



Cruciferous Vegetables

Cruciferous vegetables (or brassicas) are thought to play an important role in cancer prevention. These vegetables contain phytochemicals known as isothiocyanates. These phytochemicals change the way estrogen is metabolized or broken down in the body. This, in turn, decreases the risk of hormone- or estrogen-related cancers like breast and uterine cancer. Isothiocyanates are activated by chopping or chewing the cruciferous vegetables containing them.

In addition to isothiocyanates, cruciferous vegetables are important sources of protein, fiber, vitamins, and minerals. Most people don't realize that plant foods are sources of protein, but a cup of cruciferous vegetables provides about 3 grams. For comparison, that's the same amount of protein found in half an ounce of chicken breast. Additionally, the high fiber content of cruciferous vegetables can aid digestion and improve the health of gut bacteria. Cruciferous vegetables are also good sources of vitamin A, vitamin C, vitamin K, and manganese.

Eating a serving of these vegetables daily (particularly broccoli, kale, and Brussels sprouts) can help lower the risk of disease. To retain the full array of nutrients, it is best to eat cruciferous vegetables either raw, steamed, or lightly sautéed.

Cruciferous Vegetables (Brassicacae)

Arugula
Bok choy (pak choi)
Broccoflower
Broccoli
Broccoli rabe (rapini)
Brussels sprouts
Cabbage (all varieties)
Cauliflower
Collard greens
Daikon
Dark leafy greens (all)
Horseradish
Kale
Kohlrabi
Mustard greens
Radish
Romanesco
Rutabaga
Tatsoi
Turnips
Wasabi
Watercress

References

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3. Suzuki R, Iwasaki M, Hara A, et al. Fruit and vegetable intake and breast cancer risk defined by estrogen and progesterone receptor status: The Japan public health center-based prospective study. *Cancer Causes & Control*. 2013;24(12):2117-28. doi: <http://dx.doi.org/10.1007/s10552-013-0289-7>.