



Role of Vitamin E in human beings – “deficiency, Toxicity and Usual Source”

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Introduction :-

The most important Antioxidant necessary for our body is Vitamin E.

Vitamin E is occur in the naturally but in chemical forms.

Alpha, beta, gamma and delta tocopherol

Alpha, beta, gamma and delta tocotrienol

Out of all these forms – only alpha tocopherol necessary for the need of human body.

Formula – $C_{29}H_{50}O_2$

Abstract :-

How it is formed :-

Serum Vitamin E level in the body totally depends on the liver. Liver which function is to take up the nutrient after various forms are absorbed from the small intestine. After the process of metabolism, the liver rescretes only alpha tocopherol and other forms of vitamin E are excreted.

We know that, free radicles are the molecules containing an unshared electron. Antioxidant in the form of Vitamin E protect the cells from the damaging effects of free redicles.

Free radicals are responsible for the developing cardiovascular disease and malignancy also.

Immunity is also produce by vitamin E, Apha tocopherol of inhabits the activity of protein kinase C, which is an enzgme involved in cell proliferation and differentiation in smooth muscle cells, platelets and monocites.

Vitamin E also replete endothelial cells lining the interior surface of blood vessels are better able to resist blood cell components adhering to this surface. Vitamin E also increases the expression of two enzymes that the arachidonic acid metabolism, therapy increasing the release of prostocyclin from the endothelium which in turn, dilatos blood vessels and inhibits platelet aggregation.

How much Vitamin E intake should be –

Dietary Allowances for Vitamin E (Alpha Topheral)

Age	Males	Females
0 – 6 months	4 mg	4 mg
7 – 12 months	5 mg	5 mg
1 to 3 years	6 mg	6 mg
4 to 8 years	7 mg	7 mg
9 to 13 years	11 mg	11 mg
14 & above	15 mg	15 mg

Dietary Supplementation during location 19.4 mg

Conclusion :-

Sources of Vitamin E

Nuts, seeds, vegetable oil, green leafs, vegetables, fortified cereals.

Vitamin E deficiency is very rare, vitamin E found in healthy individuals, who got it from their normal day to day diet.

Vitamin E deficiency in low birth weight body may have the risk of infections.

Vitamin E deficiency in adults may result, peripheral neuropathy ataxia skeletal myopathy, retinopathy and impairment of immune response.

Vitamin E deficiency secondary to abetalipoproteinemia causes problems like muscle weakness, poor transmission of nerve impulse, retinal degeneration that leads to blindness.

Ataxia and vitamin E deficiency is another rare inherited disorder in which livers alphotocopherol transfer protein is defective or absent.

People with vitamin E that have develop nerve damaged and loss the ability to walk unless they take large desire of supplemental vitamin E.

Vitamin E work as a Antioxidant, It also help in anti-inflammatory process, inhibition of platelet aggregation and immune enhancement.

It is proved in studies vitamin E supplementation protects cardiovascular systems and percentage of cancer in males & females both.

Overdose utility does not prove any serios illness till the date.

References :-

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