

Savor the Flavor: Seasoning with Spices

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Making foods flavorful is just one of the many benefits of using spices in the kitchen. Adding salt to a dish can be the first thing that comes to mind to add flavor when something is bland, but using spices during cooking may be a more healthful choice.

Spices come from seeds, fruit, roots, bark or other substances from a plant. There are a wide variety of different spices to compliment any recipe. Spices not only add flavor to food, but they can also add vibrancy and color, making the dish look more appetizing. Storing spices in a cool, dry place out of sunlight is ideal for preserving flavor.

Whole versus Ground

Some spices are commonly found in the whole form, like ginger root and cinnamon sticks. However, the majority of spices are found in the ground form as a convenience to the individual purchasing them. Once ground, spices tend to



gradually lose their flavor over time. Freshly ground provides the most abundant flavor, but may require specific kitchen equipment or tools. Keep in mind that whole spices take longer to add flavor to a dish, while ground spices add flavor much quicker. Neither whole nor ground are better than the other and it is personal preference which should be used.

Common Spices

Spices such as cinnamon, coriander, cumin, ginger, nutmeg, paprika, and turmeric are found in most grocery stores. Many of these spices originated in a certain location, but now they are used around the world in a variety of dishes. They provide us a way to explore new flavors in our own kitchen. Experimenting with these spices can be a fun way to make old recipes new again.

Cinnamon

Cinnamon is a very strong smelling spice that is taken from the bark of a tree that grows in tropical regions. It is found in both the whole and ground form. It is one of the oldest spices on record. In ancient cultures, it was used as a preservative, in perfumes, and as common spice for cooking meat. It is now most commonly used in breads and desserts because of its sweet taste and delicious smell. Many people do not realize it can be so versatile. For example cinnamon can be used to add sweetness to foods like oatmeal and cooked fruit and even boldness to chili and soups.

Coriander

Coriander is found in both the whole and ground form. Coriander seeds are actually the seeds from the cilantro plant, but has a very different taste. The flavor of coriander hints at sweet with a slight warmth similar to mint. Coriander is commonly used in Indian cuisine and used as a pickling spice. It may also be used to season meats and vegetables.

Cumin

Cumin is a widely used household spice, commonly known for use in chili and taco seasonings (see recipe below). It is also a staple spice in Indian, Middle Eastern, Mexican, Portuguese and Spanish cuisine. It is a savory spice and can be used in a variety of dishes such as soups, stews, rice, bean, lamb, steak and chicken recipes. When too much is used, it can easily overpower other spices.

Ginger

Ginger lends a sweet flavor that ends with a refreshing, warm, and spicy note. Ginger can be found in both the fresh and dried form. Ginger root is the fresh form known as a "hand" because of its knobby appearance. Ginger root should be peeled before use. Dried, ground ginger is a yellow powder that tends to be less sweet than the fresh form. Typically, people associate ginger with Asian cuisine, but it can be used in a variety of other dishes to add depth and boldness. Ginger pairs well with sweet vegetables like carrots and sweet potatoes, duck, chicken, beef, and pastries and pies.

Nutmeg

Nutmeg comes from a seed of the nutmeg tree and has a very similar aroma and taste as cinnamon. It can be used for making desserts as well as savory dishes. It is common for nutmeg and cinnamon to be used together to add the perception of sweetness to foods, like pumpkin pie. Nutmeg has a strong flavor, so little is needed to make a big difference. It is recommended to grate whole nutmeg right before use, because the flavor can be lost rapidly.

Paprika

Paprika may be one of the most versatile spices available. With its spicy, smoky flavor and vibrant red color, it is a great addition to any recipe for taste and appearance. It is used around the world and can be found in a wide variety of dishes including soups, seafood, meat, egg dishes, and pasta. In addition to its variety of uses, paprika is unique in that it can



be used as a garnish to add a pop of color to a neutral-colored dish.

Turmeric

Turmeric gives food a bright, bold yellow color. Turmeric provides an earthy, mild, and woodsy flavor and is most commonly found in the dried, ground form. Turmeric is the main ingredient in curry powder. It has been suggested that curcumin, the compound in turmeric that gives it color, has positive health effects.. However, strong studies in humans are lacking to support this claim.

Garlic: The Ultimate Flavoring Agent

Garlic is one of the most common ingredients used around the world and has been in use since 3000 BCE. Garlic is a relative of the onion and is treated like both a spice and a vegetable to add a robust aroma and flavor. A head of fresh garlic is made of several smaller segments called cloves, which may be minced, crushed, or used whole after they have been peeled. Typically, garlic is not eaten by itself but added at the beginning of the cooking process to build flavor.

Common Powders

Chili, garlic, and onion powders are commonly found in the spice aisle at the grocery store, although they are not considered spices. These powders serve many purposes and can serve as healthy seasoning alternatives. Garlic and onions are simply dried and ground to produce powders. On the other hand, chili powder is a spice blend with the main ingredient being dried and ground chili peppers.

Benefits of Using Spices in Cooking

Using spices to add flavor while cooking is considered a healthful choice because they have very few calories (3-10 calories per teaspoon) and can take the place of added salt, sugar, and fat depending on the food. Human studies are beginning to show that spices may have anti-inflammatory effects and also protect against the development of diabetes and heart disease. However, there is limited research to suggest how much or how regularly you need to consume spices to receive protective health benefits. Using spices to season healthy, nutrient-dense foods is a great way to improve overall diet quality and work toward or maintain a healthy body weight.

Many spices can be found in supplement form, but they are not regulated and research is limited whether they achieve the marketed health claims.



Homemade Taco Seasoning Mix

Yield: 1 cup, 8 servings

Serving Size: 2 tablespoons (equal to one store-bought packet)

Ingredients:

- ¹/₂ cup chili powder
- ¹/₄ cup onion powder
- 2 tablespoons ground cumin
- 2 tablespoons garlic powder
- 1 tablespoon paprika
- 2 tablespoons salt
- 1 tablespoon black pepper

Directions:

• Blend until spices are well incorporated. Store in an air-tight container.

Source: Mississippi State Extension Service

Resources

- Nakatani, N. (2000). Phenolic antioxidants from herbs and spices. Biofactors, 13(1-4), 141-146.
- National Center for Complementary and Integrative Health. (2018). Turmeric. Retrieved 5 February 2019, from https://nccih.nih.gov/.

Tapsell, L. C., Hemphill, I.,
Cobiac, L., Sullivan, D. R.,
Fenech, M., Patch, C. S., ...
& Fazio, V. A. (2006). Health
benefits of herbs and spices:
the past, the present, the
future.

- Opara, E., & Chohan, M. (2014). Culinary herbs and spices: their bioactive properties, the contribution of polyphenols and the challenges in deducing their true health benefits. International journal of molecular sciences, 15(10), 19183-19202.
- Sara, L., Hause, A., & Martel, P. (2015). On cooking: A textbook of culinary fundamentals. Nueva Jersey: Pearson Education.
- Lu, M., Cao, Y., Xiao, J., Song, M., & Ho, C. T. (2018). Molecular mechanisms of the anti-obesity effect of bioactive ingredients in common spices: a review. Food & function, 9(9), 4569-4581.
- Tsui, P. F., Lin, C. S., Ho, L. J., & Lai, J. H. (2018). Spices and Atherosclerosis. Nutrients, 10(11), 1724.

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