herbs seven to 10 days, turning them over periodically so the leaves dry completely. Store dried leaves in an airtight container.

**Microwave-dried herbs:** (This method will not work well if the leaves are very big or very small.) Wash herbs and pat dry. Remove leaves from stems. Place between two paper towels. Microwave them on full power for 20 seconds. Check the herbs. The herbs will not change color, but the paper towel should get slightly damp from evaporating water. If the herbs are not dry and crisp, microwave again for 20 seconds. Depending on your microwave's strength, you will need to heat the herbs two or three times to dry them completely. Cool completely. Store dried leaves in an airtight container.

**Freezing:** (recommended for any herb). Wash herbs and dry entirely. Remove

leaves from stems and place in small plastic bag or freezer container. Label each package and freeze. For best flavor, use within six months.

## **Culinary Usage**

### ***Herb Teas***

Herb tea can be made with herbs only or a combination of herbs and black tea. Herb tea is generally light in color and mild in flavor.

Hot Tea: Use about one teaspoon of dried herbs, or 1 inch of fresh sprig per 2 cups of water. Add herbs to teapot of warm water and allow the tea to brew for three to four minutes on medium-low heat.

Iced Tea: Follow above procedures, but use about 50 percent more herbs per portion to balance the ice that will be added. Allow tea to cool before pouring over ice.

### ***Herb Butter***

Herb butters are not just for bread. They are excellent on vegetables, eggs or meat, for sautéing or seasoning. Real sweet butter will absorb the flavor of the herbs better, but you can also use margarine. As a general rule, use 1 tablespoon of fresh herb, 1½ teaspoon dried herb or ½ teaspoon seed for each ¼ pound of butter at room temperature. If combining two or more herbs, use less of the strongly flavored ones. Store herb butter in a container and refrigerate. Most herb butters can be kept in the refrigerator for up to a month or frozen for about three months.

### ***Herb Oil***

Herb oils can be used for salad dressing, marinades or to sauté in. Any type of neutrally flavored cooking oil can be used; such as olive, peanut, grapeseed or avocado. Use about 1 teaspoon dried herb for each cup of oil. In a saucepan, gently heat oil until it is warm. Add dried herbs, cook to about 180° F. Let cool and then strain out the ingredients before bottling. Herb oils can spoil, unlike vinegars. Store the herb oil in an airtight container, in the refrigerator and use within two weeks.

Herb Suggestions: rosemary, thyme, basil, tarragon, summer savory, oregano, cilantro, marjoram, chervil, chives, dill, mint, parsley, or bay leaf.

### ***Herb Salts***

From the ingredients you use to the herbs you put them on, flavored salts are wide open to your imagination. Start with 1 teaspoon dried herbs and 1/4 cup coarse noniodized salt. Combine using a mortar and pestle, or pulse in a grinder or food processor. Mix well, but avoid pulverizing the salt. Taste and increase the amount of flavorings, if desired. Place in a thin layer on a cookie sheet and bake in a 300° F oven for 10 minutes. Cool, sift and store salt in an airtight container. Intensity of flavor will diminish over time, but it can last for up to a year.

A few great combinations to try:

Chile-Lime Salt: 1/4 cup salt, 1 teaspoon red pepper flakes, 1 teaspoon dried lime zest and 1/4 teaspoon smoked paprika.

Citrus-Rosemary Salt: 1/4 cup salt, 1/2 teaspoon dried lemon zest, 1/2 teaspoon dried orange zest and 1/2 teaspoon dried rosemary.

Saffron-Fennel Salt: 1/4 cup salt, 1/4 teaspoon saffron threads and 1 teaspoon fennel seeds.

### ***Herb Vinegar***

Herbal vinegar is easy to make and provides a simple way to add flavor to salad dressings, marinades and everyday meals. The type of vinegar to use depends on what is being added. With white vinegar, try tarragon, mint or salad burnet. With apple cider vinegar, try an herb blend or mint, basil or garlic. For wine vinegar, use a basil and garlic mix. Use about 3 tablespoons of dried herbs per pint of vinegar. Heat vinegar to just below boiling (190° F), then pour over the herbs and cap tightly. Allow to stand for a week in a cool, dark place for the flavor to develop fully. Then, strain the vinegar through a damp cheesecloth or coffee filter one or more times until the vinegar is no longer cloudy.

Pour the strained vinegar into a clean sterilized jar. Seal tightly and store in the refrigerator for up to two months.

### ***Bouquet Garni***

A seasoning method used by French cooks in which fresh herb combinations are wrapped in small cloth bags, tied in a piece of muslin, or tied together into a little bunch and simmered in the food, gently infusing mild, aromatic flavor. Add bouquet garni to soups, stews or braises and remove before serving. The classic combination includes 4 sprigs parsley, 4 sprigs thyme and a bay leaf.

### ***Bouquet Fines***

Finely chopped herbs stirred into or sprinkled on top of foods, such as salads, omelets and fish, or to top any food needing color or a flavor lift. To make a simple blend of bouquet fines, chop up equal parts of tarragon, parsley, chervil and chives and add to food. As with all herbs, add during the last few minutes of cooking for best flavor. Jars of dried bouquet garni or bouquet fines would make wonderful gifts.

### ***General Usage***

- Don't overuse herbs in a dish. Usually one strong-flavored herb alone or paired with one or two more mild-flavored herbs will complement both the stronger herb and the food. In recipes calling for dried herbs, substitute 2 teaspoons of fresh herbs for ¾ teaspoon dried herbs.
- Herbs can be categorized according to their strength of flavors. Strong herbs are those with very intense flavors, including rosemary, sage, fennel and perilla. Accent- flavored herbs are those that have strong flavors but do not overpower the other ingredients. Examples include anise, basil, caraway and dill. Mildly flavored herbs, such as chives and parsley, can be used generously.
- Label date of picking or date of purchase on the storage container with a permanent marking pen.

- Store in a tightly covered container, in a dark place away from sunlight, and away from moisture. Avoid sprinkling directly from container into a steaming pot to prevent steam moisture from entering the container.
- To preserve freshness, do not store above the stove, dishwasher, microwave or refrigerator, near a sink or heating vent, or inside a cupboard or drawer. For open spice rack storage, choose a site away from heat, light and moisture.

### **References**

Bale, Sharron and Witt, Mary. 2005. Culinary Herbs. University of Kentucky Cooperative Extension. [Online] Available at: <http://www2.ca.uky.edu/agc/pubs/ho/ho74/ho74.pdf>. Accessed September 2014.

Kendall, Pat. 1994. Growing, preserving and using herbs. Colorado State University Cooperative Extension. [Online] Available at: <http://university.uog.edu/cals/people/PUBS/HERBS/Herbs3.pdf>. Accessed September 2014.

Selected Herbs Preservation, Storage and Usage. General Fact Sheet. University of Nevada Cooperative Extension.

Smith, Ronald C. and Garden-Robinson, Julie. 2005. Questions and Answers about Culinary Uses of Herbs. North Dakota State University Extension Service. [Online] Available at: <http://www.ag.ndsu.edu/pubs/plantsci/hortcrop/h1267.pdf>. Accessed September 2014.

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Kendall, Pat. 1994. Growing, preserving and using herbs. Colorado State University Cooperative Extension. [Online] Available at: <http://university.uog.edu/cals/people/PUBS/HERBS/Herbs3.pdf>. Accessed September 2014.

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Smith, Ronald C. and Garden-Robinson, Julie. 2005. Questions and Answers about Culinary Uses of Herbs. North Dakota State University Extension Service. [Online] Available at: <http://www.ag.ndsu.edu/pubs/plantsci/hortcrop/h1267.pdf>. Accessed September 2014.