

## Foods that Prevent Cancer

We are told we should eat five fruit and vegetables a day. Most studies bear this out and people eating five fruit and vegetables daily have about half the risk of developing most cancers.

There is a reason for this. Fruits and vegetables protect us in a variety of different ways. These include triggering cancer cell death (most spices), protecting DNA (garlic), inhibiting cancer cell growth (berries), blocking metastasis (turmeric), reducing inflammation (olive oil), reducing blood vessel formation by cancers (green tea) and blocking cancer cell enzymes (chillies).

However not all studies have shown benefits. There is a likely reason for this. Unfortunately the fruits and vegetables we most often eat have the least effective anti-cancer properties. These include potatoes, tomatoes, carrots and lettuce.

A remarkable study by Boivin tested extracts of a variety of vegetables against different cancer cell cultures. Although different cancer cultures responded differently to different vegetables, a definite pattern emerged.

Two families of vegetables had the most powerful anticancer effects. The first was the cruciferous vegetables. These include (and I will put these in a rough order starting with those with the strongest anti-cancer effects): Brussels sprouts, broccoli, cabbage, kale, cauliflower, collard greens. The second group with powerful anti-cancer properties were the allium family. These include (again in rough order of anti-cancer potency) garlic, leek, spring onions, onions, chives and scallions. Other vegetables, not in these two groups, but with strong anticancer properties are celery and beetroot.

However this study looked only at vegetables. Probably the foods with the most powerful anti-cancer properties are mushrooms (which were not tested and are not, strictly speaking, vegetables). Another strong contender is flaxseed. Many fruits, nuts, herbs and spices (notably turmeric) have strong anti-cancer effects. Most of these foods work synergistically, acting against cancer at multiple points along the cancer pathway, blocking its development. For this reason variety is important. The chart below is in rough order of importance.

Also see the Cancer leaflet for further discussion of food and cancer.

<b>Foods that Prevent Cancer</b>	<b>Foods that Promote Cancer</b>
Mushrooms	Milk (breast, prostate, ovarian)
Garlic, Onion, Leeks	Sugar (?all cancers)
Cruciferous vegetables	Refined grains <sup>10</sup> (oral cavity,

	oesophagus, stomach, colorectal, thyroid, larynx)
Green tea	Meat especially those with nitrites such as hot dogs, pepperoni, ham, bacon (colon cancer, leukaemia)  The food most strongly associated with non-Hodgkins lymphoma, some leukaemias and pancreatic cancer is chicken (thought to be linked to viruses which can induce cancer in chickens)
Turmeric	Trans fats (breast, prostate, colon & pancreatic cancer)
Beetroot	Pickled meat & pickled fish (stomach cancer)
Flaxseed	Lactose (Ovarian cancer)
Most spices	
Seaweed	
Berries	
Citrus fruits	
Tomatoes	
Soy	
Virgin Olive Oil	
Ginger	
Pomegranate Juice	
Omega 3 fats	
Range of coloured fruit and vegetables	
Red wine	