

Functional Food Revolution

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Belief in healing power of foods is not a new concept having been a widely held view of generation. This widespread belief in the merit of so called “functional food (functional foods which are a class of foods that have strong putative metabolic role & above that is seen in a wide variety of common foods) has captured

the interest of not only scientists but also of consumers. Consumers of today view food as a miracle medicine and therefore for them this may be a revolution. Other possible reasons for viewing this concept as a revolution is the increased health care cost and technological advancement in food industry. Now it is possible to take out bad stuff (fat, cholesterol, sodium and calories) to putting back or enhancing the good stuff. It is possible for example to produce anti-cancer broccoli that could be sold to health-conscious consumers at premium cost. Epidemiological data has suggested that six of the ten leading causes of death in world are believed to be related to diet and other environmental factor over which we have significant control. Theses disease are cancer, chronic heart disease, stroke, diabetes, atherosclerosis and liver disease.

How they act in the body?

Functional components may trigger enzyme system that block or surpass DNA damage, reduce tumour size and decrease the effect of oestrogen like hormone. These components also help to inactivate and eliminate carcinogens other toxicants and thus offers protection against cancer.

Other target of functional component in the body is lipid homeostasis, strengthening of immune functions and restoration of balance of colonic micro flora. For the last target is achieved with the

help of prebiotics and probiotics the functional components of which is non-pathogenic bacteria. These bacteria which are taken as yoghurt &

reaches colon of gastro- intestinal system. They produce lactic acid (which lowers pH of the medium which exerts antibacterial effect on pathogenic bacteria.

Today when a larger number of world populations are deficient in lactase enzyme which is responsible for digestion of milk the intake of yogurt in place of milk which contain same nutrient as milk except the lactose which is in the form of glucose and galactose (partially broken product) in yogurt help prevent symptoms of bloating, flatulence and diarrhoea. Besides this certain epidemiological survey has supported that consumption of yogurt and fermented milk may reduce the evidence of colon and breast cancer, diarrhoea and immune system stimulation. Green tea, garlic, cabbage, cauliflowers, onion, gingers soya beans, grapes, nuts turmeric, citrus fruits and antioxidant rich fruits and vegetables are such foods where functional component help prevent the chronic diseases. However, it should be always be taken as diet not as a drug.

Functional properties of mushrooms

Functional Foods



Commonly consumed mushrooms that are both edible and have functional properties include *Auricularia*, *Grefolia*, *Hericium*, *Lentinus* and *Pleurotus*. Most edible mushrooms like *Agaricus bisporus* commonly known as button mushroom however do not show medicinal value and some medicinal mushroom like *Ganoderma* and *Coriolus* are not edible. Many cultures have used mushroom as food as well as medicine however the use of mushroom as functional food is notable in the East. Mushroom has been incorporated in health tonics, soup, tea and health foods. It has been used to lubricate the lungs, tonify kidneys and reduce excessive dampness. More recently mushroom

have been shown to modulate the immune system, lower blood pressure and blood lipid concentrations, and inhibit tumours, inflammation and microbial action. Shiitake mushroom is a model of the functional mushroom with demonstrated bioactivity has led to isolation of pure compounds that have reached pharmaceutical status.