

## **SUMMARY OF ARTICLES SUBMITTED**

**Berven et al. Safety of conjugated linoleic acid (CLA) in overweight or obese human volunteers. *Eur. J. Lipid Sci. Technol* 102(2000): 455-462.**

*Objective:* The main objective of the study was to determine whether CLA supplementation was safe in overweight and obese humans.

*Methodology:* 60 subjects of both genders over 18 years of age and with a BMI of 27.5-39.0 kg/m<sup>2</sup> (overweight to obese) were included in the study. The trial was performed as a randomized, double blind placebo-controlled study at two centers. The subjects received 3.4 g CLA per day or olive oil (placebo) for 12 weeks. Primary parameters were safety parameters (blood parameters, adverse events, vital signs). In addition, body composition was measured (by Bio Impedance Assessment, BIA) in order to measure the efficacy of CLA.

*Results and conclusion:* 55 of the subjects completed the study. No acute toxic effects, serious adverse events or clinically significant changes in blood parameters and vital signs were observed in the study. Based on these results it was concluded that CLA is safe in the given dose to be used in a healthy population.

**Blankson et al. Conjugated linoleic acid reduces body fat mass in overweight and obese humans. *J. Nutr.* 130 (2000): 2943-2948.**

*Objective:* The main objective of this study was to evaluate the effects of different daily doses of CLA on body composition in overweight and obese humans.

*Methodology:* The trial was performed as a single-center, randomized, double blind, and placebo-controlled study. 60 overweight or obese volunteers (BMI 25 - 35 kg/m<sup>2</sup>) were divided into five groups receiving placebo (9 g olive oil) or 1.7 g, 3.4 g, 5.1 g or 6.8 g CLA per day for 12 weeks, respectively. Dual-Energy X-ray Absorptiometry (DXA) was used to measure body composition. In addition, blood safety parameters and blood lipids were also measured in order to follow the safety of CLA supplementation.

*Results and conclusion:* 47 out of 60 included volunteers completed the study. No differences between treatment groups were found regarding adverse events. A significantly higher reduction in body fat mass was found in the CLA groups compared with the placebo group. The reduction of body fat within the groups was significant for the 3.4 g and 6.8 g CLA groups. Only the 6.8g CLA group gave a significant increase in lean body mass. No significant differences between the groups were observed in body weight, lean body mass, body mass index or blood safety parameters and blood lipids.

The data indicates that CLA taken in the dose described do not have any specific adverse effects. The data suggests that CLA may reduce body fat mass in humans.