

POLYPHENOL WORKS!

Polyphenols are a group of natural substances found in plants and fruits, giving them colours while protecting them from diseases. They play vital roles in maintaining your health and wellness, protecting the cells in your body from free radical damage including **maintaining healthy blood glucose levels.**

Did You Know?

Polyphenols are found most abundantly in dark coloured plants such as grapes and elderberry. They are concentrated in the seeds and skins of the fruits.

Maintain Healthy **Blood Glucose Levels**

Your blood glucose levels depend on what and how much you eat, as well as how effectively your body produces and uses insulin, which transports glucose into your cells. The healthier your blood glucose levels are, the lower your risk of developing metabolic syndrome diseases such as diabetes.

Recent clinical studies suggest that polyphenols may have the potential in maintaining **healthy glucose levels** by:

- ✓ **Regulating** glucose absorption.^{1,2}
- ✓ **Increasing** insulin sensitivity.³
- ✓ **Stimulating** early insulin secretion.^{4,5}
- ✓ **Improving** glucose breakdown.^{5,6}



Here's
the
proof!

Check out how polyphenols help maintain healthy blood glucose.

1. Pandey KB and Rizvi SI. 2009. Plant polyphenols as dietary antioxidants in human health and diseases. *Oxid Med Cell Longev*. Nov-Dec; 2(5): 270-278.
2. Williamson G. 2013. Possible effects of dietary polyphenols on sugar absorption and digestion. *Mol Nutr Food Res*. Jan; 57(1):48-57.
3. Akpene EB et al. 2006. Muscadine grape products intake, diet and blood constituents of non-diabetic and type 2 diabetic subjects. *Nutrition Journal*. Vol 22, Issues 11-12, Pages 1137-1145
4. Nyambe SH and Williamson G. 2016. Polyphenol and fiber-rich dried fruits with green tea attenuate starch-derived postprandial blood glucose and insulin: a randomized, controlled, single blind, cross-over intervention. *Br J Nutr* 116(3):443-50.
5. Bozetto L et al. 2015. Polyphenol-rich diets improve glucose metabolism in people at high cardiometabolic risk: a controlled randomized intervention trial. *Diabetologia* Jul;58(7):1551-60
6. Kati H et al. 2010. Impact of dietary polyphenols on carbohydrate metabolism. *Int J Mol Sci*. 11(4), 1365-1402.