



Conjugated Linolenic Acid

The Anti-Fat Fatty Acid

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Literature Education Series On Dietary Supplements

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Fat is evil. Fat is bad. Fat makes you fat. People follow low-fat diets to avoid excessive fat intake. People take supplements to help them reduce fat absorption as well as body fat. About the last thing you'd *choose* to do is voluntarily consume excess fat in supplement form right? Not if that fat is CLA.

What is CLA?

CLA (conjugated linoleic acid) is a free fatty acid that may prove to be essential to our diet. Studies show that CLA can play a vital role in reducing body fat and improving muscle tone. In the past, it was readily available in beef and dairy products, but today, it is no longer present in great quantities. To obtain about 1000 mg of CLA in food you would have to consume three pounds of hamburger, twenty-five slices of American cheese or half a gallon of ice cream. Of course the adverse effects of eating these high saturated fat foods might eclipse the benefits obtained from the CLA. Consequently, the use of a CLA supplement is a sensible alternative and may even help you reduce body fat. Researchers think that CLA helps reduce body fat deposits by promoting apoptosis (programmed cell death) in fat cells.¹

Short-term studies

In two different double-blind, 12-week studies, CLA supplementation has been shown to promote a decrease in body fat. In one study², 53 men and women supplemented with 4200 mg

CLA daily or a placebo. Body fat decreased a significant 3.8% in the CLA-treated group, compared to placebo. In the other study³, 47 overweight or obese subjects received varying amounts of CLA daily (1700 mg to 6800 mg) or a placebo. Results showed significantly higher reduction in body fat mass in those receiving 3400 mg and 6800 mg CLA compared with the placebo group.

In an eight-week, double-blind study⁴, 22 volunteers received 700 mg of CLA for four weeks and 1400 mg of CLA for the next four weeks, or a placebo. Diet was controlled and there were no significant differences in calories or macronutrient intake (carbohydrate, fat, protein) between the two groups. The results were that body fat and fat mass was significantly reduced in the CLA group with 1400 mg, but not with 700 mg or placebo.

Other research⁵ suggests that consuming 1800 mg or 3600 mg CLA daily also reduces hunger and improves satiety and feeling of fullness, compared to placebo.

Long-term studies

The previously cited studies were of relatively short length (maximum 12 weeks). So what happens when CLA is supplemented for a longer period of time? To determine the effect of CLA supplementation over a one-year period, 180 overweight or obese men and women received 4500 mg CLA daily or placebo while consuming a diet without any calorie restrictions in a double-blind study⁶. The results demonstrated a statistically significant reduction in body fat mass in the CLA group compared to placebo, and a statistically significant increase in lean body mass (i.e., muscle) compared to placebo. These changes were not associated with diet or exercise.

Likewise, during a 24-month research period⁷, 134 overweight volunteers received 3400 mg of CLA or placebo daily in a double-blind study for 12 months, and then continued for another 12 months in an open study with the goal of assessing CLA safety and other effects. The results of these studies showed that CLA supplementation for 24 months in overweight adults was well tolerated, and also confirmed that CLA decreases body fat mass, and may help maintain initial reductions in body fat mass and weight in the long term.

Adverse reactions/interactions

Although long-term research indicates that CLA is generally well tolerated, some individuals may experience gastrointestinal upset including diarrhea, nausea, loose stools, and dyspepsia.

One study⁸ suggests that CLA may increase insulin resistance and blood sugar levels in diabetics; so individuals with diabetes who take CLA should closely monitor their blood sugar levels. The same study suggests that men with abdominal obesity and metabolic syndrome may be more likely to develop hyperproinsulinemia and insulin resistance when supplementing with CLA.

Conclusions

Both short-term and long term research suggests that supplementation with CLA by overweight and obese individuals are associated with a reduction in body fat. For those wishing to try CLA, I recommend a supplement providing 1200 mg CLA per softgel capsule. At this dosage level you can emulate the amounts given in research by consuming 3 or 4 softgels daily, divided between breakfast, lunch and dinner.

References

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