



## *Berberine: natural metformin from barberries*

### *What is Berberine?*

Berberine is a natural active ingredient named after the plants from which it was first extracted: Berberidaceae, or Barberry Family.

One of the most famous of these is the Barberry, also called sour thorn. Barberry, whose botanical name is *Berberis vulgaris*, is a shrub that produces small berries in which Berberine is found.

### *Why has it aroused the interest of scientists?*

These medicinal plants are traditionally used because of their effect against inflammation, diarrhea, parasites and bacteria.

Over the years and research, this natural active ingredient has shown many other



benefits, especially for the treatment of type 2 diabetes.

### *What is the link between berberine and metformin?*

Studies on berberine show that this natural active ingredient has an effect comparable to metformin.

This antidiabetic drug, which is used as a basic treatment for type 2 diabetes, has the same mode of action as berberine: an effect that lowers blood sugar. In other words, metformin and berberine both work to lower blood sugar levels, helping to avoid the over-

sugaring typical of type 2 diabetes.

Several studies have compared the efficacy of these two drugs and the results have shown the ability of berberine to lower blood sugar levels in patients with type 2 diabetes.

### *Anti-aging effect due to antioxidant*

Like many plant active ingredients, berberine acts as a natural antioxidant.

This means that it is able to counteract oxidative stress.

Due to a build-up of reactive radicals in the body, this phenomenon causes many cell damages. It is also involved in cell aging.

Due to its antioxidant properties, berberine can thus contribute to

physical defense, prevent certain diseases and have anti-aging effects.

### *Activity against diabetes*

As mentioned earlier, berberine shares the same effect that lowers blood sugar as metformin.

Studies show that it can lower blood sugar levels in several ways. Researchers have highlighted its effect on an enzyme involved in sugar metabolism: AMPK.

By activating this enzyme, berberine increases insulin sensitivity and promotes the uptake and utilization of glucose in the body.

According to some studies, it would also regulate "gluconeogenesis", a mechanism that leads to the formation of glucose in the liver.

Therefore, the various effects of berberine can lower blood glucose levels and act against hyperglycemia as in type 2 diabetes.

### *Lowering blood lipid levels*

Thanks to its activating effect on AMPK, berberine also seems to be able to improve lipid profile by lowering triglyceride and cholesterol levels in the blood.

### *How to choose the right dosage?*

To date, there is no recommended dosage for Berberine. According to current scientific data, the dosage seems to vary between 500 and 1500 mg per day, depending on the case.

Some studies suggest that this daily dose can be increased to up to 2000 mg per day in certain special cases for a short period of time and under medical supervision.

In any case, do not hesitate to seek the advice of a health expert to choose the best dietary supplement that is adapted to your needs.

### *Are there contraindications?*

So far, no major side effects have been found with the use of berberine.

After <https://www.supersmart.com/>