



# Super foods

Vegetables and fruits pack disease-fighting wallop

By Deanna L. Thompson

If researchers announced that a magic pill could reduce your risk of cancer, heart disease and stroke, you'd probably rush to the drug store to buy it. Well, what if you found out that a magic pill is available and you already can buy it—at a farmers' market, a stand alongside the road or your local supermarket?

The "magic pill" is vegetables and fruits, which are chock full of vitamins, nutrients and phytochemicals that combine to offer unparalleled protection against disease. When the American Institute for Cancer Research (AICR) in 1997 reviewed 4,500 research studies to look for common links, it made a surprising discovery: Vegetables and fruits are the most protective element of the diet.

"We know that having at least five servings daily decreases the incidence of cancer by 20 percent," says Melanie R. Polk, a registered dietitian who is AICR's director of nutrition education. "Just that one change in diet can make that much of a difference."

Health authorities ranging from the government's National Cancer Institute to the American Dietetic Association to Harvard's School of Public Health all agree: You should eat at least five to nine servings of vegetables and fruits daily, and more is better. However, research by the Centers for Disease Control shows that 80 percent of Americans—4 out of 5 people—don't get the recommended amount.

Are you one of them? Spring is a great time to rediscover the flavor and disease-fighting value of fresh fruits and vegetables.

## What's in this "magic pill"?

Vegetables and fruits are packed with things that are good for you, including fiber, vitamins and minerals. But the rising star of

late is phytochemicals (*phyto* comes from a Greek word meaning plant) that offer protective benefits to the plant as it grows—and which researchers have found offer similar benefits to humans. There are thousands of different phytochemicals, and they perform a variety of functions, such as protecting cell walls from invasion, altering hormone levels and detoxifying carcinogens, Polk notes.

"Each vegetable and fruit has its own profile of these substances," says Polk. "What you get from eating kale is different from what you get from eating cantaloupe."

To ensure that you get the benefits of the many known phytochemicals, you need to eat a variety of fruits and vegetables. The same substances that pack a disease-fighting wallop also give fruits and vegetables their vibrant hues. Strive to eat a rainbow of colors every day, and you'll reap the benefits of an array of phytochemicals, says Nelda Mercer, a registered dietitian who is a spokesperson for the American Dietetic Association.

She recommends coloring your regular food palette with:

- Blue/purple vegetables and fruits, such as plums, purple grapes, blueberries and eggplant, which contain phytochemicals called anthocyanins, in addition to other nutrients, and have been linked to lower risks of cancer as well as to healthy aging.
- Green vegetables and fruits, such as leafy greens, broccoli and zucchini, which contain phytochemicals, including lutein, that appear to lower risk of some cancers and promote healthy retinas and good vision.
- Orange/yellow vegetables and fruits, such as yellow squash, apricots and sweet potatoes, which contain various phytochemicals, including beta-carotene, that have been linked to

eye and cardiovascular health, as well as to lower cancer risk.

- Red vegetables and fruits, such as tomatoes, raspberries, strawberries, pink grapefruit and watermelon, with phytochemicals including lycopene, which has been linked to reduced incidences of prostate and breast cancer and to better urinary tract health.
- White or tan vegetables and fruits, such as onions, which contains allicin, a phytochemical that is being studied for its effect on blood pressure and infection, and cauliflower, which contains indoles and sulforaphanes that may slow the growth of tumors.

### Take one apple and call me in the morning

Research indicates that increasing your overall consumption of vegetables and fruits may help in preventing mouth, esophagus, stomach, lung, colorectal, liver, prostate, ovarian and breast cancers, Polk notes. In addition, eating five servings of vegetables and fruits may reduce by 30 percent your risk of having an ischemic stroke, based on the results of a Harvard study of 120,000 men and women. The results of another Harvard study indicate that increasing your consumption of vegetables and fruits from three or fewer servings to eight or more daily could reduce your risk of heart disease by 20 percent.

Increasingly, researchers are finding links between specific fruits or vegetables and prevention of certain diseases. For example, Harvard researchers have found that high levels of folate (found in dark leafy green vegetables) may protect against colon cancer, while eating cooked tomato products may protect against prostate cancer.

But dietitians caution against interpreting this information as a reason to choose supplements containing phytochemicals over the real thing—the fruits and vegetables themselves. In fact, researchers don't believe that specific phytochemicals taken in pill form work the same magic. For example, beta-carotene, found in carrots and other foods, is an antioxidant that appears to boost the immune system. But studies have shown that cigarette smokers who take beta-carotene supplements increase, rather than decrease, their lung cancer risk.

What about taking a multivitamin? While it can provide insurance against some deficiencies—such as folic acid in women of childbearing age—a multivitamin should not be taken as a substitute for fruits and vegetables, notes Mercer.

“What a multivitamin doesn't contain is all the other properties of foods that combine to make them good for you, including some that haven't even been discovered yet,” says Mercer.

Dietitians say it's that synergy, or interaction between vita-

## Buy it fresh at a farmers' market

**Y**ou can find fresh, locally grown produce at farmers' markets in virtually every region of the United States—and that's good news for your health. Fruits and vegetables not only taste best when they're fresh, but that's also when they pack the biggest nutritional punch.

Not sure where a farmers' market is located in your area? Look online at [www.ams.usda.gov/farmersmarkets/map.htm](http://www.ams.usda.gov/farmersmarkets/map.htm) for a list of farmers' markets grouped by state and city. You may find additional markets by doing a Web search for farmers' markets in your region.

Some farmers' markets are open year-round. Others, especially those in colder climates, are seasonal, operating from late spring through early fall.

mins, minerals, antioxidants and phytochemicals in foods, that gives them disease-fighting power—not necessarily the antioxidants or phytochemicals alone.

### Getting your five to nine servings

So are you convinced that you should try harder to get vegetables and fruits into your diet? It's not as difficult to get the recommended five to nine servings as many people think. Try for a minimum of three servings of vegetables and two servings of fruit daily, says Mercer. Men, who generally consume more calories than women, should shoot for the higher end of the recommendation.

Polk notes that a serving is much smaller than many people think: “A half cup of cooked vegetables or one medium fresh fruit—these are not big servings.”

Think ahead to be sure you're including fruits and vegetables at every snack and meal. You can bring carrots in your brownbag lunch. Or try a lunch salad that includes spinach, tomatoes and carrots. Add zucchini or other vegetables to your pasta sauce at dinner.

“Slice a banana over your cereal,” suggests Polk. “Have fruit in the afternoon rather than going to the vending machine for cookies or chips. Eat a bowl of berries instead of ice cream in front of the television.”

Vegetables and fruits are the original fast food—and they're a lot healthier than the drive-through or vending machine variety.

### Make a fresh start

Spring brings a whole new season of produce to locations across America. Check out your local farmers' market or roadside produce stand for farm-fresh vegetables and fruits. (See sidebar.)

“If you can get fresh-grown vegetables and fruits, all the better,” says Polk. “Shopping at a farmers' market or a stand on the side of the road is lovely.”

For maximum benefits, try to eat fresh fruit and vegetables within three to four days of purchase, recommends Polk.

“The shorter the time since it was picked, the more nutrient value,” says Polk.

Can't make it to a farmers' market? While produce just off the vine or fresh from the field often tastes better, Mercer says most metropolitan area supermarkets today stock very fresh produce with plenty of nutrients.

Wherever you find your fruits and vegetables this spring, just remember that the most important dietary step you can take to improve your health is to eat them—and often. ■