

**Obesimed® Forte - Sood N, Baker WL, Coleman CI. Effect of glucomannan on plasma lipid and glucose concentrations, body weight, and blood pressure: systematic review and meta-analysis. Am J Clin Nutr. 2008 Oct; 88(4):1167-75.**

Authors (year published)	Study design	Total patients	Intervention	Reported outcomes/results	Adverse events	Appraisal	Level
Sood N, et al., 2008	A systematic review meta-analysis of 14 RCT.	531	Glucomannan 3-10 g daily	Glucomannan significantly lowered total cholesterol and body weight.	Reported	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 or placebo for 8–16 w.	Yes	Yes. A total of 14 randomized controlled trials (n=531).	Safety and efficacy data obtained on all patients	Yes-power analysis performed.	Glucomannan appeared to statistically significantly lower total cholesterol, LDL-C, triglycerides, and weight.	Statistical tests appropriately used can have confidence in results.	Efficacy and safety both considered.

**Synopsis - Sood N, Baker WL, Coleman CI. Effect of glucomannan on plasma lipid and glucose concentrations, body weight, and blood pressure: systematic review and meta-analysis. Am J Clin Nutr. 2008 Oct; 88(4):1167-75.**

Aim: to better characterize glucomannan's impact on plasma lipids, body weight and blood pressure.

Study design: a systematic literature search

Subjects: 531 patients having at least one, if not, multiple, constituents of the metabolic syndrome, including type 2 diabetes mellitus or impaired glucose tolerance, hyperlipidemia, hypertension, or obesity. The dosage range of glucomannan ranged from 1,2 to 15,1 g/d and were administered in various forms, such as capsules, tablets, bars, biscuits, and refined konjac meal for 3-16 weeks.

Results: the use of glucomannan significantly lowered total cholesterol [weighted mean difference (WMD): -19.28 mg/dL; 95% CI: -24.30, -14.26], LDL cholesterol (WMD: 15.99 mg/dL; 95% CI: 21.31, -10.67), triglycerides (WMD: 11.08 mg/dL; 95% CI: -22.07, -0.09), body weight (WMD: -0.79 kg; 95% CI: -1.53, -0.05) and fasting blood glucose (WMD: -7.44 mg/dL; 95% CI: -14.16, -0.72). In studies lasting a mean of 5,2 weeks, the meta-analysis found that there was a statistically significant but small reduction in weight of 1,74 lb (~1%) with glucomannan. Pediatric patients, patients receiving dietary modification, and patients with impaired glucose metabolism did not benefit from glucomannan to the same degree.

Authors' conclusion: glucomannan appears to beneficially affect total cholesterol, LDL cholesterol, triglycerides, body weight, and fasting blood glucose, but not HDL cholesterol or blood pressure.