

Efficacy of Olibra: A 12-Week Randomized Controlled Trial and a Review of Earlier Studies

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Abstract

Background:

Intervention strategies that harness the body's appetite and satiety regulating signals provide a means of countering excessive energy intake.

Methods:

Eighty-two subjects were enrolled (18–60 years, body mass index: 25–40 kg/m²) in a randomized, placebo-controlled, double-blind, parallel trial. During a 12-week period, the effects of Olibra™ fat emulsion (2.1 g twice daily) on food intake, appetite, satiety, weight, and body composition were compared with those of a twice daily administered placebo (1.95 g milk fat). On days -7, 0, and 28, Olibra or the placebo added to 200 g of yogurt was served at breakfast and lunch. Food intake, appetite, and satiety were assessed after lunch and dinner. Body weight was measured on days -7, 0, 14, 28, 56, and 84. Body fat, waist circumference, and waist-hip ratio were determined on days 0 and 84. The Eating Inventory was administered at screening and on day 28. Data relating to 71 subjects were analyzed using analysis of covariance.

Results:

At 12 weeks, body weight was reduced in the test group (2.17 ± 0.46 kg standard error of the mean, $p < .0001$) and the control group (1.68 ± 0.42 kg, $p < .0001$). Waist circumference decreased by 2.93 ± 0.85 cm in the test group ($p = .001$) and by 1.78 ± 0.74 cm in the control group ($p = .02$). Differential weight and waist circumference reductions were not significant. Hunger scores (Eating Inventory) decreased more in the test group ($p = .0082$). Differential group effects were not significant for body fat, waist-hip ratio, food intake, appetite, and satiety.

Conclusions:

At this dose, Olibra did not exert a consistent effect on food intake, appetite regulation, body weight, or body composition.

J Diabetes Sci Technol 2012;6(3):695-708

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Abbreviations: (ANCOVA) analysis of covariance, (β -hCG) β -human chorionic gonadotropin, (BMI) body mass index, (EI) Eating Inventory, (GI) gastrointestinal, (kcal) kilocalorie, (PBRC) Pennington Biomedical Research Center, (PROP) 6-n-propylthiouracil, (SD) standard deviation, (SEM) standard error of the mean, (US) United States, (USDA) United States Department of Agriculture, (VAS) visual analog scale

Keywords: appetite, emulsion, energy intake, fats, satiety, weight loss

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