

Obesimed® Forte - Kacinik V, Lyon M, Purnama M, Reimer RA, Gahler R, Green TJ, Wood S. Effect of PGX, a novel functional fibre supplement, on subjective ratings of appetite in overweight and obese women consuming a 3-day structured, low-calorie diet. Nutr Diabetes. 2011 Dec 12;1:e22.

Authors (year published)	Study design	Total patients	Intervention	Reported outcomes/results	Adverse events	Appraisal	Level
Kacinik V et al., 2011	Randomized, double-blind, controlled clinical trial.	35	5 g of PolyGlycopleX	On day 3 PolyGlycopleX significantly reduced total appetite, hunger, desire to eat and prospective consumption	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 PolyGlycopleX 5 g for 3 days	Yes	Yes. 35 overweight or obese women	Safety and efficacy data obtained on all patients	Yes-power analysis performed.	Significantly lower mean area under the curve for hunger on day 3 (440,4 versus 375,4; p=0,048)	Statistical tests appropriately used can have confidence in results.	Efficacy and safety both considered.

Synopsis - Kacinik V, Lyon M, Purnama M, Reimer RA, Gahler R, Green TJ, Wood S. Effect of PGX, a novel functional fibre supplement, on subjective ratings of appetite in overweight and obese women consuming a 3-day structured, low-calorie diet. Nutr Diabetes. 2011 Dec 12;1:e22.

Aim: to investigate the effect of supplementing a three-day, low-calorie diet with PolyGlycopleX, a highly viscous fibre, on subjective ratings of appetite compared with a placebo.

Study design: randomized, double-blind, crossover, placebo-controlled trial.

Subjects: 35 women (aged 38±9 years, body mass index 29,9±2,8 kg m²) were randomised to consume a 1000-kcal per day diet for 3 days, supplemented with 5 g of PolyGlycopleX or placebo at each of breakfast, lunch and dinner. PolyGlycopleX (α-D-glucurono-α-D-manno-β-D-manno-β-D-gluco), (α-Lgulurono- β-D mannurono), β-D-gluco-β-D-mannan (Inovobiologic, Calgary, Alberta, Canada) is a novel functional fibre complex manufactured by a proprietary process from fibres (konjac glucomannan, xanthan gum and) to form a highly viscous polysaccharide (higher viscosity than any currently known individual sodium alginate polysaccharide or fibre blend) with high water-holding and gel-forming properties. Subjective appetite was assessed using 100 mm visual analogue scales that were completed daily before, between and after consumption of meals.

Results: Consumption of PolyGlycopleX compared with placebo led to significantly lower mean area under the curve for hunger on day 3 (440,4 versus 375,4; p=0,048), prospective consumption on day 3 (471,0 versus 401,8; p=0,017) and the overall 3-day average (468,6 versus 420,2; p=0,026). More specifically, on day 3 PolyGlycopleX significantly reduced total appetite, hunger, desire to eat and prospective consumption for 2,5 and 4,5 h after lunch and before dinner times, with hunger also being reduced 2,5 h after dinner (p<0,05).

Authors' conclusion: the results show that adding 5 g of PolyGlycopleX to meals during consumption of a low-calorie diet reduces subjective ratings of prospective consumption and increases the feelings of satiety, especially during afternoon and evening. This highly viscous polysaccharide may be a useful adjunct to weight-loss interventions involving significant caloric reductions.