

PGX[®] (PolyGlycopleX[®]) is a unique high-viscosity functional fibre complex that has been proven safe and lowers cholesterol compared to placebo.

Carabin IG, Lyon MR, Wood S, Pelletier X, Donazzolo Y, Burdock GA.
Supplementation of the diet with the functional fiber PolyGlycopleX[®] is well-tolerated by healthy subjects in a clinical trial. *Nutrition Journal* 2009, 8:9

The beneficial effects and strong safety profile of PGX[®] (PolyGlycopleX[®]) were confirmed in this randomized, double-blind, placebo-controlled clinical study conducted in France. The purpose of the study was to evaluate gastrointestinal (GI) tolerance to PGX[®] ingestion when taken for 21 days, to a maximum dose level of 10 g per day, in healthy adults, as part of a low-fibre diet. PolyGlycopleX[®] (α -D-glucurono- α -D-manno- β -D-manno- β -D-gluco), (α -L-gulurono- β -D mannurono), β -D-gluco- β -D-mannan; (PGX[®]); Inovobiologic Inc, Calgary, Canada) is a novel functional fibre complex manufactured by a proprietary process (EnviroSimplex[®]) from three dietary fibres to form a highly viscous polysaccharide with high water-holding and gel-forming properties. The proprietary process causes strong interactions between these three fibres to produce a polysaccharide complex with a level of viscosity that is higher than any currently known individual polysaccharide. This study examined the effects of ingesting PGX[®] or a control product (skim milk powder) in 54 healthy male and female adults, ages 18-55. Subjects ingested 2.5 g of PGX[®] or control product twice daily for 7 days followed by 5 g twice daily for 14 days. Skim milk powder was selected as the control product because of its similar colour and texture to PGX[®]. The PGX[®] and control product were pre-mixed with a commercially available cereal and then packaged together with plain yogurt in ready-to-use containers. Subjects completed a self-evaluation of GI symptoms throughout the study and underwent a physical and extensive clinical evaluation at the beginning of the study, and after 1 and 2 weeks. Both groups reported mild GI side effects, such as flatulence, bloating, abdominal distension and rumbling. Similar effects are reported with fruit and vegetable consumption, as well as dietary fibre intake.

Subjects consuming PGX[®] were found to have statistically significant decreases in total cholesterol (14%) and LDL cholesterol (17%) after 1 to 2 weeks, and a significant decrease in uric acid levels after 1 week. The negative health effects of high cholesterol are well known, while elevated uric acid levels are associated with gout, hypertension, cardiovascular disease and metabolic syndrome. While the current study established GI tolerance to daily PGX[®] use, the potent cholesterol-lowering effects of PGX[®] were most impressive since significant decreases in total and LDL cholesterol occurred after only 1 week of low to modest consumption.

The authors conclude that PGX[®] is a safe source of functional fibre that is well tolerated and can help users to increase their overall fibre intake while lowering total and LDL cholesterol significantly. PGX[®] can be used in supplement form or with food to maintain healthy levels of total and LDL cholesterol, as well as uric acid.