Abstract

Conjugated linoleic acid (CLA) refers to a family of polyunsaturated fatty acids, being represented by a group of isomers of linoleic acid called conjugated for having a double bond after a simple bound. Among its isomers, trans-10,cis-12 and cis-9, cis-12 CLA stand out. These isomers can lead to different effects on the body: anticarcinogenic, antidiabetogenic, antiatherogenesis and positive body composition alteration. The objective of this review is to describe their mechanisms of action, effects on body composition, on plasmatic lipoproteins and supplementation. Studies about CLA supplementation show its capacity of reducing fat percentage, body mass and of promoting an improvement in lipid metabolism. One of the adverse effects attributed to one of the isomers is insulin resistance by body fat redistribution. Limitations in the scientific models used in CLA researches make impossible to draw conclusions about the action of this fatty acid on human metabolism.

Keywords

Conjugated linoleic, Body composition, Fat percentage, Lipid metabolism.