

## The clinical impact of fiber supplementation on cardio-vascular risk parameters in type 2 diabetes

Peter J.E. Verdegem, Ph.D.<sup>2</sup>, Steven H. Freed<sup>1</sup>, R.Ph., David J. Joffe<sup>1</sup>, R.Ph.,  
CDE, FACA

<sup>1</sup>DiabetesInControl.com, <sup>2</sup>Unicity International, Orem, UT

**Introduction.** Fiber supplementation, in particular of the soluble kind, has known beneficial effects in lowering the cardio-vascular risk profile by lowering serum cholesterol. It is thought that bile-acid sequestration of cholesterol in the digestive system is the main mechanism for cholesterol reduction. This study investigates the efficacy of BiosLife 2, a fiber supplement combining soluble and insoluble fiber, that has been specifically designed for cholesterol lowering.

**Methods.** This study included 78 type 2 diabetes patients with an average age of 59. At baseline, total cholesterol, triglycerides, LDL, and HDL were assessed. The subjects then added 10 - 15 gram of the fiber supplement to their diet for 90 days. At the final visit, the parameters were re-assessed. The fiber supplement is taken as a drink, and consists of guar gum, gum arabic, locust bean gum, pectin, and oat fiber dispersed in calcium carbonate. In addition this product contained chromium, and B-vitamins. Five grams were taken 2 - 3 times daily 5 -10 minutes prior to eating.

**Results.** The compliance with the fiber supplementation was excellent. The supplementation with fiber resulted in beneficial changes to the assessed parameters. The changes are listed in the table.

**Conclusion.** Supplementing the diet with this fiber drink to a level as recommended by the American Heart Association has clear beneficial effects on the lipid profile of type 2 diabetics. This specially designed fiber supplement has promising effects as an alternative treatment to pharmaceutical intervention for hyperlipidemia.

<i>Parameter</i>	<i>Baseline average</i>	<i>90-day average</i>	<i>% change</i>
Total cholesterol	215 mg/dL	184	-14.4
Triglycerides	299 mg/dL	257	-14.0
LDL	129 mg/dL	92	-28.7
HDL	43 mg/dL	55	+21.8