

Hot or Sweet, Peppers Pack Plenty of Nutrition

The Folklore: A popular legend from the Ozarks says that for peppers to grow hearty and flavorful, you must be very angry when planting them. The best peppers are said to be those planted by a lunatic. Mexican tradition says the fiery potency of chilies can banish bad luck and the evil eye.

The Facts: Peppers are really fruits eaten as vegetables. They belong to the *Capsicum* family, and should not be confused with black pepper, the spice. That's the seed of a completely different plant, *Piper nigrum*. Peppers are neatly divided into two camps by their fiery potential—or lack of it. On one side are sweet bell peppers; on the other are red-hot chilies. The latter vary in temperature ratings from mildly hot ancho peppers and jalapenos to set-the-mouth-aflame habaneros.

Peppers come in a range of colors, from familiar green—actually just unripe red peppers—to yellow, orange, purple, brown and black. When you can, opt for red. Here's why. All peppers are excellent sources of vitamin C—one medium green pepper contributes nearly twice the Daily Value—but a red or yellow pepper provides a whopping three to four times the DV. Red peppers also boast nearly twice the Daily Value for vitamin A—much more than green or yellow. All peppers provide fiber, potassium, folate and vitamin B6.

The Findings: Peppers are rich in a family of phytonutrients called capsaicinoids. Capsiate is the capsaicinoid found in sweet peppers. A recent Spanish animal study involving capsiate demonstrated anti-inflammatory and anti-tumor activity. The study, from the University of Cordoba, found that a synthetic version of the capsaicinoids in sweet peppers possesses powerful cancer-fighting activity.

Capsaicin, the fiery capsaicinoid in hot peppers, has gained even more respect medicinally. Researchers have discovered that capsaicin directly stimu-

lates pain-sensitive neurons in the mouth and skin via specific protein receptors (the same protein sensors that heat stimulates, which is why chili peppers taste hot). Capsaicin desensitizes peripheral nerve endings, explaining its effectiveness as a topical analgesic in over-the-counter creams and ointments.

Research suggests capsaicin may also work as a blood thinner. Preliminary studies in animals suggest capsaicin may induce "cell suicide" in cancer cells. And some say it is useful as a weight-loss aid, perhaps by boosting metabolism or by suppressing appetite. But this has yet to be proved.

The Finer Points: Select firm peppers with glossy, unwrinkled skin (most peppers are waxed to increase shelf life). Store in the refrigerator crisper drawer or a plastic bag; use within five days.

When cutting chili peppers, take care not to let the seeds or inside membranes come into contact with your skin or eyes. That's the capsaicin-rich part of the plant that burns. Disposable gloves are a good idea when handling hot peppers, particularly if you have sensitive skin.

Here's a handy tip: If your mouth is on fire when eating hot peppers, don't drink water to cool it off; that merely spreads the pain around your mouth because capsaicin is only slightly water-soluble. Instead, drink milk or eat yogurt, rice or bread to douse the fire.

Roasted Sweet Peppers

Freshly roasted peppers add flavor to sandwiches and salads or can be pureed for a dip or as a sauce for pasta or grilled fish or chicken. Once roasted, store wrapped in the refrigerator for up to three days.

To grill (or oven roast): Place washed bell pepper halves skin side down on a hot grill (or cut side down in a lightly oiled baking dish). Grill on "high" about three to four minutes on each side until slightly charred (or roast at 400° F for about 25 minutes). For use in purees, peel skin.

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- A glass of grape juice every day may help reduce blood pressure, according to new research. In the study, funded by Welch Foods Inc., 80 men with high blood pressure drank either 12 ounces of grape juice per day or the same amount of a taste-alike placebo beverage. After 12 weeks, the men who drank grape juice showed a significant drop of six points in both systolic (top number) and diastolic (bottom number) blood pressure compared to the men who drank the placebo. Previous research suggests grape juice improves arterial wall flexibility.

Presented at the *Experimental Biology* meeting, San Diego, April 14, 2003.

- Adding milk to tea may help bind the oxalates in tea that can contribute to kidney stones, according to a study from New Zealand. Ten healthy participants drank six cups of black tea a day, first without milk and then with milk (almost one ounce). Adding milk to the tea significantly reduced the output of oxalate in the urine compared to drinking the tea straight. The oxalates in tea are thought to bind with the calcium in milk, allowing it to pass unabsorbed through the body.

European Journal of Clinical Nutrition, March 2003.

- Very large doses of vitamin D taken once every four months may prevent fractures due to osteoporosis, even without supplemental calcium. Every 120 days, for five years, British researchers gave nearly 2,700 older men and women either a placebo or 100,000 International Units (IU) of vitamin D (about the equivalent of getting 800 IU each day for all 120 days—the amount experts recommend). Those in the vitamin D group had 22% fewer total fractures and 33% fewer fractures at major osteoporotic sites (hip, wrist, forearm, vertebrae) despite getting less calcium than is recommended.

British Medical Journal, March 1, 2003.

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