

# Get *the* Blues...

## Blue Foods, That Is

New research shows that getting the blues can do your body good.

By Heidi Reichenberger McIndoo, MS, RD, LDN

**N**o one likes to sing the blues or, worse, have the blues. But I'm here to tell you why you should get the blues.

Blue food, that is—and purple, too—blueberries, eggplant, plums, purple grapes, black currants, purple figs, raisins, dried plums (prunes), and even black olives fall into this category. On the more exotic end are purple varieties of asparagus, carrots, peppers, potatoes, cabbage, and Belgian endive.

With all these choices, you should have no problem getting the blues and purples into your diet.

But why should you? As all these foods are fruits and

vegetables, they're virtually free of fat and sodium, high in fiber, and extremely low in calories. One serving of fruit—for example, 1 medium piece or a ½ cup of cut or small fruits such as blueberries or ¼ cup of dried fruit like raisins—has about 60 calories. One serving of veggies—½ cup cooked or 1 cup raw—has only about 25, and some have even less. Tough to beat that, but believe it or not, it gets even better.

All these foods contain phytochemicals, compounds found in plants that, while not essential to the body's proper functioning, help improve health or decrease the risk of certain diseases. Sometimes called phytonutrients, there are hundreds of these substances in foods.

Phytonutrients are divided into different groups. Blue and purple foods in particular contain several from what is called the *flavonoid group*, the most abundant and powerful of all the phytochemical groups in



## The Blues Can Protect Against Breast Cancer

A recent study published in the *Journal of Medicinal Foods* suggests that natural compounds in Concord grape juice protect healthy human breast cells from DNA damage. Researchers exposed such cells in a test tube to an environmental carcinogen that's able to "initiate a chain of events leading to breast cancer." The Concord grape juice compounds, however, protected the DNA of the healthy cells from connecting with the carcinogen.






our diet. This group not only provides tremendous health benefits, it's also responsible for the rich colors we see in blue and purple foods. In addition to flavonoids, many of these deep-hued foods also contain the phytonutrients resveratrol and ellagic acid.

You know what's in these blue foods, so now learn what they can do for you. Simply put, they fight a variety of diseases and affect your entire body from head to toe.

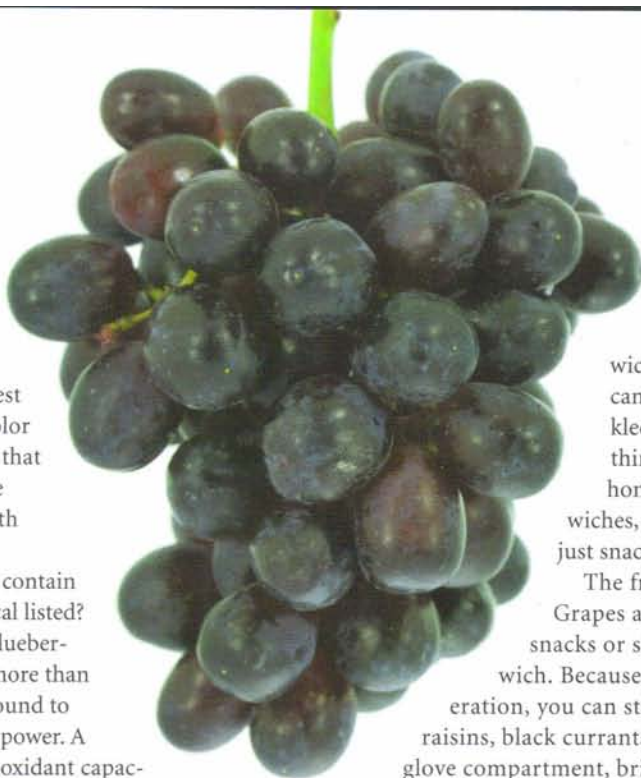
You might notice that not every blue and purple fruit and veggie is listed in the chart on the opposite

Phytochemicals	Blue and Purple Food Source	How This May Help You
Anthocyanins 	Blackberries Blueberries Plums Dried plums	<ul style="list-style-type: none"> <li>● Improve motor skills—the ability to perform both large movements such as walking and sitting and finer movements of the hands, fingers, and toes.</li> <li>● Help reduce short-term memory loss seen with aging and in Alzheimer's disease.</li> <li>● Help maintain healthy blood vessels, allowing for better blood flow and lowering the risk of heart attack or stroke.</li> </ul>
Proanthocyanidins 	Blackberries Blueberries Purple grapes Dark raisins	<ul style="list-style-type: none"> <li>● Lower the risk of urinary tract infection by preventing bacteria from sticking to urinary tract walls where they multiply.</li> <li>● Protect against cardiovascular disease, including heart attack and stroke.</li> <li>● Protect against cancer.</li> </ul>
Myricetin 	Blackberries Blueberries Purple grapes Dark raisins	<ul style="list-style-type: none"> <li>● Appears to have both anti-inflammatory properties, which could be beneficial in diseases like arthritis and asthma, as well as the internal inflammation associated with cardiovascular disease—but too early to tell.</li> <li>● Appears to have anticancer properties, but more research is needed.</li> </ul>
Quercetin 	Blueberries Purple grapes Dark raisins	<ul style="list-style-type: none"> <li>● Protects brain cells from damage, protecting against diseases such as Alzheimer's.</li> <li>● Protects against asthma and lung cancer.</li> </ul>
Catechins 	Purple grapes Plums Dried plums	<ul style="list-style-type: none"> <li>● Help maintain healthy lungs and lung function.</li> <li>● Prevent cancer cells from spreading.</li> </ul>
Resveratrol 	Blueberries Purple grapes Dark raisins	<ul style="list-style-type: none"> <li>● Works similarly to the female hormone estrogen and may improve conditions caused by the natural estrogen decrease associated with aging, including symptoms associated with menopause, osteoporosis, and breast cancer.</li> <li>● Helps prevent blood cells from sticking and forming clots that can lead to heart attacks and strokes.</li> <li>● Raises high-density lipoprotein—or good—cholesterol levels in the blood, lowering the risk of heart disease.</li> <li>● Decreases the spread and growth of cancer cells by cutting off their nutrient supply.</li> </ul>
Ellagic acid 	Blackberries Blueberries	<ul style="list-style-type: none"> <li>● May lower cancer risk and slow tumor growth, but more research is needed.</li> </ul>

page. That's because not all foods have been studied in such great detail to identify what nutrients they contain. Rest assured, however, their color alone is enough evidence that they contain at least some of these powerhouse health promoters.

Notice how blueberries contain almost every phytochemical listed? It makes sense then that blueberries, when tested against more than 20 other fresh fruits, are found to contain more antioxidant power. A method of measuring antioxidant capacity called Oxygen Radical Absorbance Capacity, or ORAC, revealed that  $\frac{1}{4}$  cup of wild blueberries contains 2,400 ORAC units. While there's no official daily recommendation of ORAC units, scientists estimate that somewhere between 3,000 and 5,000 units is sufficient to provide the various benefits. Our current intake, however, is estimated to be at about 1,200 units per day. Not all foods have been measured in this way, but you can see how simply adding a little more than one serving of blueberries to your daily diet can help you meet your ORAC needs.

Now that you can't wait to dig in to all these super-healthy fruits and veggies, how do you go about making them a regular part of your diet? You can substitute the purple peppers, potatoes, asparagus, etc, for the more traditional varieties. Don't recall seeing them at your local grocery store? Try farmers' markets or specialty food or produce markets, which tend to carry some of the more exotic foods. Eggplant can often be used in place of meat in dishes such as lasagna and chicken Parmesan or can be sliced and



grilled or sautéed; it can also make a great meatless sandwich filling. Black olives can be sliced and sprinkled onto almost anything—salads, casseroles, homemade pizza, sandwiches, and more. Or you can just snack on them.

The fruits are even easier. Grapes and plums make great snacks or side dishes to a sandwich. Because they need no refrigeration, you can stash dried fruits like raisins, black currants, and plums in your glove compartment, briefcase, purse, or desk drawer for those times when you just need something right away. You can also toss them into a bowl of hot or cold cereal or a quick bread or muffin batter. And don't forget how good some sweet and savory combos are; a handful of raisins on a salad makes for an interesting change from everyday fare.

And then there are the berries. Eat fresh berries plain or sprinkled on yogurt, angel food cake, or cereal. And no matter what the season, with a bag of frozen berries on hand, you're all set to boost your nutrition with a handful mixed into hot cereal as it cooks, into a smoothie, or sprinkled on top of pancake batter. The combinations are limitless.

No matter how you're looking to improve your health, there's bound to be a blue or purple food that can help. So start getting the blues today. ♣

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