

Obesimed® Forte - Kraemer WJ, Vingren J, Silvestre R, Spiering BA, Hatfield DL, Ho JY, Fragala MS, Maresh CM, Volek JS. Effect of adding exercise to a diet containing glucomannan. Metabolism. 2007 Aug;56(8):1149-58

Authors (year published)	Study design	Total patients	Intervention	Reported outcomes/results	Adverse events	Appraisal	Level
Kraemer WJ, et al., 2007	Double-blind, controlled, randomized trial.	42	Glucomannan 3 g daily	Addition of exercise training program to a glucomannan diet regimen significantly improved measures of body composition and total cholesterol	No	D2 A1 P1 R1 T1 O1 F1 S1 C1	I

CASP Questions for making sense of evidence

1. Did the study ask a clearly focused question?	2. Was this a RCT, and was it appropriately so?	3. Were participants appropriately allocated to intervention and control groups?	4. Were participant, staff, and study personnel blinded to participants' study group?	5. Were all participants who entered the trial accounted for at its conclusion?	6. Were the participants in all groups followed up and data collected in the same way?	7. Did the study have enough participants to minimize the play of chance?	8. How are the results presented, and what is the main result?	9. How precise are these results?	10. Were all important outcomes considered so that the results can be applied?
Yes	Yes. Appropriate for this study	Yes. Participants randomly assigned to xanthan gum 0,5 or placebo.	Yes	Yes. 21 obese women (BMI >30kg/m2)	Safety and efficacy data obtained on all patients	Yes-power analysis performed.	Significant positive correlation between hunger and BMI (r=48, p<0.05).	Statistical tests appropriately used can have confidence in results.	Efficacy and safety both considered.

Synopsis - Kraemer WJ, Vingren J, Silvestre R, Spiering BA, Hatfield DL, Ho JY, Fragala MS, Maresh CM, Volek JS. Effect of adding exercise to a diet containing glucomannan. *Metabolism*. 2007 Aug;56(8):1149-58

Aim: to examine the effect of adding a total-body exercise program to an 8-week diet supplemented with glucomannan on weight loss, body composition, blood parameters, and physical performance in overweight men and women

Study design: a randomized double-blind placebo controlled trial.

Subjects: 42 men and women (men n=20, aged 18-57 years; women n=22, aged 18-52 years) who were sedentary and overweight (body mass index >25 kg m²) completed one of two 8-week conditions: 1) a diet with glucomannan with no exercise (No-Ex) or (2) a diet with glucomannan combined with a resistance and endurance exercise training program (Ex). Each participant ingested 1500 mg of glucomannan before each of the 2 largest meals every day for 8 weeks. Body mass, body composition, maximal strength, cardiovascular endurance, blood lipids, and metabolic markers were measured before and after the 8-week intervention.

Results: there were reductions ($p < 0,05$) in body mass (men, $-2,7 \pm 1,4$ and $-3,0 \pm 4,0$ kg; women, $-2,2 \pm 1,5$ and $-3,3 \pm 1,5$ kg; No-Ex and Ex, respectively), fat mass (men, $-2,3 \pm 1,6$ and $-3,9 \pm 2,5$ kg; women, $-2,6 \pm 1,4$ and $-3,6 \pm 1,1$ kg; No-Ex and Ex, respectively), total cholesterol (men, $-17,9 \pm 21,5$ and $-18,8 \pm 19,4$ mg dL⁻¹; women, $-9,3 \pm 20,0$ and $-10,1 \pm 19,5$ mg dL⁻¹; No-Ex and Ex, respectively), and low-density lipoprotein cholesterol. Exercise significantly improved high-density lipoprotein cholesterol (HDL-C) (No-Ex, $-2,0 \pm 4,7$ and $-2,3 \pm 4,5$ mg dL⁻¹ vs Ex, $4,4 \pm 10,8$ and $1,6 \pm 3,6$ mg dL⁻¹; men and women, respectively), TC/HDL-C ratio. In addition, exercise appeared to augment the reduction in fat mass (by 63% and 50%; men and women, respectively) and waist circumference, but did not affect total weight loss.

Authors' conclusion: addition of a resistance and endurance exercise training program to a glucomannan diet regimen significantly improved measures of body composition, high-density lipoprotein cholesterol, and total cholesterol / high-density lipoprotein cholesterol ratio.