

Secret to a healthy life

GOOD LIVING

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Eating habits have a significant impact on incidence and severity of many health conditions and disorders.

We have also observed that plant-based foods have important chemical substances that affect the reactions in the body. Such chemical substances include antioxidants, which prevent oxidation of lipoproteins and nucleic acids that make cells in the body become cancerous.

Lipoproteins are fats that transport cholesterol in the blood. When they oxidise the cholesterol deposits on arterial walls, they cause arteriosclerosis. Preventing oxidation of the lipoproteins antioxidants can stop this from degenerating into disease.

Free radicals are strong oxidising agents. They cause damage to our own cells. They are released in the body during metabolism. By inactivating or neutralising these free radicals, antioxidants assist the body by averting cellular damage.

Environmental pollution, metabolic activity in the body, smoking, stress, overworking and physical diseases are agents of free radical generation.

The secret to good living is in nutrients, which are present in food and repair cellular damage as well as prevent degenerative diseases.

The body cells function more or less like a factory where energy is produced in chemical reactions. These cellular kitchens – the mitochondria – are spectacularly efficient and 95 per cent of the oxygen we inhale is consumed here. These mitochondria produce electrons in the oxidation reactions. Some free electrons tend to be released into the cells, attaching themselves to any other



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molecules they come across. On attachment the new molecules become free radicals. These free radicals are chemically reactive and when they attach themselves to other molecules they produce a cellular pollution that decreases our energy levels. If the attachment occurs in the cell nucleus (DNA) it can cause cell mutations hence cancers or cell death. Vitamin E, C and β-carotene, selenium (found in avocados and shellfish); copper (found in nuts); zinc (shellfish) help neutralise free radicals. The body needs more antioxidants during stress, illness, when exposed to pollutants and during exercise. Other antioxidants include chlorophyll, bioflavonoids, anthocyanidines, co-enzyme Q-10 and N-acetylcysteine (NAC):

N-acetylcysteine is a precursor to the non-essential amino acid cysteine which has been used in oral medications to relieve mucous.

Recently it has been used as a

nutritional supplement because of its antioxidant and immune boosting properties.

There is an ongoing research on its potential use in AIDS cases.

In 1994, Raju A.P. and others showed that it increases lymphocytes and other defence cells improving their functions in AIDS patients.

A study in 1990 at Berkeley University, California, showed free radicals increase as we age. By lowering free radicals in the cells, your body and brain will be better able to produce energy and you will feel and be "full of energy": Exercise which increases and improves circulation in the cardiovascular system by relaxing blood vessels increases oxygen levels and reduces carbon dioxide levels hence reducing free radicals.