

# ANTI CANCER DIET: FIGHTING CANCER THE HEALTHIER WAY

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## ABSTRACT:

As the era of the “kill or cure” approach to conventional cancer therapy draws to a close, the era of natural medicine focusing on biologically supportive therapies is making clear inroads into mainstream oncology. Conventional therapies weaken the body over time, alternative non-toxic nutritional therapies build up the body’s anti-cancer defence. Not all health problems are avoidable. However, good nutrition and an overall healthful lifestyle can lower all odds of developing cancer.

**Key words:** Cancer, Diet, Anticancer.

## INTRODUCTION:

CANCER, known medically as a malignant neoplasm, is a broad group of various diseases, all involving unregulated cell growth. The cells divide and grow uncontrollably, forming malignant tumours, and thus invading nearby parts of the body. Determining what causes cancer is complex. Many factors are known to increase the risk of cancer, including

- Tobacco Use
- Certain Infections
- Alcohol

- Radiations
- Lack Of Physical Activity
- Obesity
- Environmental Pollutants.

These can directly damage the genes, or combine with the existing genetic faults within cells to cause disease. Approximately 5 to 10% of cancers are entirely hereditary.

**ANTICANCER DIET:** Anticancer describe the methods of healthcare that contribute to the prevention of cancer or that help in the treatment of a cancer. There are mainly three methods for treating a

cancer which include Chemotherapy, Radiotherapy and surgery.<sup>[1]</sup>

Anticancer diet serves as a complement to conventional approaches of cancer management. The chances of surviving the disease vary greatly by the type and location of the cancer and the extent of disease at the start of treatment. Research shows that a large percentage of cancer-related deaths are directly linked to the lifestyle choices such as smoking, drinking, lack of exercise and an unhealthy diet. Avoiding cigarettes, limiting alcohol and getting regular exercise are a great start to an anti-cancer lifestyle.<sup>[1,2]</sup>

While conventional therapies weaken the body over time, alternative non-toxic nutritional therapies build up the body's anti-cancer defence. Not all health problems are avoidable. However, good nutrition and an overall healthful lifestyle can lower all odds of developing cancer. In fact, malnutrition alone kills 40% of cancer patients. Nutrition, therefore plays a critical role of complete non-toxic natural therapeutic program for treating cancer.<sup>[1]</sup>

DIET is one of the major risk factors for cancer in Western societies. The most recent scientific advancement in the anti-cancer research is the identification of specific foods and food elements that offer powerful protection against cancer. These foods are essential for both prevention of cancer and also increasing the survival after diagnosis.<sup>[2]</sup>

The World Cancer Research Fund confirmed in its October 2007 report that 40% of the cancers could be avoided with

a more adequate diet and a bit more of physical activity. Harmful foods and supplements have also been identified, and avoiding or minimizing them is equally important.

According to Joel Fuhrman, a typical anti-cancer diet should contain:<sup>[3]</sup>

- At least 4 fresh fruits daily,
- One large bowl of raw green salad, as well as two other cooked (steamed) vegetables, such as broccoli, carrots and peas, squash or other vegetables.
- Soup laden with vegetables, herbs and beans can be made once a week and conveniently taken for lunch.
- Raw nuts and seeds are another important, but often overlooked, group of foods with documented health benefits contributing to longevity.

#### **FOOD THAT HELPS FIGHTING CANCER:** <sup>[14-21]</sup>

##### **BROCCOLI:**

Out of the cruciferous vegetables, broccoli is rich in sulforaphane, an antioxidant that helps the liver break down and destroys cancer-causing toxins. It also increases the activity of liver enzymes that helps get cancerous substances out of the body. Even better, broccoli sprouts contain 50 times more sulforaphane than that found in regular broccoli. Broccoli sprouts also have been shown to fight *H. pylori*, a type of bacteria believed to cause stomach cancer.<sup>[4]</sup>

**TOMATOES** (in soup, juice, sauce):

They are rich in LYCOPENE, an antioxidant that is best absorbed from cooked tomatoes because cooking breaks down the fibre in tomatoes. A little olive oil may also enhance the absorption. Tomatoes are specifically known to fight prostate, breast, lung and colon cancer. Watermelon and guava also contain a lot of lycopene and can also help in fighting cancer. <sup>[4, 5]</sup>

**GARLIC:**

Sliced or diced garlic clove contains an inert compound called Allicin which undergoes an amazing cascade of chemical changes. Nearly all Allicin generated compounds function as antioxidants and help prevent cell mutations that give rise to cancer. Evidence suggests that garlic might help protect against cancers of the colon, prostate, esophagus, larynx, ovaries and kidneys. <sup>[5]</sup>

**SPINACH:**

Spinach and other “greens,” such as chard and collard greens, are rich in antioxidants that protect cells from the type of damage that can cause cancerous mutations. A study published in the *Journal of Agricultural and Food Chemistry* gave spinach the top “bioactivity index” ranking of vegetables for its ability to protect against cancer. <sup>4</sup>

**COLD WATER FISH:**

Eat fish two or three times a week—sardines, salmon, mackerel and trout as

these are rich in healthy omega-3 fats—specifically eicosapentaenoic acid (EPA) and docosahexaenoic acid (DHA). Low intake of omega-3 fats appears to be a factor in breast, colon, pancreatic and stomach cancers. <sup>[4, 6]</sup>

**OMEGA-3 FATS VS OMEGA-6 FATS:**

All omega-6 oils (soybean, corn, sunflower) should be reduced/ eliminated and replaced with olive oil, canola oil or flaxseed oil (omega-3 oils). Dairy products that come from animals fed on corn, soy and wheat are also rich in omega-6 fats and hence, should be avoided. If enough omega-3 fats are consumed, the omega-6 fats don't seem able to induce the inflammatory conditions that favour development of several chronic, degenerative diseases, including cancer. Regarding omega-6 and omega-3 oils, a Singapore study gives us an idea of their potential benefit. Analysis of more than 35,000 women showed that those who consumed higher quantities of omega-6s (and no omega-3s) increased their risk of developing “advanced” breast cancer by a factor of 2.45 (145% increase). Those who consumed oily fish at least twice a week had no increase in risk, even if their diet also contained omega-6s. <sup>[4, 6]</sup>

**GREEN TEA:**

The polyphenols (catechin) of green tea inhibit the progression of cancer. Regular consumption of green tea has been linked to a significant reduction in the risk for developing cancer. It can also increase the efficacy of radiotherapy.

**RED WINE:**

It contains resveratrol and other phytochemicals that have antioxidant and anti-inflammatory properties. Researches show that a glass of wine a day can prevent a wide range of cancers like leukaemia, skin as well as breast cancer.<sup>[6]</sup>

**MEDITERRANEAN HERBS:**

Thyme, oregano, basil, rosemary, marjoram, mint etc. not only add flavor to the food, but can also help reduce the growth of cancer cells.

**TURMERIC:**

The common spice, turmeric has been found to contain curcumin, the most potent natural anti-inflammatory agent ever described.

It inhibits cancer growth by not only reducing inflammation but by inducing cancer cell death (apoptosis), slowing down the growth of new blood vessels necessary for tumor expansion (angiogenesis), and increasing the efficacy of chemotherapy.<sup>[7]</sup>

**REPLACE REFINED SUGAR WITH NATURAL SUGAR:**

Try and replace desserts (refined sugar) with fruits as often as possible. Berries, e.g., contain anthocyanidins that directly help to kill cancer cells and reduce the growth of abnormal blood vessels. Cranberries have been found to be particularly protective against ovarian cancer.<sup>[6]</sup>

**AGAVE SYRUP:**

Agave syrup is a wonderful way to replace sugar for those who just can't do without sweet taste as it does not raise the blood sugar or insulin.

**DARK CHOCOLATE:**

Dark chocolate contain more than 70% cocoa. Flavonoids present in cocoa, have cancer-fighting properties. It is certainly one of the tastiest ways to help stay away from cancer.<sup>8</sup>

**Protective studies showing links between consumption of specific foods and the incidence of cancer in human populations:<sup>[9]</sup>**

Foods	Participants	Cancer Type	Risk Reduction
Cruciferous vegetables	47,909	Bladder	50%
	4,309	Lung	30%
	29,361	Prostate	50%
Tomatoes	47,365	Prostate	25%
Citrus Fruit	521,457	Stomach, Esophagus	25%
Leafy greens (Dietary Folic Acid)	81,922	Pancreas	75%
	11,699	Breast (post-menopause)	44%
Lignans (flax seeds & others)	58,049	Breast (post-menopause, estrogen-receptor +)	28%
Carrots	470,802	Head and neck	46%
Apples, pears, plums	470,802	Head and neck	38%
Green Tea	69,710	Colorectal	57%
Vegetable oils & Nuts (Dietary tocopherols)	295,344	Prostate	32%
Vitamin D / Calcium	10,578	Breast (pre-menopause)	35%

## FOOD THAT CAN CAUSE CANCER:

### POTATOES:

They raise blood sugar, which can feed inflammation and cancer growth.

### PROCESSED FOODS:

Numerous studies have shown that processed foods and sugar can significantly increase the risk of cancer.

### DAIRY PRODUCTS:

Foods that promote rapid growth promote cancer as well. Consuming dairy protein on a regular basis elevates blood levels of insulin-like growth factor (IGF-1) which is known to stimulate the growth of both normal and cancer cells.<sup>[10]</sup>

### RED MEAT:

Processed meats, luncheon meats, barbecued meats also contain cancer-causing heterocyclic amines.

### GLYCEMIC INDEX:

Several studies suggest that people with a low glycemic-index diet are better protected against certain cancers. A Harvard study (Michau *et al.* 2005) observed a reduction of between 30 and 40 percent in colon or rectal cancer. In

another study, the same research group found a reduction of 70% in the risk of developing ovarian cancer (Augustin *et al.*, 2003). Overweight women who had a diet with a high glycemic index had 160% more risk of pancreatic cancer than those with a low glycemic-index diet.<sup>[11]</sup>

## CONCLUSION:

Modern natural medicine approaches cancer therapy by incorporating the use of antioxidants, lifestyle changes, herbs, and dietary modification to beat it. These approaches will also help to prepare the cancer patient's body for conventional treatment. The side effects will be reduced. Neither conventional nor alternative treatment holds the magic bullet in cancer treatment. Combining the best of both worlds to beat cancer makes the most logical sense for the patient.<sup>[12]</sup> The general success rates are getting higher when both conventional alternate treatments are used. However, we must also note that just as there are conventional therapies that do not work, the same should be expected of certain natural or alternative therapies. The success of a treatment often depends on the stage of cancer, the age, the immunity status, and the tumor response rate of the patient.<sup>[13]</sup>

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