



BC Cancer Agency

Care and Research

ONCOLOGY NUTRITION

PHYTOCHEMICALS The “Super Nutrients” of the 21st Century

Phytochemicals (*phyto* is Greek for plant) are naturally occurring chemical compounds found in foods such as fruits, vegetables and grains. They are responsible for the flavour, colour or odor of foods and may also be involved in a plant's self defense against insect or fungus attack. Scientists are just beginning to explore the many ways phytochemicals in foods may be effective in the prevention and treatment of cancer. Phytochemicals may protect against cancer by stopping a healthy cell from changing to a cancerous one, or they may help prevent cancer cells from multiplying.

Although there is still much that is unknown about phytochemicals, we do know from many worldwide human studies, that people who eat large quantities of vegetables and fruits have reduced cancer risks. Many scientists believe that a lifelong diet rich in phytochemicals may help reduce the risk of cancer.

Phytochemicals

Allyl Sulfides

Indoles, Isothiocyanates

Isoflavones

Carotenoids (lycopenes, lutein, Beta carotene)

Lactones

Phenolic Acids (ellagic acid, ferulic acid)

Polyphenols (curcumin, catechins, theaflavins)

Saponins

Terpens (perillyl alcohol, limonene)

Major Food Sources

Onions, garlic, leeks, chives

Cruciferous vegetables (broccoli, cabbage, kale, cauliflower)

Soy beans (tofu, soy milk or flour)

Dark greens, tomatoes, orange & yellow vegetables & fruit

Oats, barley, rye

Tomatoes, citrus fruits, carrots, whole grains, nuts, green pepper, grapes, strawberries, raspberries

Green tea (unprocessed tea leaves), grapes, wine, tumeric

Dried beans & legumes

Cherries, citrus fruit peel, dill, mint, caraway

FEAST ON PHYTOCHEMICALS!

General Recommendations:

1. Aim for five to ten servings of fruits and vegetables each day and try to have at least three different colours (e.g. dark green, yellow, orange ...)
2. Eat more grains. Try whole grain varieties when available.
3. Decrease portion sizes of meat, fish & poultry. You will naturally eat more grains and vegetables if you do.

This information is not meant to replace the medical counsel of your doctor or individual consultation with a registered dietitian. This information may only be used in its entirety.