



Functional food corner

The tenet "**Let food be thy medicine and medicine be thy food,**" espoused by Hippocrates nearly 2,500 years ago, is receiving renewed interest. There has been an explosion of interest in the health-enhancing role of specific foods or physiologically-active food components: so-called functional foods. Clearly, all foods are functional, as they provide taste, aroma, or nutritive value. Within the last decade, however, the term functional as it applies to food has adopted a different connotation -- that of providing an additional physiological benefit beyond that of meeting basic nutritional needs.

“Functional Foods” are foods or dietary components that may provide a health benefit beyond basic nutrition. You can take greater control of your health through the food choices you make, knowing that some foods can provide specific health benefits. Examples can include fruits and vegetables, whole grains, fortified or enhanced foods and beverages, and some dietary supplements. Functional attributes of many traditional foods are being discovered, while new food products are being developed with beneficial components. You may already be consuming foods that provide a specific benefit or you may be interested in doing so. For a list of foods that can provide benefits and tips on how to incorporate those into your diet see this chart: [Functional Food Chart](#).

Studies show that cancer risk in people consuming diets high in fruits and vegetables was only one-half that in those consuming few of these foods. It is clear that there are components in a plant-based diet other than traditional nutrients that can reduce cancer risk. Oats, Broccoli, Tomatoes, Soy are a few common functional foods that we can be a part of our daily diet.

Oats. Oat products are a widely studied dietary source of the cholesterol-lowering soluble fiber beta-glucan. There is now significant scientific agreement that consumption of this particular plant food can reduce total and low-density lipoprotein (LDL) cholesterol, thereby reducing the risk of coronary heart disease.

Broccoli and other Cruciferous Vegetables. Epidemiological evidence has associated the frequent consumption of cruciferous vegetables with decreased cancer risk. A review of 87 case-control studies showed an inverse association between consumption of total brassica vegetables and cancer risk. This anti-cancer benefit has been attributed to the anti-carcinogenic properties of cruciferous vegetables to their relatively high content of glucosinolates.

Glucosinolates are a group of chemicals stored within the cells of all cruciferous vegetables. Indole-3 carbinol (I3C) is currently under investigation for its cancer chemo-preventive properties, particularly of the mammary gland. I3C may reduce cancer risk by modulating estrogen metabolism. Studies suggest that this compound may be a novel approach for reducing the risk of breast cancer.



Boulder Natural Medicine Clinic, LLC

The estimated intake of glucosinolate for the average person in the US is 15-18 mg/day. Good sources are watercress, cabbage, broccoli, cauliflower, collards, kale, brussel sprouts, kohlrabi, Chinese cabbage, radishes, arugula, turnips, mustard greens, horseradish and capers. You could truly have a meal consisting of wonderful healthy foods just from the cabbage family!

Mounting evidence supports the observation that functional foods containing physiologically active components may enhance health. Emphasis must be placed on a diet high in fiber (particularly vegetable fiber), low in animal fat, and contains 5-9 servings of fruits and vegetables per day. Moreover, diet is only one component of an overall lifestyle that can have an impact on health; other components include smoking, physical activity, and stress.

Eat well and be well.