

Obesimed® Forte - Vuksan V, Panahi S, Lyon M, Rogovik AL, Jenkins AL, Leiter LA. Viscosity of fiber preloads affects food intake in adolescents. Nutrition, Metabolism & Cardiovascular Diseases (2009) 19, 498-503.

Authors (year published)	Study design	Total patients	Intervention	Reported outcomes/results	Adverse events	Appraisal	Level
Vuksan V et al., 2009	Double-blind, controlled, randomized clinical trial.	31	5 g glucomannan or cellulose or glucomannan with xanthan	Food intake was lower after glucomannan with xanthan.	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 glucomannan + xanthan.	Yes	Yes. 31 healthy weight adolescents	Safety and efficacy data obtained on all patients	Yes-power analysis performed.	Viscosity increased over a period of 75 min, reaching a maximum of 41 and 70 Pa s.	Statistical tests appropriately used can have confidence in results.	Efficacy and safety both considered.

Synopsis - Vuksan V, Panahi S, Lyon M, Rogovik AL, Jenkins AL, Leiter LA. Viscosity of fiber preloads affects food intake in adolescents. Nutrition, Metabolism & Cardiovascular Diseases (2009) 19, 498-503.

Aim: to compare the effects of three fibers including cellulose, glucomannan, and a novel viscous polysaccharide (NVP, namely glucomannan, sodium alginate and xanthan), that differ only in viscosity, on food intake and appetite ratings.

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

Subjects: 31 healthy weight adolescents (25 female and 6 male; age 16,1 +/-0,6 years; body mass index 22,2 +/- 3,7 kg/m²) consumed one of the three preloads 90 min prior to an ad libitum pizza meal. Preloads were identical in taste, appearance, nutrient content and quantity of fiber, but different in their viscosities (10, 410, and 700 poise for cellulose, glucomannan, and a novel viscous polysaccharide (glucomannan, sodium alginate and xanthan), respectively).

Results: pizza intake was significantly lower (p=0,008) after consumption of the high-viscosity novel viscous polysaccharide (278 +/- 111 g) compared to the medium-viscosity glucomannan (313 +/- 123 g) and low-viscosity CE (316 +/- 138 g) preloads, with no difference between the glucomannan and cellulose preloads. Appetite scores, physical symptoms and 24-h intake did not differ among treatment groups.

Authors' conclusion: a highly viscous NVP ((glucomannan, sodium alginate and xanthan) preload leads to reduced subsequent food intake, in terms of both gram weight and calories, in healthy weight adolescents.