# Betaglucare

#### Betaglucare is self-care product for managing cholesterol and blood glucose levels, supported by extensive clinical science.

Made from Scandinavian oats, Betaglucare is rich in high molecular weight beta-glucans.

#### **Beta-glucans can:**

- Lower cholesterol levels, by binding to bile to reduce cholesterol reabsorption
- Reduce post-prandial blood glucose 0 levels by slowing down the digestion of carbohydrate in a meal

#### What makes Betaglucare different from oats?

Betaglucare is a concentrated source of beta-glucan, the soluble fibre found in oats. Beta-glucan forms a highly viscous gel when consumed along with liquid. It's this viscosity that directly influences its efficacy in both reducing cholesterol re-absorption and in delaying the uptake of carbohydrates when consumed along with meals.

Oats versus Betaglucare - what's the difference?

#### Betaglucare<sup>®</sup>

The higher quality of the oat, the thicker the gel becomes .It's this viscosity or thickness of the gel that influences the effect. The gel binds with bile acid in the small intestine. This has the effect of reducing cholesterol. The gel creates a layer on the intestinal wall to delay the uptake of carbohydrates. The result is a lowered blood glucose curve after meals



Breakfast Oats



Betaglucare

Betaglucare is also made from Scandinavian oats containing high molecular weight (MW) beta-glucan. Studies have shown that high MW beta-glucans are more effective

for cholesterol lowering compared with lower MW betaglucans.

Finally, the starch content of Betaglucare is around 10%, compared to 70% in oats, and the product has a very low glycemic index (GI<10).

# Does Betaglucare have any side effects?

Some people may experience mild bloating and increased regularity because of the high fibre content (5.9g per serve for hearts and 6.2g per serve for powder). Any symptoms are usually mild and diminish within a week with adequate fluid intake. They can then increase their daily portions gradually until they reach a full sachet.

#### **Does Betaglucare interact with** medications?

There are no known interactions with medications.

## **Does Betaglucare replace medications?**

No but Betaglucare may be consumed either to complement medications, or as a possible alternative to medications for those with borderline or mildly elevated blood glucose levels or blood lipids. Any changes to medications should be made in consultation with a medical professional.

# How should Betaglucare be consumed?

For cholesterol lowering: 1 sachet of crisp hearts eaten with milk or yoghurt and fruit or 1 sachet of powder made into a fruit smoothie for breakfast.

For blood glucose lowering: 1 sachet of powder consumed as a drink immediately before or with a meal.

#### Where can Betaglucare be purchased and what is the cost?

Betaglucare can be purchased through pharmacies or online at www.betaglucare.com.au/shop

The RRP for a 4 week supply (28 daily sachets) is \$39 or \$1.40 per daily sachet.

## **Nutrition information**

Both the oat hearts and powder are 100% oatbran.

Per serving	Oat Hearts	Powder
Energy (kJ)	367	176
Protein (g)	5.1	2.8
Total Carbohydrate (g)	11.5	3.1
Sugars (g)	0.4	0
Total Fat (g)	1.0	0.7
Saturated Fat (g)	0.2	0.1
Unsaturated Fat (g)	0.9	0
Dietary Fibre (g)	5.9	6.2
Beta-glucan (g)	3.0	3.0
Sodium (mg)	0	0

### **Beta-glucans and cholesterol lowering**

Beta-glucans reduce LDL cholesterol by binding with bile to reduce cholesterol re-absorption.

Research has shown mean reductions in LDL cholesterol of  $4.2-6.0\%^{1,2}$ . However, greater reductions are seen with the use of at least 3g of beta-glucans per day, in those with higher initial cholesterol levels and with the use of higher molecular weight beta-glucans<sup>1,2</sup>.

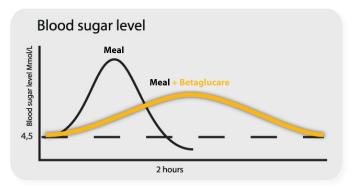
For example, Ho et al. found that the reduction in LDL cholesterol was double in trials using 3g or more of beta-glucans compared with those using less than 3g<sup>2</sup> while Wolever et al. found that low molecular weight beta-glucans were 50% less effective than high or medium weight beta-glucans for cholesterol lowering<sup>3</sup>.

There is also some evidence that the cholesterol lowering effect of oat beta-glucans is greater in those with type 2 diabetes than those without<sup>1</sup>.

# Beta-glucans and blood glucose management

When consumed before or with a meal, beta-glucans reduce post-prandial blood glucose peaks by slowing the digestion of carbohydrate from the meal. Research has shown significant reductions in post-prandial glucose with oat or barley products containing at least 4g beta-glucans, consumed with meals containing 30-80g carbohydrate<sup>4</sup>.

Smaller doses (2.5-3.5g/day) consumed over 3-8 weeks have been shown to reduce fasting blood glucose levels by 0.52mmol/L and HbA1c by  $0.21\%^5$ .



#### References

- 1. Whitehead A et al. Cholesterol-lowering effects of oat betaglucan: a meta-analysis of randomized controlled trials. Am J Clin Nutr. 2014 Dec;100(6):1413-21.
- 2. Ho et al. The effect of oat  $\beta$ -glucan on LDL-cholesterol, non-HDL-cholesterol and apoB for CVD risk reduction: a systematic review and meta-analysis of randomised-controlled trials. Br J Nutr. 2016 Oct;116(8):1369-1382.
- 3. Wolever et al. Physiochemical properties of oat beta-glucan influence its abilitiy to reduce serum LDL cholesterol in humans: a randomised clinical trial. Am J Clin Nutr 2010:92: 723 – 32.
- 4. Tosh et al. Review of human studies investigating the post-prandial blood-glucose lowering ability of oat and barley food productsEur J Clin Nutr. 2013 Apr;67(4):310-7.
- 5. Shen et al. Effect of Oat  $\beta$ -Glucan Intake on Glycaemic Control and Insulin Sensitivity of Diabetic Patients: A Meta-Analysis of Randomized Controlled Trials. Nutrients. 2016 Jan; 8(1): 39.



#### For more information

To find out more about Betaglucare including research articles on beta-glucans visit **www.betaglucare.com.au**/ **healthcare-professionals**/

#### **Complimentary Healthcare Kits**

To order your Healthcare Professionals Pack or Pharmacy Training and Sample Pack visit www.betaglucare.com.au/healthcareprofessionals/ or email betaglucare@gatewaybrands.com.au



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