



CLA Conjugated Linoleic Acid

DESCRIPTION

CLA contains 800 mg of conjugated linoleic acid (a free fatty acid derived from safflower oil) to help promote healthy body composition, enhance immune function and support a healthy inflammatory response. Linoleic acid is an omega-6 essential fatty acid, meaning that it is unsaturated with a double bond at the 6th carbon from the omega end of the molecule. Conjugated linoleic acid is an isomer of linoleic acid, which is found mainly in meat and dairy products.

necrosis factor-alpha. CLA has also been shown to activate peroxisome proliferator-activated receptor-gamma (PPAR-gamma), which may function in the anti-diabetic activity of CLA. In addition, activation of PPAR-gamma and/or PPAR-alpha may also account for the anti-cancer and cholesterol-lowering effects of CLA reported in animal studies.

RESEARCH STUDIES*

Although human trials are limited, there has been an interest in determining the effectiveness of CLA to control body weight and maintain lean body mass. In a randomized, double-blind, placebo controlled trial examining the changes in body composition following CLA (50:50 ratio of cis-9, trans-11 and trans-10, cis-12 isomers) supplementation for 12 weeks in healthy obese humans, it was found that lean body mass was significantly increased in the CLA group. Another clinical trial sought to analyze whether CLA had a regional affect on weight loss. After 6 months of supplementation, the researchers found that there was a significant reduction of fat mass, specifically in the legs, in the experimental group. In addition, lean body mass increased in the group supplemented with CLA.

Animal studies have also shown promising results indicating the usefulness of CLA supplementation to improve hepatic function, alter lipid profiles, preserve pancreatic function and reduce inflammatory markers; indicating its use in diabetes and cardiovascular disease. One research study using obese, insulin resistant rats showed improvement in oral glucose tolerance test and insulinemia with attenuated serum haptoglobin levels when supplemented with CLA for 7.5 weeks. In addition, another research study showed improvement of liver function, lipid profile (elevated HDL, reduced VLDL and LDL) and reduced lipid liver concentration in rats fed a CLA diet for 8 weeks.

Item number: AM149
Delivery system: Softgels
Amount per bottle: 90 softgels
Serving size: 3 softgels



INGREDIENTS PER SERVING

Conjugated linoleic acid 2400 mg
Other ingredients: gelatin, glycerin, water and natural color

INDICATIONS*

Optimal weight management, diabetes, cardiovascular disease

MECHANISM OF ACTION

The mechanism(s) of actions of CLA are not clearly understood, due in part because each isomer has a specific effect on the body. For example, the CLA-associated body composition changes observed in animals appear to be associated chiefly with the trans-10, cis-12 isomer. In several studies using mice, the trans-10, cis-12 CLA isomer was shown to reduce lipoprotein lipase activity and serum concentrations of triglyceride. The trans-10, cis-12 isomer also decreased the expression of stearoyl-CoA desaturase activity in mouse adipocytes in tissue culture, which may function to inhibit fat synthesis.

Both cis-9, trans-11 and trans-10, cis-12 CLA isomers have demonstrated anti-carcinogenic activity and it is hypothesized that CLA may modulate cytokine activity, such as that of tumor

ADVERSE REACTIONS

Pregnant or breast-feeding women should consult a doctor before use. At doses above 2 g per day, some gastrointestinal distress has been reported.

Contraindications: Do not use CLA if patient is allergic to any component or has a disorder which prevents adequate digestion of lipids, such as in gallbladder disease.

DOSAGE AND ADMINISTRATION

Most research studies have used between 3.4-4.2 g of CLA for benefits. Typical dose is between 3-5 g per day or 4-5 softgels per day.

STORAGE

Store between 20-25 °C (68-77 °F).
Keep out of reach of children.

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REFERENCES

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3. Noto, A, et al. Dietary conjugated linoleic acid preserves pancreatic function and reduces inflammatory markers in obese, insulin-resistant rats. *Metabolism*. 2007 Jan;56(1):142-51.
4. Noto, A, et al. Conjugated linoleic acid reduces hepatic steatosis, improves liver function, and favorably modifies lipid metabolism in obese insulin-resistant rats. *Lipids*. 2006 Feb;41(2):179-88.
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*These statements have not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure, or prevent any disease.

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