
**Pearls of Wisdom
About Cinnamon**

- *A high source of Antioxidants*
- *Has Anti-Inflammatory properties*
- *Buy and use organic spices when possible*
- *Use your spices within one year of purchase, then replace with fresh.*
- *Limit ground cinnamon intake to 1-2 tsp per day.*
- *Store ground cinnamon in the refrigerator, tightly covered, to reduce evaporation of essential oils.*
- *When feasible, buy cinnamon sticks and grind with a hand mill before use to create cinnamon powder.*
- *Store cinnamon sticks in a tightly closed jar, in a dark cool place.*
- *Ceylon cinnamon is thought to have more health benefits*
- *Cinnamon is a natural food preservative! This is due to its antibacterial properties.*
- *ORAC values: The “oxygen radical absorbance capacity”, a system developed by the National Institutes of Health, measures the antioxidant capacity of foods. The higher the number assigned to a food, the better!*

*Per 100 grams, **cloves** has the highest ORAC value of any food, and **cinnamon** has the third highest ORAC value! So, even in very small amounts, ½ tsp per day, there can be measurable health benefits.*

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The Wonders of Winter Warming Spice: Cinnamon

Spices of all kinds are amazingly high in antioxidants, those compounds that help mop up the cellular damage caused by free radicals, countering the damaging effects of oxidation in the body. Luckily, we can get loads of antioxidants in our foods, by eating lots of vegetables and fruits...and eating spices and herbs! Scientific research has identified that spices—even more than herbs, fruits, and vegetables—contain potent nutrients for health. Studies of dietary patterns from around the world have shown that populations that consume more spices have the lowest incidence of chronic diseases, such as cancer, heart disease, diabetes, and Alzheimer’s.

For thousands of years, spices have been used for culinary purposes, but also for medicinal uses. Today it is widely believed that use of spices in cooking and food preparation does not provide any potential harm in regards to drug interactions. This is largely due to dosing, realizing that cooking with spices provides a much lower intake than if taking a concentrated form as a supplement. However, if you choose to take concentrated amounts of any spice as a dietary supplement, you should use caution and be aware that there may be a food-drug interaction that can impact your health. Cinnamon extract supplements when taken alongside antidiabetes drugs may have an additive effect and lower blood glucose levels. If taking drugs that have risk of liver damage (such as acarbose, atorvastatin, fluvastatin, gemfibrozil, niacin, tamoxifen, pravastatin), cinnamon extract supplements may increase the risk of liver damage. Ask for advice from your medical provider, nutritionist, or pharmacist. To paraphrase the 16th-century physician Paracelsus, it may be a case of “the dose makes the poison.” But for nearly everyone, using spices as a culinary ingredient is safe...and delicious!

The spices so common and beloved in the fall are often considered warming spices, which makes sense as the weather turns colder. We find spices like cinnamon, ginger, cloves, and nutmeg comforting and they are often associated with winter holiday meals. Spices can be used in so many ways, and provide flavor, intensity and depth of character to a recipe, while often substituting for sugar! The more spices used, the less sugar you need for a good-tasting product.

Cinnamon Facts

Cinnamon has been harvested from the inner bark of trees called *Cinnamomum trees* for thousands of years. The use of cinnamon dates back as far as 4,000 years ago to Ancient Egypt. Cinnamon was considered a very valuable and rare spice at this time, frequently being sold at very high costs and given to royalty as gifts or signs of devotion. Today, cinnamon as we know it is made by cutting the stems of the cinnamomum tree and removing the inner bark, which curls up into cinnamon sticks. These sticks are then ground to make powdery cinnamon spice which is sold and used across the world.

There are two main types of cinnamon spice used today: Ceylon cinnamon (labeled as true cinnamon, and native only to Sri Lanka) and Cassia cinnamon which is more widely available and used. Both varieties have a notable spicy taste, fragrance and health benefits, but ceylon is actually considered to be superior for therapeutic use.

Using Cinnamon in your Diet...

Get creative!!

- in a smoothie
- cooked with apples or pears
- baked in quick breads
- in curries, stews, and with masala powder in casseroles
- in marinates for meat or poultry
- in your breakfast oatmeal
- in chai tea and cocoa
- with baked apples
 - in trail mix
- coating for spiced nuts
- topping for fruit crisp
 - on French toast

In order to keep the fragrance and flavor intact, cinnamon is generally powdered just before preparing dishes and added at the last moment in the recipe, since prolonged cooking results in evaporation of its essential oils.

Around the world, cinnamon is widely used as a spice, often as a flavoring base and condiment. It is a great flavor addition to chocolate, nearly all fruits, tea, cocoa, liquors, and of course in many types of baked goods (use these in moderation!)

Cinnamon plays a role in many ethnic cuisines. It is predominant in Asian and Chinese dishes, often combined with other spices, like Chinese 5-Spice. Some Indian vegetarian and chicken curries, and rice dishes (biriyani) contain cinnamon. In the Middle East, it is used in meat and rice dishes.

Cinnamon is also used in soups, stews, barbeque sauces, pickling, and as an ingredient in curry powders.

Grown from two varieties of trees, the ceylon cinnamon is more rare and costly. It has a thinner and more brittle bark than cassia cinnamon, and is a lighter brown color. Researchers think that ceylon cinnamon actually has potential for having more health benefits than cassia cinnamon. Ceylon cinnamon contains less of a compound called coumarins than cassia cinnamon. Coumarins are believed to be potentially damaging to the liver when you consume large doses. Therefore researchers think that ceylon cinnamon is the better option for producing cinnamon extracts that feature high doses of cinnamon (taken as dietary supplements).

Health Benefits of Cinnamon

A little bit of cinnamon goes a long way, and its antioxidant properties are what makes it especially beneficial to include in your diet. As little as 1/2 teaspoon of cinnamon daily can have positive effects on blood sugar levels, digestion, immunity, and more. However stronger doses are also extremely beneficial for improving heart disease risk and cutting your risk for diabetes, cancer, and neuro-degenerative diseases.

The antioxidants in cinnamon have anti-inflammatory effects, which may help lower the risk of heart disease, cancer, brain function decline, and more. Researchers have identified over seven kinds of flavonoid compounds alone in cinnamon which are highly effective at fighting dangerous inflammation levels throughout the body. Because cinnamon reduces swelling and inflammation, it can be beneficial in pain management.

Cinnamon plays a role in protecting your heart by reducing some of the risk factors associated with cardiovascular disease: lowering blood pressure, reducing cholesterol, LDL and triglycerides, and increasing blood circulation. This spice has a distinctive anti-diabetic effect, lowering blood sugar levels, and increasing the cell's sensitivity to insulin. Cinnamon blocks an enzyme which results in less blood sugar entering the blood stream after a high-carb/sugar meal.

Cinnamon's antioxidant properties help defend the brain against developing neurological disorders (like Parkinson's and Alzheimer's diseases) by activating neuro-protective proteins that protect brain cells from mutation and damage.

Cinnamon may reduce the risk of developing cancer. Because of its antioxidant abilities, cinnamon can protect against DNA damage, cell mutation, and cancerous tumor growth. This is especially true in the colon; studies show that cinnamon can reduce the risk of colon cancer. Cinnamon is now being investigated as a natural anti-cancer agent because of its strong antioxidant abilities.

Cinnamon fights infections and viruses as a natural anti-microbial, anti-biotic, anti-fungal, and anti-viral agent. The immune-boosting abilities of cinnamon are found in cinnamon's essential oils.

Cinnamon is valuable in oral health. The extracts found in cinnamon were shown to be protective against bacteria living in the oral microflora that could cause bad breath, tooth decay, cavities, or mouth infections.

Cinnamon has powerful anti-fungal properties, and may be effective in stopping or curing Candida overgrowth in the digestive tract. It also benefits skin health, protecting against irritations, rashes, allergic reactions, and infections. Cinnamon essential oil and honey are often combined to boost skin health, and are beneficial for acne, rosacea, and allergies manifested on the skin. Cinnamon helps fight allergies by reducing inflammation and histamine reactions in the body.

Cinnamon Essential Oil

If you're using cinnamon essential oil, you should test a small amount on your skin to first check for irritation and allergic reactions before using larger amounts.