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PHYTOCHEMICALS FOR CANCER PROTECTION

Many researchers believe that eating foods high in phytochemicals may reduce the risks of developing cancer and other chronic diseases. Phytochemicals, although not true nutrients, are chemicals found in plants that may act as cancer-fighting substances. They are found in fruits, vegetables, whole grains, and nuts. If phytochemicals do reduce the risk of cancer, plants can be bred to contain more of them, or these substances can be extracted and inserted into other foods to produce designer foods. The phytochemicals listed below have the potential for protection and are the subject of laboratory, animal, and sometimes human research studies.

FOOD	PHYTOCHEMICALS	EFFECT
Allium vegetables, such as onions, scallions, leeks, chives; especially garlic	Quercetin, allixin, allicin, alliin, diallyl sulfide	Preventive effects against some cancers; slows or stops the growth of some tumors
Beans	**Saponins, protease inhibitors**, **phytic acid**	Inhibit reproduction of cancer cells and slows tumor growth of some cancers
Berries, such as blueberries, strawberries, raspberries	**Ellagic acid,** flavonoids, anthocyanosides	Potent antioxidant properties; preventive effect against some cancers
Cruciferous vegetables, such as broccoli, cauliflower, cabbage, kohlrabi, Brussels sprouts	Glucosinolates, crambene, Indole-3-carbinol, Isothiocyanates	Help regulate body enzymes that defend against cancer
Grapes and grape juice	**Polyphenols, such as resveratrol**	Potent antioxidant and anti-inflammatory properties; slows growth of some cancers

Green Tea	Polyphenols, flavonoids, such as catechins	Potent antioxidant properties; preventive effects against many cancers
Tomatoes, especially processed tomatoes	Lycopene	Potent antioxidant properties; inhibit growth of some cancers
Whole Grains, such as brown rice; wheat breads, rolls, pasta and cereals; whole grain oat cereals such as oatmeal, popcorn, wild rice, tortilla and tortilla chips; corn; kasha (roasted buckwheat); tabouleh (bulgur wheat)	**Phenols**, **lignans, saponins**	Potent antioxidant properties; lowers cancer risk

Source: American Institute for Cancer Research (2010), Foods That Fight Cancer, www.aicr.org

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