

THE BASICS OF HERB USE AND PRESERVATION

Herbs play an important role in the cuisine of many cultures and can additionally offer many medicinal and health benefits. Herbs refer to the leaves and seeds of herbaceous plants, whereas spices are berries, seeds, flower buds, roots, or bark of tropical plants. These savory ingredients can be used as healthier alternatives to replace or reduce the amount of salt and sugar in foods. Their flavor comes from specialized aromatic oils in the cells of the plants. Chopping or grinding breaks the cell walls and releases the flavor; heat increases the rate at which some herbs release their flavors.

Using Herbs

Whether fresh herbs are grown in the garden or purchased, herbs should be thoroughly washed before using. Sturdy herbs, such as rosemary and thyme, can be rinsed well under cool running water, but delicate or fine-leaved herbs such as basil, dill, or tarragon should be submerged in a bowl of cool water and swished back and forth.

Herbs are used to complement, not disguise, the flavor of food. Generally, when preparing soup, sauce or meat dishes, 1/4 teaspoon of dried herbs per four servings is adequate.

Quick tip: Looking to reduce the amount of sodium or sugar in your diet? Herbs and spices can be a good alternative to salt or sweeteners.

The flavor of dried herbs is about three to four times stronger than fresh herbs. To substitute dried herbs for fresh in a recipe, use 1/4 to 1/3 as much. These amounts can be used as guidelines:

- 1/4 teaspoon dried powdered herbs =
- 1 tsp. dried whole/crumbled =
- 1 tablespoon fresh chopped herbs

Chopping leaves finely will create more cut surface and allow additional flavor components to be released.

Herbal infusions, which involve steeping fresh herbs with desired flavors or characteristics in water or oil, are used to flavor drinks, such as teas and cocktails, and foods, such as salad dressing, butter, yogurt, and oil. To become familiar with the flavor of an herb, mix it with butter or cream cheese, let stand for half an hour, then taste this mixture on a cracker.

The way herbs are prepared and used can vary widely and this influences their culinary use.

- For best flavor results, add dried herbs near the beginning of the cooking process to provide sufficient time for the herbs to rehydrate.
- Fresh herbs are usually added during the last part of cooking.
- Wrapping whole herbs in a cheesecloth bag before adding them to cooked dishes makes removal easy before serving.



Basil



Cilantro



Dill



Fennel



Oregano



Parsley



Rosemary



Sage



Thyme

- Herbs in uncooked foods, such as salad dressings, dips and fruit mixes, need time to blend flavors, so add them as far in advance of serving as possible.
- Basil, cilantro, dill, mint, oregano, parsley, rosemary, sage, savory, tarragon, and thyme add interest to salads; rosemary, thyme or basil may be added as a secondary flavor to sorbet or summer beverages. Some herbs are best used fresh—such as burnet, chervil, and parsley—because they have little flavor once dried or frozen.

Herbal Vinegars and Oils

Dried or fresh herbs may be added to vinegar or oil and used in the seasoning of salads and sauces. If using fresh herbs when making infused oils or vinegars, it's important to store refrigerate the solution and use it within four days; infusions made with dried herbs can be stored at room temperature for longer periods. Commercially made herb/oil mixtures are often stored at room temperature but this is because of special processing or acidification steps.

Herbal Teas and Beverages

Traditionally, a true tea is made from the leaves of the tea plant, *Camellia sinensis*. Beverages made from the leaves, flowers, bark or roots of other plants have become widely known as herbal teas. Herbal teas do not go through the same curing process as black or green tea so it is important to brew herbal teas using water that has been heated to a temperature high enough to destroy harmful microorganisms. It is recommended to brew herbal teas at 180–200°F for 5–15 minutes. Brewed herbal tea can be chilled for use as iced tea. Herbs or herbal teas should not be used in making tea which is not brewed, such as sun tea; however, after cooling, brewed herbal tea can be added to sun tea that has been made with black tea labeled for cold brewing use.



Drying and Storing Herbs

Drying is the traditional method for preserving herbs. To minimize wilting and maximize flavor, gather herbs in the morning of a dry day, just after dew has evaporated. Rinse thoroughly and dry with paper towels. Because many herbs look alike when dry, label them before you dry them to help prevent any mix ups. Herbs are dry when they are crispy, crumble easily, and stems break, similar to the jarred herbs bought at stores. When collecting the seeds of herbs, try drying inside a paper bag with holes cut in the side of the bag. Sun drying is not recommended because of the potential for insect infestation and loss of flavor and color.

Food Dehydrator

Drying herbs with a commercial food dehydrator typically allows for better control of temperature within the recommended temperature range. Arrange herbs on drying trays in single layers; good air circulation between trays is important. The National Center for Home Food Preservation recommends pre-heating the dehydrator with the thermostat set to 95° F to 115° F. In areas with higher humidity, temperatures of 125° F may be required. Check your dehydrator instruction booklet for specific details.

Gas or Electric Oven

The oven light of an electric range or the pilot light of a gas range may furnish enough heat for overnight drying of herbs. Place single layer of herbs on oven-safe trays.

Microwave Oven

Drying in a microwave oven can be a good option for small amounts of herbs and appears to be the best drying method for reducing microbial contamination of herb leaves. Check the microwave oven owner's manual for specific herb drying directions. Make sure herbs are thoroughly dry before placing in the microwave oven so that residual water does not cause the herbs to cook instead of dry. To dry, place a single layer of herbs between two paper towels on a microwave-safe plate. Avoid using paper towels made from recycled materials as they may contain metal particles which could cause sparking in the microwave oven. Place a ½ cup of water in 1 cup measure next to plate of herbs.

Some herbs, such as basil, should be dried on the microwave ovens 'low' setting. It is important to stop every 15 seconds to check the herbs and periodically turn them over.

General Guide for Microwave Drying			
Wattage	500-600	650-700	750-1200
Drying Time	3-6 min	2-4 min	1-2 min

Air Drying

Air drying is the least expensive method but offers the least amount of consistency in drying and the greatest opportunity for contamination with bacteria or dust. Tie two to three sprigs of fresh herbs at the base of stems with twine and hang away from direct sunlight at room temperature or lay on cheesecloth stretched on frames or netting screens. This method may be used for sturdier herbs. More tender leaf herbs—such as basil, tarragon, lemon balm, and mint—are higher in moisture and should be dried quickly, using one of the previous methods, to prevent mold growth.

Quick tip: Herbs are easy to grow and can flourish year-round if kept indoors during the winter. Most herbs thrive in full sunlight; if growing inside, place herbs in a windowsill or other area of your home that gets adequate light.

Storing Dried Herbs

Dried herbs should be stored in a cool, dry place and most will keep well for up to a year. Their strength can be judged by their aroma. Dried herbs can be stored whole or crushed, but whole herbs retain their flavor longer.

To ensure optimum quality, store in rigid, opaque containers with airtight seals. Choose ceramic jars or darkened glass containers to help protect the herbs against light deterioration. Make sure herb leaves are completely dry to prevent mold growth during storage. Label all storage containers with the herb's name and date.

Freezing Herbs

Quick-frozen herbs will keep up to one year in the freezer if well packaged. To tray-freeze herbs, wash them, then drain and pat dry. Strip leaves off stems, spread leaves in a single layer on a cookie sheet; place in freezer for at least 30 minutes. Place the frozen leaves in a freezer bag. Label with herb's name, date, and return to freezer for use as needed. Cut leaves like basil can also be frozen in ice cube trays half filled with water. Add 1 tablespoon chopped leaves to each section of the ice cube tray. Press herbs under water as much as possible. Freeze overnight. The next day, top off the ice cube trays so the herbs are completely submerged in water and re-freeze. When frozen, pop out the cubes and stored in a labeled and dated freezer bag. Frozen herbs are best used in cooked dishes as they will become limp when thawed.

FOOD	HERBS AND OTHER SEASONINGS TO ENHANCE FLAVOR
Vegetables	
Carrots	Cinnamon, cloves, marjoram, nutmeg, rosemary, sage
Corn	Cilantro, cumin, curry powder, paprika, parsley, onion
Green Beans	Curry powder, dill, lemon juice, marjoram, oregano, tarragon, thyme
Greens	Onion, red pepper
Peas	Ginger, marjoram, mint, onion, parsley, sage
Potatoes	Bay leaves, chives, dill, paprika, parsley, sage, garlic, onion
Summer Squash	Marjoram, rosemary, sage, cloves, curry powder, nutmeg
Winter Squash	Cinnamon, ginger, nutmeg, onion
Tomatoes	Basil, bay leaf, chives, dill, marjoram, oregano, parsley, pepper
Meats	
Beef	Bay leaf, marjoram, nutmeg, onion, pepper, sage, thyme
Lamb	Basil, curry powder, garlic, mint, rosemary
Pork	Garlic, onion, oregano, pepper, sage
Chicken	Marjoram, oregano, parsley, rosemary, saffron, sage, tarragon, thyme
Fish	Basil, chervil, chives, dill, marjoram, dry mustard, paprika, pepper
Eggs/Dairy	
Eggs	Basil, chives, chervil, dill, marjoram, parsley, paprika, tarragon
Butter	Basil, chives, lemon thyme, marjoram, mint, sage
Yogurt	Chives, dill, garlic, mint, parsley

FLAVOR	HERBS
Delicate	Burnet, chervil, chives, parsley
Medium	Basil, celery leaves, tarragon, marjoram, mint, oregano, savory, thyme
Strong	Bay leaf, rosemary, sage
Sweet	Mint
Savory	Oregano, tarragon, chives, dill

PRESERVING AND USING HERBS

CHARACTERISTICS & USES	HARVESTING & PRESERVATION
Basil	
<p>Sweet but pungent flavor. Pairs well with tomatoes, cheese, green salads, eggs, yogurt, soups, stews, and fish. Anti-inflammatory. Commonly used to alleviate gastrointestinal problems.</p>	<p>Cut stems 6–8 inches above ground when plant starts to flower. Dry in microwave oven at low setting and store in airtight containers. To freeze, press leaves into half-filled ice cube trays and allow to sit overnight.</p>
Bay	
<p>Sweet but pungent flavor and odor. Good with tomatoes, beans, potatoes, and beef. Leaves are tough and should be removed before serving. Can be used to boost immune system and aid digestion.</p>	<p>Pick individual leaves to use immediately or preserve. Fresh leaves can be stored in a plastic bag for one to two weeks. To dry, set on parchment-lined baking sheet and put in oven at 200° until crisp.</p>
Chives	
<p>Flavor is similar to green onions but milder; leaves are also finer. Provides a light, oniony flavor in salads, dips, sauces, vegetables, and soups. May prevent heart disease, cancer, and diabetes.</p>	<p>Use fresh leaves by snipping off the tops of plants with scissors. Chives lose their color and flavor when dried. To freeze, wash and chop finely and press into half-filled ice cube trays; allow to sit overnight.</p>
Cilantro	
<p>Pairs well with corn, cucumbers, avocado, rice, fish, and chili peppers. Often used with lime in curries and soups. May help to promote brain health, reduce anxiety, and regulate blood sugar levels.</p>	<p>High heat reduces flavor. Dry in microwave oven at low setting and store in airtight containers. To freeze, press leaves into half-filled ice cube trays and allow to sit overnight.</p>
Coriander	
<p>Small, orange-flavored seeds used in cold cuts, curry powder, cakes, cookies, poultry dressings, and French dressing. Sourced from the same plant as cilantro. Helps control blood sugar, blood pressure, and cholesterol.</p>	<p>Cut stems of seed heads after seeds have developed but while they are still green. Suspend the stalks inside an open paper bag and place in dark area. When dry, shake the bag well and collect the seeds. Store in light-proof airtight containers. Flavor improves after the first month of storage.</p>
Dill	
<p>Taste is similar to Ranch dressing. Used for dips, sauces, pickles, vegetables, meats, and fish. The name “dill” means “to soothe”; historically used to calm colicky infants. May help reduce menstrual cramps and depression.</p>	<p>Pick young leaves just as flowers open. Cut leaves and spread in thin layer to dry until brittle. Crumble leaves and store in an airtight container. To collect seeds, cut flower stalks and follow instructions listed for coriander.</p>

CHARACTERISTICS & USES	HARVESTING & PRESERVATION
Marjoram	
<p>Earthy, woody flavor with citrusy undertone. May be used fresh or dried to season vegetables, lamb, sausage, eggs, poultry, cheese dishes, potato salad, stuffings, and soups. Used for digestion, hormone regulation, and diabetes management.</p>	<p>Cut stems just before buds begin to flower, leaving a few leaves. Dry in microwave oven at low setting. When dry, crumble and store in airtight containers. To freeze, blanch and pack in small bunches; seal in plastic bags before placing in freezer.</p>
Mint	
<p>Refreshing odor and flavor. Often used as garnish. Pairs well with lamb, peas, candies, chocolate, and vegetables. May possess numerous health benefits, including cold and allergy relief, indigestion relief, brain health, and relief of breastfeeding pain.</p>	<p>Pick young, fresh leaves. When using fresh, crush leaves just before adding to dish. To dry, place in microwave at low setting and store in airtight containers. To freeze, press leaves into half-filled ice cube trays and allow to sit overnight.</p>
Oregano	
<p>Similar flavor to marjoram but stronger. Most commonly used in Italian dishes. Pairs well with tomatoes and other vegetables. Antioxidant, antibacterial, and anti-inflammatory properties.</p>	<p>Cut stems before buds begin to flower, leaving a few leaves. Dry in microwave oven at low setting. When dry, crumble and store in airtight containers. Freeze in plastic bags or with water in ice cube trays.</p>
Rosemary	
<p>Spicy odor and warm, piney taste. Used as garnish and to flavor vegetable and meat dishes. Can lift mood, boost alertness, and relieve indigestion. May stimulate hair growth.</p>	<p>Air or microwave drying works well for rosemary and other sturdy herbs. When dry, rub leaves from stems and store in airtight containers.</p>
Sage	
<p>Strong bitter flavor. Used sparingly in stuffings, soups, stews, and herb breads. Antioxidant. May support brain and memory health, reduce blood sugar, reduce menopause symptoms, and support oral health.</p>	<p>Pick leaves in spring before flower buds form or flavor becomes musty. Dry in microwave oven at low setting and store in airtight container. To freeze, press leaves into half-filled ice cube trays and allow to sit overnight.</p>
Thyme	
<p>Earthy flavor. Good with roast meats, fish, soups, gumbos, stews, stuffings, and vegetables. Potential benefits include fighting acne, boosting mood, boosting immunity, relieving cough, and lowering blood pressure.</p>	<p>Cut sprigs before the plant flowers. Air dry in a paper bag over several weeks or place in warm oven until brittle. After drying, rub leaves from the stems. Crush and store in airtight containers.</p>

Modified from Colorado State University Extension