

# Seasoning with Herbs and Spices

**K-STATE**  
Research and Extension  
Family and Consumer Sciences

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Herbs and spices have been used for centuries to season and flavor foods.

In prehistoric times, people discovered that certain parts of plants made food taste better. Herbs were the flavoring of the common people, often grown in kitchen gardens or gathered in the woods. They were used for medicinal purposes and to enhance the flavor of foods. Herbs were even used to mask the taste of off-flavor, tainted meats.

Spices are usually grown in tropical countries and are the natural aromatic parts of the plant from the dried seeds, buds, fruit, flower, bark, or root. (For example: cinnamon – bark; ginger – root; black pepper – berry; nutmeg – seeds; cloves – bud.)

At one time spices were so costly that only the wealthy could afford them. The Spice Road between Europe and the Middle East was one of the first international trade markets. The discovery of America was not a quest for new lands, but a journey to find a new and shorter path to bring spices back from Asia to the merchants in Spain.

Modern consumers use both herbs and spices to enhance the flavor and healthfulness of foods. Spices from all over the world are widely available. Herbs can be grown in

the home garden, or purchased from a farmers market or grocery store. Seasonings are sold whole, crushed, powdered, dry, or fresh to provide a variety of flavors.

## Using Herbs and Spices

A complementary seasoning can enhance the flavor of food. Here are some suggestions for flavor combinations:

- **Beef** — bay leaf, marjoram, nutmeg, onion, pepper, sage, thyme
- **Chicken** — ginger, marjoram, oregano, paprika, poultry seasoning, rosemary, sage, tarragon, thyme
- **Fish** — curry powder, dill, dry mustard, marjoram, paprika, pepper
- **Lamb** — curry powder, garlic, rosemary, mint
- **Pork** — garlic, sage, pepper, oregano
- **Veal** — bay leaf, curry powder, ginger, marjoram, oregano
- **Carrots** — cinnamon, cloves, marjoram, nutmeg, rosemary, sage
- **Corn** — cumin, curry powder, paprika, parsley
- **Green beans** — dill, curry powder, lemon juice, marjoram, oregano, tarragon, thyme
- **Greens** — pepper
- **Peas** — ginger, marjoram, onion, parsley, sage

### Pronunciation Tip

In the United States, pronounce “herb” without the “h” — “erb.”

- **Potatoes** — dill, garlic, onion, paprika, parsley, sage
- **Summer squash** — cloves, curry powder, marjoram, nutmeg, rosemary, sage
- **Tomatoes** — basil, bay leaf, dill, marjoram, onion, oregano, parsley, pepper
- **Winter squash** — cinnamon, ginger, nutmeg, onion

Seasoning blends are mixtures of ground or whole spices, herbs, seeds, or other flavorings. Condiments are also used for seasonings; they are a blend of herbs and/or spices, usually mixed into a liquid form. Meat rubs and marinades are blends of herbs and spices used to flavor and tenderize meats.

Seasonings such as apple pie spice are blends of several spices and are ready to use. If you don't have the called-for blend in a recipe, you can also use a combination of basic spices. For 1 teaspoon of apple pie spice, substitute a combination of 1 teaspoon cinnamon and  $\frac{1}{8}$  teaspoon nutmeg. For pumpkin pie spice (1 teaspoon), substitute 1 teaspoon cinnamon,  $\frac{1}{4}$  teaspoon ginger,  $\frac{1}{8}$  teaspoon nutmeg, and  $\frac{1}{8}$  teaspoon allspice. Italian seasoning is a combination of  $\frac{1}{4}$  teaspoon oregano leaves,  $\frac{1}{4}$  teaspoon marjoram leaves,  $\frac{1}{4}$  teaspoon basil leaves, and  $\frac{1}{8}$  teaspoon rubbed sage for  $1\frac{1}{2}$  teaspoons of seasoning. For each teaspoon of poultry seasoning, substitute  $\frac{3}{4}$  teaspoon ground sage and  $\frac{1}{4}$  teaspoon ground thyme.

Some seasonings are used to give food unique cultural flavors. For Italian cooking, use oregano; for Indian cooking, use curry. For Mexican recipes, use cilantro and cumin. For Chinese recipes, use ginger. For French cooking, use marjoram.

## Food Safety

Herbs and spices have long been used to reduce the growth of bacteria in foods. For example, certain herbs and spices — including cloves, cinnamon, thyme, oregano, and rosemary — can function as antibacterial agents. Before refrigeration, food spoilage was a significant problem, especially in countries

## Seasoning Guidelines

Use the following guidelines for determining how much herb or spice to use:

**Equivalent amounts:** 1 tablespoon finely cut fresh herbs = 1 teaspoon crumbled dried herbs =  $\frac{1}{4}$  to  $\frac{1}{2}$  teaspoon ground dried herbs.

Begin with a small amount and adjust as needed. For 4 servings or 1 pound of meat or 1 pint/2 cups of soup or sauce, use  $\frac{1}{4}$  teaspoon dried ground herbs.

When using cayenne pepper or garlic powder, start with  $\frac{1}{8}$  teaspoon. Red pepper intensifies in flavor during cooking.

When doubling a recipe, do not double herbs and spices. Increase amounts by 50 percent, adding more if needed.

Add less delicate herbs (such as dill seed, oregano, thyme) earlier in the cooking and more delicate herbs (such as basil, chives, mint) later or just before serving.

with hot climates. According to researchers, people who began adding spices to their meat in those times were reducing the risk of foodborne illnesses without realizing it.

Recent evidence points to another benefit of using herbs and spices when grilling. Marinades containing certain antioxidant spices, such as rosemary and oregano, have been shown to reduce production of potentially harmful heat-formed compounds associated with grilling meat. The K-State Research and Extension publication *Beef: Choices, Preparation and Flavor* (MF2888) contains more information about marinades.

## Storing Herbs and Spices

The flavors of herbs and spices are fragile and can be destroyed by heat, light, and moisture. Store seasonings in tightly covered containers in a cupboard or drawer. Store them away from heat and moisture sources such as the dishwasher, sink, range, or heating vent. In hot climates, refrigerate paprika, chili powder, and red pepper to protect the flavor.

Keep moisture out of the herb or spice container by placing the measured amount in a small bowl to add to the preparation instead of measuring or sprinkling over a steaming pot. Use a dry spoon to measure.

Most people keep seasonings too long for best quality. To determine a flavoring's quality, crush or rub a small amount in your hand to see if it smells strong and flavorful.

Generally, keep herbs and ground spices about a year or less. Keep whole spices up to two years or less. Write the date on the seasoning container when you bring it home from the store.

## Preserving Herbs

Fresh herbs are easy to preserve for future flavor. For short-term use, within a week, store in a glass with a small amount of water in the refrigerator. Cover loosely with a plastic bag.

Freeze herbs sprinkled loosely on a cookie sheet. Once frozen, repackage in airtight rigid containers to store in the freezer.

Herbs can also be frozen in water in ice cube trays, to be used in soups or stews. Frozen herbs will be limp and should be used in cooked dishes.

Herbs can be dried in the oven or a dehydrator. Spread a thin layer on a cookie sheet and heat in a warm oven up to 180 degrees. Leave the door partly open and stir frequently. Remove when thoroughly dry and package in airtight containers.

## Healthier Seasonings

**Reduce Sugar** – Eating 100 fewer calories than needed a day can lead to a 10-pound weight loss in a year. Adding spices such as allspice, anise, cardamom, or cinnamon will add flavor and allow you to reduce the amount of sugar in some preparations. (**Note:** Sugar also plays a part in browning, tenderness, and leavening of some baked products, so the finished product may be different in taste and appearance. Experiment with gradual changes.) Try sweetening oatmeal, sweet potatoes, or squash with a mixture of cinnamon and sugar.

**Reduce Salt/Sodium** – Replace salt in savory preparations with black pepper, garlic powder, curry powder, cumin, dill seeds, basil, ginger, coriander, or onion powder. Be sure to check the ingredient label of seasoning mixes to ensure that salt is not the first ingredient. To reduce sodium, buy powdered garlic or onion instead of garlic salt or onion salt.

**Reduce Fat** – Eating lower-fat preparations can reduce calories and decrease the risks of heart disease and some cancers. Using herbs and spices for flavoring — instead of breading, batters, gravies, or sauces — is a healthier preparation method. Grilling foods seasoned with herbs and spices, instead of frying, is another way to reduce fat.

## Antioxidants

Studies show that many popular herbs and spices are sources of natural antioxidants, the compounds that play an important role in neutralizing free radicals and reducing cancer risk.

Some herbs have more antioxidant power per gram than many fruits and vegetables; however, people usually don't eat them in the same quantities as fruits and vegetables. Those with the highest antioxidant activity are oregano, sweet marjoram, rose geranium, sweet bay, dill, thyme, rosemary, and sage. Combine these herbs with a healthy diet that includes fruits and vegetables for increased antioxidant properties.

While some benefits of common herbs and spices are based in history and folklore, they are being researched for health properties today. The most promising research shows the following results:

- Cinnamon has one of the highest antioxidant levels of any spice — as much in 1 teaspoon as in a cup of pomegranate juice or a half cup of blueberries. Also, components in cinnamon can act like insulin in the body and may help regulate blood sugar levels.
- Hot or cayenne pepper has potential to suppress certain cancer cells.

- Sage may protect brain cells and help preserve memory and thinking.
- Studies have shown turmeric may be useful in treating Alzheimer's disease, cancer, and cystic fibrosis.
- Cloves can help ease a toothache and have been used for years to sweeten bad breath.
- Rosemary may help reduce headaches and prevent damage that could lead to strokes and Alzheimer's disease.

Remember to follow good eating guidelines based on the Dietary Guidelines for Americans. Talk with your physician before basing nutrition and health decisions on yet-to-be-proven information.

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In each case, credit Jan Stephens, *Seasoning with Herbs and Spices, Fact Sheet*, Kansas State University, July 2010.

**Kansas State University Agricultural Experiment Station and Cooperative Extension Service**

MF2920

July 2010

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