



Opinion

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Role of Omega 6/Omega3 Fatty Acid in Life



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Abstract

Because of awareness in population the consumption of total fat and saturated fat intake has drastically reduced. But unknowingly intake of Omega 6 fatty acids is increased. At the same time the intake of Omega 3 fatty acid has reduced, resulted into change in ratio of Omega6 fatty acid/Omega 3 fatty acid from 1:1 to 20:1. This ratio is directly responsible for risk of obesity and the complications occurring due to it. Omega 3 fatty acid decreases obesity. Absolute levels of Omega 6 fatty acids and Omega3fatty acid is less important than their ratio for obesity and their complications.

Introduction

Due to agribusiness and modern agriculture, diet contains high levels of Omega6 PUFAs but very low levels of Omega3PUFAs, resulting in to change in their ratios from 1:1 to 20:1. Experimental studies suggested that Omega3fatty and Omega6fattyacids have different action on body fat through adipogenesis lipid homeostasis and brain gut adipose tissue axis and systemic inflammation, including endothelial dysfunction. Omega6 fatty acids increases cellular triglyceride by increasing membrane permeability. Whereas Omega3 fatty acid has an anti atherogenic effect by suppressing lipogenic enzymes and increasing B-oxidation.

A Diet high in Omega6 acid fatty acid/Omega 3 fatty acid ratio causes an increase in the endocannabinoid signaling and related mediators. This results in to increased inflammatory state, energy homeostasis and mood. High intake of Omega 6 fatty acid in diet results in to alteration in om6fa/om3fa ratio gives rise

to obesity,weight gain,and its complication.Om6 and Om3 fatty acids compete with their biosynthetic enzymes. Higher levels of Omega6 fatty acids increases leptin resistance and insulin resistance, whereas Omega3fatty acids causes homeostasis and weight loss. So it is recommended to increase intake of dietary Omega3fatty acid in diet and reduce intake of Omega6fatty acids in diet to control their ratios. Over above this endogenous level of Om6 and Om3 fatty acids also play a role.

Recycle oil in restaurant increases your level of omega6fatty acid and which contribute the present increasing the incidence of coronary artery disease. So the ratio of Omega6fatty acid and Omega3 fatty acid indirectly plays an important role in health hazards and our wellbeing. Thus an unbalanced Om.6/Om3 ratio in favour of Omega 6 PUFAs is highly prothrombotic and proinflammatory which contributes the prevalence of Atherosclerosis, obesity and Diabetes Type 2.



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