

Top Foods That Fight Cancer

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In case you haven't seen the book *Foods That Fight Cancer: Preventing Cancer Through Diet*, I strongly suggest you pick up a copy and recommend it to your colleagues, friends, clients, patients, students, associates and family members. The book is authored by two leading cancer researchers, Drs. Richard Beliveau and Denis Gringas. Dr. Beliveau holds the Chair in the Prevention and Treatment of Cancer at the University of Quebec in Montreal, and Dr. Gringas is a researcher in the Molecular Medicine Laboratory of UQAM-Sainte-Justine Hospital (Centre de Cancerologie Charles-Bruneau) and the University of Quebec at Montreal.

As stated in their book, "Nature supplies us with an abundance of foods rich in molecules with powerful anti-cancer properties, capable of engaging with the disease (cancer) without causing any harmful side effects. In many respects, these foods possess therapeutic properties on par with those of synthetic drugs". In a very precise but understandable manner, the two researchers outline the many biological targets affected by bioactive nutrients in foods that can help prevent cancer and be used in the adjunctive management of cancer. More specifically, they highlight the research showing how specific food-borne bioactive molecules can do the following

- Decrease free-radical damage to DNA, which is known to produce cancerous mutations;
- Strengthen immune system function, as various immune cells are known to destroy cancer cells (e.g., macrophages and killer-T cells);
- Inhibit angiogenesis of developing tumors;
- Block key signal transduction pathways required for cancer cell replication;
- Stimulate pathways that induce programmed cell death (apoptosis) of existing and emerging cancer cells;
- Enhance detoxification, helping to neutralize and eliminate carcinogens in the body;
- Promote cellular differentiation, which decreases the risk of healthy cells from becoming cancer cells;
- Block the formation of dangerous nitrosamines in the body;
- Block the synthesis of dangerous forms of estrogen and testosterone, which are associated with reproductive organ cancers;
- Slow the rate of cell replication, which is a key factor in reducing the frequency of genetic mutations that may occur;
- Blocking receptor sites on cells to prevent over-stimulation of hormones and growth factors, which, in turn, slows down the rate of cell division;
- Reduce the synthesis of inflammatory prostaglandin (series-2), which is also linked to increased cancer risk.

Foods That Fight Cancer

In addition to reviewing the worldwide evidence on this subject, the Nutrinome Project, conducted in their own lab, has shown that raw extracts from certain fruits and vegetables inhibit the growth of certain cancer cells to varying degrees. Using medulloblastoma cancer cells (a very aggressive brain tumor), they showed that extracts of certain fruits and vegetables could inhibit the growth of these cancer cells in the following order, from most effective to least effective: garlic, beet, kale, red cabbage, onion, turnip, cranberry, carrot, potato, squash, cabbage, and tomato.

Since then, these researchers have gone further to show that blending some of these fruits and vegetables together into a cocktail and feeding it to immune-deficient mice (nude mice), who were injected with human lung cancer cells under their skin, resulted in better health outcomes than occurred in nude mice who were injected with lung cancer cells, but did not receive the fruit and vegetable cocktail. (A more in-depth description of these experiments and pictures of the mice can be found in the book *Anti-Cancer: A New Way of Life*, by David Servan-Schreiber, MD, PhD.) The specific brewed cocktail given to these mice closely matched what would be attainable for humans to mirror and included:

- Cabbage
- Blueberries
- Brussels sprouts
- Broccoli
- Garlic
- Scallions
- Turmeric
- Black pepper
- Cranberries
- Grapefruit
- Green tea

The implication is that individuals who have cancer may wish to use a daily cocktail of this nature in conjunction with their standard medical treatment, as a means to enhance certain biological mechanisms that may help their body fight the disease.

Anti-Cancer Foods for Daily Use

For the rest of us, Drs. Beliveau and Gringas suggest there is a daily preventive threshold level of cancer-fighting foods that each of us should strive to attain. Their suggestions for the prevention of cancer include consumption of the following items each day:

- Brussels sprouts - ½ cup
- Broccoli, cauliflower, cabbage - ½ cup
- Garlic - 2 cloves
- Onions, shallots - ½ cup
- Spinach, watercress - ½ cup
- Soy (edamame, dry roasted beans) - ½ cup
- Freshly ground flaxseeds - 1 tablespoon
- Tomato paste - 1 tablespoon
- Turmeric - 1 teaspoon
- Black pepper - ½ teaspoon
- Blueberries, raspberries, blackberries - ½ cup
- Dried cranberries - ½ cup
- Grapes - ½ cup
- Dark chocolate (70 percent cacao) - 40 g
- Citrus juice - ½ cup
- Green tea - three 250 ml servings
- Red wine - 1 glass (5 ounces)

What About Supplements?

Drs. Beliveau, Gringas and Servan-Schreiber all suggest there is no evidence to support the use of dietary supplements to prevent cancer, or to be used in the adjunctive nutritional management of cancer. On this point, I disagree wholeheartedly with these experts, in that numerous studies have

appeared in peer-reviewed medical and scientific journals in recent years showing important anti-cancer properties provided by various nutritional supplements. This includes studies demonstrating their ability to help prevent cancer, reduce cancer incidence, and be used in conjunction with medical practices as an adjunctive measure to enhance the efficacy of some forms of chemotherapy and/or slow the progression of cancer and/or decrease the recurrence of cancer.

As a practitioner who is affiliated with a leading cancer treatment facility in Toronto, our patients are provided with the best that medicine, diet and supplementation have to offer, based on the total pool of peer-reviewed scientific evidence. I have published numerous review papers on subjects pertaining to the use of nutritional supplements and cancer. I am also a lecturer on this subject in the Cancer Fellowship Program for medical doctors through the American Academy of Anti-Aging Medicine

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