EN on Foods

What's Up Doc? Getting to the Root of Carrots

The Folklore: What's up? A surprising history for pedestrian carrots. This somewhat phallic root was considered an aphrodisiac in ancient Greek and Roman times and later prescribed for sexual and other maladies in the Middle Ages. Native to what is present-day Afghanistan, carrots' original color was purple! It wasn't until the 17th century that orange carrots were developed by the Dutch to honor their national color.

The Facts: This root vegetable (Daucus carota) is a relative of parsley, dill, celery and fennel (feathery tops are their common feature). Available year-round, carrots can be very short or very long (up to three feet!), thin or fat, tapered or cylindrical, even round.

"Baby" carrots sold in bags usually are not young carrots as you may think, but rather are machine-cut and peeled from larger—and less tasty—carrots. True baby carrots are cultivars that develop full flavor and color when young. The Betasweet carrot (maroon with orange inside) was cultivated to contain 50% more beta-carotene than ordinary carrots, which are already a top source of this phytonutrient.

Carotene, vitamin A's precursor and the antioxidant pigment that provides the orange color, was named after carrots, in which it was first identified. A 7½-inch carrot contains nearly twice the Daily Value for vitamin A (8,666 I.U.) plus potassium (230 milligrams) and fiber (2.2 grams), all for 30 calories.

There is some disagreement as to how much beta-carotene is available to the body from a raw carrot, but it's still worth eating. However, there's no doubt cooked carrots provide plenty. Cooking increases vitamin A content, because beta-carotene is released when heat breaks down cell walls. Purple carrots contain another class of antioxidant pigments called anthocyanins.

The Findings: Numerous studies have shown that diets high in fruits and vegetables, including carotenoid-rich foods, protect against some cancers. In a French study of over 1,500 nonsmokers, those eating the most carrots had 20% less risk of developing lung cancer than those eating the fewest carrots. And in a Harvard study of women smokers, those who ate five or more carrots a week reduced their risk of lung cancer by 60% over 16 years, compared with women who never ate carrots.

The Finer Points: Choose vibrantly colored carrots (the more orange, the more beta-carotene) that are well-shaped, smooth, firm (not rubbery) and free of cracks, splits, mold and decay. If the green tops are present, trim them to prevent moisture from being drawn out of the carrots, which causes withering; reilege in a plastic bag. Don't store carrots with apples, pears or other fruits that produce ethylene or they may become bitter. Nutritional value will keep for several weeks, but carrots are most tasty when eaten within two weeks.

Peel carrots to reduce pesticide residues. Organic carrots don't need peeling, but should be scrubbed under running water to remove surface bacteria.

Royal Carrot Soup
3 cups low-sodium vegetable broth
2 cups orange juice
1 lb. carrots (6-8 medium), peeled and coarsely chopped
1 onion (medium), coarsely chopped
¾ tsp ground cumin
½ tsp ground cinnamon
1 cup plain low-fat yogurt

In large saucepan, combine broth, juice, carrots, onion and spices. Simmer 25 minutes or until carrots are tender. Puree in blender or food processor. Return to saucepan; reheat. Stir in yogurt and serve.

Makes eight 1-cup servings.

Nutrition Information Per Serving:
111 calories, 2 grams fat, 2 milligrams cholesterol, 3 grams fiber, 21 milligrams vitamin C, 60,662 I.U. beta-carotene.

Source: Produce Marketing Association.

Research Roundup

- Walking may reduce the risk of death in people with type 2 diabetes, according to research from the Centers for Disease Control and Prevention in Atlanta. In the study, researchers followed nearly 3,000 adults diagnosed with type 2 diabetes. Lifestyle habits were obtained from a national health survey. After eight years, participants who walked at least two hours per week had 39% less risk of dying than inactive participants.

Archives of Internal Medicine, June 23, 2003.

- Omega-3 fatty acids may help protect against Alzheimer's disease, according to data from the Chicago Health and Aging Project, which followed 815 older adults for about four years. Those who reported eating just one fish meal a week—a source of omega-3 fatty acids—were 60% less likely to develop Alzheimer's disease than those who rarely or never ate fish. And those who consumed the most total omega-3's (fish, vegetable oils and nuts combined) had 70% less risk. DHA (docosahexaenoic acid), one of the omega-3 fats found in fish or formed from other omega-3's, is a primary constituent of brain cell membranes. It may protect against Alzheimer's disease by aiding nerve conduction and the release of neurotransmitters, the researchers say.

Archives of Neurology, July 2003.

- Fruits and vegetables may help lower the risk of ischemic stroke—the most common type—according to a Danish study. Researchers tracked over 53,000 men and women for about three years. Those with the highest intake of fruits and vegetables (about six to seven servings daily) had 28% less risk of ischemic stroke than those with the lowest intake (one to two servings a day). The protective effect was strongest for fruit, particularly citrus fruit, which may be due to its high vitamin C content, say the researchers.


In Coming Issues

Why you need more protein as you get older.... Comfort foods get a makeover from EN's editors.... Novel ways to get your calcium.... Update on acrylamide.

Your Free Online Nutrition Library
You can access Environmental Nutrition's entire online archives from 1996, including this issue. Free to subscribers only. Go to www.environmentalnutrition.com and click "Login." Your e-mail address is your user ID and this month's password is bake.

ENVIROMENTAL NUTRITION
www.environmentalnutrition.com