Birchula™

Birch Bark Extract For Obesity and Diabetes Management

A growing body of scientific evidence has shown, birch extracts impact many of the same pathologic mechanisms being targeted by pharmaceutical approaches, such as GLP-1 agonists (semaglutide), DPP-4 inhibitors (sitagliptin) and PTP1B inhibitors (ertiprotafib). Birch extract could support and enhance complementary GLP-1 therapies. The well-established safety profile of birch bark extract suggests that it may have fewer side effects by itself or in combination with other therapies.

Scientifically proven benefits of birch bark extract to manage obesity and blood sugar levels

- Triggers the release of GLP-1 BA
- Improves sensitivity to leptin, an anti-obesity hormone BA
- Restricts fatty acid uptake from food BA
- Impedes the breakdown of complex carbohydrates into simple sugars BA
- Stimulates glucose uptake by muscle cells B
- Reduces the risk of atherosclerosis B, BA, BBE
- Reduces atherosclerotic plaque formation B, BA

(B) Betulin, (BA) betulinic acid, (L) lupeol, (BBE) birch bark extract

- Birchula™ Birch Bark Extract comes from the outer bark of the North American birch tree (Betula Papyrifera)
- Upcycled from the waste bark of the paper and timber industries, not peeled from live trees.
- Obtained from sustainably harvested and managed forests certified through the Sustainable Forestry Initiative (SFI)
- Proprietary technology for safe cGMP processing
- Identity preserved – Can trace the supply chain back to when the tree was harvested

Birchula™ birch bark extract contains highly effective triterpenes, Betulin, Betulinic Acid, Betulin Caffeates, and lupeol. These compounds are scientifically proven to reduce inflammation, improve cardiometabolic health, reduce cholesterol, improve glucose uptake and control blood sugar.

There is a distressing worldwide rise in the incidence obesity, Type 2 diabetes and associated disease. There is compelling evidence that the triterpenes betulin, betulinic acid, and lupeol found in birch bark have beneficial effects on obesity, carbohydrate and lipid metabolism, as well as insulin function. dyslipidemia, and heart disease.

Research and methods of action

Positive Impact of Birch Bark Triterpenes on Carbohydrate Metabolism

- Betulinic Acid inhibits PTP1B improving sensitivity to leptin, an anti-obesity hormone.(1)
- Betulinic acid promotes energy expenditure by triggering the release of GLP-1 (10,11)
- Betulin stimulates glucose uptake at about 20% of the effect of Insulin. (12)
- Betulinic Acid impedes the breakdown of complex carbohydrates into simple sugars (12,13)

Birch bark triterpenes effect lipid metabolism and modification

- Betulinic Acid restricts fatty acid uptake from food(2)
- Lupeol inhibits the fatty acid synthase enzyme(3)
- Betulinic Acid promotes lipid breakdown by inhibiting cAMP-dependent phosphodiesterase (4)
- Betulin and Betulinic Acid inhibits sterol regulatory element binding proteins (SREBP) improving hyperlipidemia. insulin resistance and reducing atherosclerotic plaque. (5,6)
- Betulinic acid promotes the efflux of lipid from these foam cells reducing the risk of atherosclerosis (7)
- Birch bark triterpenes inhibit the oxidation of “bad” low-density lipoprotein to form oxLDL (8), which contributes to atherosclerotic plaque formation (9)

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The Actives Factory is a manufacturer of natural extracts and high purity compounds from the North American White Birch for nutraceutical, cosmeceutical, and pharmaceutical use.