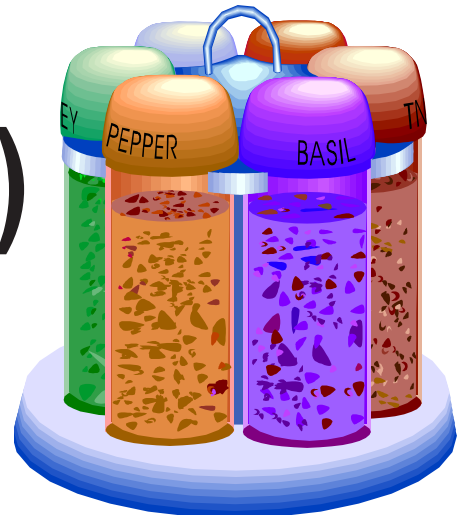


Add a Little SPICE (& HERBS) to Your Life!



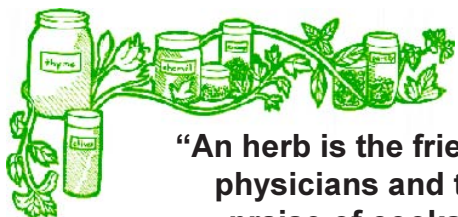
Alice Henneman, MS, RD, Extension Educator
NU Cooperative Extension in Lancaster County
(402) 441-7180 • lancaster.unl.edu/food
ahenneman1@unl.edu

Spices and herbs have been used in foods for centuries. Archeologists estimate that by 50,000 B.C. primitive man had discovered that parts of certain aromatic plants help make food taste better, according to the American Spice Trade Association (ASTA).

Spices were once so costly only the wealthy could afford them. In 11th Century Europe, many towns paid their taxes and rents in pepper. The reason for Columbus' voyage in 1492 was to seek a more direct passage to the rich spices of the Orient.

What's the difference between a spice and an herb? Here are definitions of various seasonings from Ann A. Hertzler, PhD, RD, "Herbs and Spices," Virginia Cooperative Extension:

- **Herbs** are leaves of low-growing shrubs. Examples are parsley, chives, marjoram, thyme, basil, caraway, dill, oregano, rosemary, savory, sage and celery leaves. These can be used fresh or dried. Dried forms may be whole, crushed, or ground.
- **Spices** come from the bark (cinnamon), root (ginger, onion, garlic), buds (cloves, saffron), seeds (yellow mustard, poppy, sesame), berry (black pepper), or the fruit (allspice, paprika) of tropical plants and trees.
- Many **dehydrated vegetable seasonings** are available. These include onion, garlic ... and shallots.
- **Seasoning blends** are mixtures of **spices** and **herbs**.



**"An herb is the friend of
physicians and the
praise of cooks."
— Charlemagne**

Fat, Sugar And Salt Reduction Tips



Spices and herbs can help retain flavor in your foods while cutting back on dietary fat, sugar and sodium/salt.

Reducing Fat. "... removing a tablespoon of fat removes about 10 grams of fat and 100 calories — *an amount which could represent a 10 pound weight loss in a year.* The calories in herbs and spices are far less than in breadings, batters, gravies, sauces and fried foods," according to Hertzler.

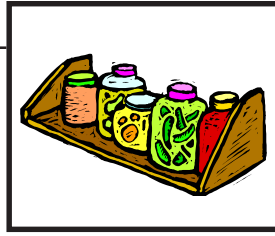
Reducing Sugar. Reduce or eliminate sugar by using these sweet-tasting spices recommended by Hertzler:

- Allspice
- Anise
- Cardamom
- Cinnamon
- Cloves
- Ginger
- Mace
- Nutmeg

Reducing Salt. Here are some tips when using spices and herbs to help you reduce the salt in foods:

- Savory flavors, and flavors with "bite," such as black pepper, garlic powder, curry powder, cumin, dill seeds, basil, ginger, coriander and onion, are the most effective in replacing the taste of salt, according to ASTA.
- Omit the salt when cooking pasta and flavor with basil, oregano, parsley and pepper or use an Italian seasoning blend.
- Use *powdered* garlic and onion rather than their *salt* form. Use half as much of the powdered form.
- Check labels to see if "salt" or "sodium" are listed among the ingredients.

Flavor And Food Combinations



The following flavor and food combinations, adapted from information provided by the National Heart, Lung and Blood Institute (www.nhlbi.nih.gov), have the added benefit of making meat, poultry, fish and vegetables tasty without adding salt.

For **meat, poultry and fish**, try one or more of these combinations:

- **Beef:** Bay leaf, marjoram, nutmeg, onion, pepper, sage, thyme
- **Lamb:** Curry powder, garlic, rosemary, mint
- **Pork:** Garlic, onion, sage, pepper, oregano
- **Veal:** Bay leaf, curry powder, ginger, marjoram, oregano
- **Chicken:** Ginger, marjoram, oregano, paprika, poultry seasoning, rosemary, sage, tarragon, thyme
- **Fish:** Curry powder, dill, dry mustard, marjoram, paprika, pepper

For **vegetables**, experiment with one or more of these combinations:

- **Carrots:** Cinnamon, cloves, dill, ginger, marjoram, nutmeg, rosemary, sage
- **Corn:** Cumin, curry powder, onion, paprika, parsley
- **Green Beans:** Dill, curry powder, marjoram, oregano, tarragon, thyme
- **Greens:** Onion, pepper
- **Potatoes:** Dill, garlic, onion, paprika, parsley, sage
- **Summer Squash:** Cloves, curry powder, marjoram, nutmeg, rosemary, sage
- **Winter Squash:** Cinnamon, ginger, nutmeg, onion
- **Tomatoes:** Basil, bay leaf, dill, marjoram, onion, oregano, parsley, pepper

The flavor of certain spices and herbs has been associated with different cultures, for example:

- Oregano with Italian cooking
- Cilantro with Mexican cooking
- Ginger with Chinese cooking
- Marjoram with French cooking



“Pepper is small in quantity and great in virtue.”
— Plato

Common Substitutions



When you don't have a spice or herb blend called for in your recipe, try these combinations of spices and herbs as a substitution:

For each 1 teaspoon of **apple pie spice**, substitute a *combination* of:

- 1 teaspoon cinnamon
- 1/8 teaspoon nutmeg

For each 1 teaspoon of **pumpkin pie spice**, substitute a *combination* of these **ground spices**:

- 1 teaspoon cinnamon
- 1/4 teaspoon ginger
- 1/8 teaspoon nutmeg
- 1/8 teaspoon allspice

For each 1-1/2 teaspoon of **Italian seasoning**, substitute a *combination* of:

- 1/4 teaspoon *each* of crumbled dried ...
 - oregano leaves
 - marjoram leaves
 - basil leaves
- 1/8 teaspoon rubbed sage

For each 1 teaspoon of **poultry seasoning**, substitute a *combination* of:

- 3/4 teaspoon ground sage
- 1/4 teaspoon ground thyme

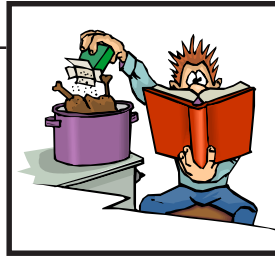
When substituting, you'll often be more successful substituting fresh herbs for dried herbs, rather than the other way around. For example, think potato salad with fresh vs. dried parsley!

FASCINATING FLAVOR FACT



The reason for Columbus' voyage in 1492 was to seek a more direct passage to the rich spices of the Orient.

General Rules for Amounts



If possible, start with a tested recipe from a reliable source.

If you're creating your own recipe, begin with trying one or two spices or herbs. The amount to add varies with the type of spice or herb, type of recipe and personal preference.

Substituting Equivalent Amounts of Different Forms.

What if your recipe calls for fresh herbs and all you have are dried? Here are some approximate amounts of different forms of herbs equivalent to each other:

- 1 tablespoon finely cut fresh herbs
- 1 teaspoon crumbled dried herbs
- 1/4 to 1/2 teaspoon ground dried herbs

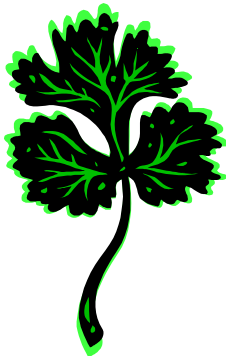
General Rules for Amounts. If you don't know how much of a spice or herb to use, follow these recommendations from SpiceAdvice® at <http://spiceadvice.com> — *remember to use more herbs if using a fresh or crumbled dried form:*

- Begin with 1/4 teaspoon of most ground spices or ground dried herbs for these amounts and adjust as needed:
 - 4 servings;
 - 1 pound of meat;
 - 1 pint (2 cups of soup or sauce).
- Start with 1/8 teaspoon for cayenne pepper and garlic powder; adjust as needed.
- Red pepper intensifies in flavor during cooking; add in small increments.

Doubling a Recipe. When doubling a recipe:

- 1) DO NOT double spices and herbs.
- 2) Increase amounts by 1-1/2 times.
- 3) Taste, add more if needed.

FASCINATING FLAVOR FACT



“Cilantro” refers to the leaf of the coriander plant while “coriander” refers to a spice made from the seed of the same plant. “Cilantro” and “coriander” are not interchangeable in recipes.

When to Add Spices & Herbs



The type of herb and the type of food for which it is used influence the time to add it during food preparation:

Adding FRESH herbs during cooking. As a general rule, add fresh herbs near the end of the cooking time or just before serving as prolonged heating can cause flavor and aroma losses.

- Add the more delicate fresh herbs — basil, chives, cilantro, dill leaves, parsley, marjoram and mint — a minute or two before the end of cooking or sprinkle them on the food before it's served.
- The less delicate fresh herbs, such as dill seeds, oregano, rosemary, tarragon and thyme, can be added about the last 20 minutes of cooking.
- For some foods, such as breads, batters, etc., you'll need to add fresh herbs at the beginning of the cooking process.

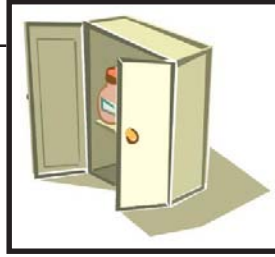
Adding DRIED herbs and spices during cooking.

Follow these tips and techniques for best taste when adding dried spices and herbs during cooking.

- **Whole** dried spices and herbs (such as whole allspice and bay leaves):
 - Release their flavors slower than crumbled or ground ones.
 - Are ideal for dishes cooking an hour or more, such as soups and stews.
- **Ground** dried spices and herbs:
 - Release their flavor quickly.
 - May taste best in shorter-cooker recipes or added nearer the end of longer-cooking ones.
- **Crumbled** dried herbs may differ:
 - Milder herbs (such as basil) may flavor best added toward the end of cooking.
 - More robust herbs (such as thyme) can stand longer cooking periods.
- Freshly grinding spices (such as black pepper and nutmeg) provides more flavor than buying them already ground. This also applies to using them in uncooked foods.
- Secure whole spices, such as cloves, in a tea ball for easy removal at the end of cooking.
- Warning: Remove bay leaves at the end of cooking. They can be a choking hazard if left in foods and can cause harmful cuts and scratches in your throat and esophagus.

UNCOOKED foods. For uncooked foods, add both fresh and dried spices and herbs several hours before serving to allow flavors to blend.

Storing Spices And Herbs



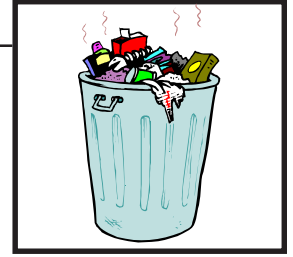
Use the following guidelines for storing your spices and herbs to maintain maximum quality. To prevent flavor and color loss, avoid moisture, light, heat and air.

- Store in tightly covered containers.
- Store in a dark place away from sunlight, such as inside a cupboard or drawer.
- Avoid storage above the dishwasher, microwave, stove or refrigerator, or near a sink or heating vent.
- If storing in an open spice rack, store in a site away from heat, light and moisture.
- Avoid sprinkling dried spices and herbs directly from container into a steaming pot to prevent moisture from entering the container.
- Use a dry spoon to measure spices and herbs from a container.
- Keep these points in mind regarding refrigerator/freezer storage:
 - Refrigerate paprika, chili powder and red pepper for best color retention, especially in summer or hotter climates.
 - Spices and herbs can get wet if condensation forms when a cold container from a refrigerator or freezer is left open in a humid kitchen.



“Spice a dish with love and it pleases every palate.”
—Plautus

How Long To Keep Spices And Herbs



Here are some guidelines to help you determine when it’s time to toss your spices and herbs.

- As general rule, keep:
 - 1 year for herbs or ground spices.
 - 2 years for whole spices.
- Buy a smaller container until you determine how fast you’ll use a particular spice or herb.
- If a spice or herb smells strong and flavorful, it’s probably still potent.
 - Check an herb or a ground spice by rubbing a small amount in your hand. If the aroma is fresh, rich and immediate, it can still flavor foods.
 - Check a whole spice — such as a clove or cinnamon stick — by breaking, crushing or scraping it before smelling it.
 - Avoid smelling pepper or chili powder as they can irritate your nose.
- Initial quality will influence shelf life.
- Label date of purchase on container with a permanent marking pen.

FOR MORE INFORMATION

Check the following Web sites for more information and recipes using spices and herbs.

American Spice Trade Association, www.astaspice.org

SpiceAdvice, www.spiceadvice.com

Penzeys Spices, www.penzeys.com

McCormick, www.mccormick.com

No endorsement of products is intended nor is criticism implied of products not mentioned.