

EQUIGLUC



Introduction:

Equigluc™ is a dry extract of apple containing 50% of phlorizin.

Phlorizin is an apple glucoside that is able to limit physiologically glucose post-prandial reabsorption.

The mechanism of its antidiabetic effect has been known as it can competitively inhibit sodium-glucose symporters (SGLTs) and gut microbiota changes. It acts in the intestine to modify gut microbial community structure, resulting in lower LPS load in the host and higher SCFAs producing beneficial bacteria.

Phlorizin also has anti-obesity effect.

It has been shown that it suppresses plasma pro-inflammatory adipokines levels such as leptin, adipon, tumor necrosis factor- α , monocyte chemoattractant protein-1, interferon- γ , and interleukin-6, and prevents HFD-induced collagen accumulation in the liver and WAT. Furthermore, phlorizin supplementation also decreases plasma glucose, insulin, glucagon, and homeostasis model assessment of insulin resistance levels.

Applications:

- Prevents diet-induced obesity

- Antidiabetic properties
- Prevents hepatic steatosis
- Prevents inflammation, and fibrosis
- Prevents insulin resistance

Dosages:

400 mg of Epigluc™ containing 50% of Phlorizin.

Bibliography:

Mei X, Zhang X, Wang Z, Gao Z, Liu G, Hu H, Zou L, Li X. Insulin Sensitivity-Enhancing Activity of Phlorizin Is Associated with Lipopolysaccharide Decrease and Gut Microbiota Changes in Obese and Type 2 Diabetes (db/db) Mice. *J Agric Food Chem.* 2016 Oct 12;64(40):7502-7511. doi: 10.1021/acs.jafc.6b03474.

Shin SK, Cho SJ, Jung UJ, Ryu R, Choi MS. Phlorizin Supplementation Attenuates Obesity, Inflammation, and Hyperglycemia in Diet-Induced Obese Mice Fed a High-Fat Diet. *Nutrients.* 2016 Feb 16;8(2):92. doi: 10.3390/nu8020092. PMID: 26891322; PMCID: PMC4772055.

Mei X, Zhang X, Wang Z, Gao Z, Liu G, Hu H, Zou L, Li X. Insulin Sensitivity-Enhancing Activity of Phlorizin Is Associated with Lipopolysaccharide Decrease and Gut Microbiota Changes in Obese and Type 2 Diabetes (db/db) Mice. *J Agric Food Chem.* 2016 Oct 12;64(40):7502-7511. doi: 10.1021/acs.jafc.6b03474. Epub 2016 Sep 27. PMID: 27635781.