

## **Warning – high blood pressure: What role does magnesium play?**

**On the occasion of World Hypertension Day on May 17, 2020, experts from the German Society for Biofactors (GfB) point out the blood pressure-lowering effect of magnesium.**

### **Magnesium deficiency: Risk factor for heart and blood vessels**

The number of hypertension patients worldwide has increased alarmingly in recent years. In Germany, more than half of the people in the 60 and over age group suffer from high blood pressure – with fatal consequences for the heart and brain. This is because high blood pressure increases the risk of heart disease and strokes.

Diuretics are considered the standard method of treating high blood pressure. They remove water from the body and in this way reduce the pressure in the blood vessels. However, important minerals – especially **magnesium** – are also lost with the fluid. A vicious circle, as magnesium not only helps against the well-known nocturnal calf cramps<sup>1</sup>, but also plays an important role in the performance of the heart muscle. As a natural calcium antagonist, magnesium dilates the blood vessels and lowers the blood pressure, as well as being able to normalise the heart rate and protect heart muscle tissue.<sup>2</sup> Conversely, a **magnesium deficiency** can promote neuromuscular excitability, which increases the risk of high blood pressure, cardiac insufficiency and arrhythmias.<sup>3,4</sup>

### **When patients suffer from high blood pressure**

"Numerous studies show that magnesium substitution has a positive influence on high blood pressure.<sup>5</sup> The investigations prove that there is a lowering effect on both systolic and diastolic blood pressure," emphasised also Prof. Dr. med. Klaus Kisters, Chief Physician of Medical Clinic I at St. Anna Hospital in Herne and one of the scientific **experts of the German Society for Biofactors (GfB)** in this context.

### **Positive effect of magnesium therapy on high blood pressure and cardiac insufficiency**

When supplementing with magnesium, it should be borne in mind that organic compounds are better tolerated than inorganic compounds as a rule and are characterised by higher bioavailability.<sup>6,7</sup> "Scientific investigations<sup>8</sup> prove that the quality of life and life expectancy increase in patients with heart disease resulting from high blood pressure and heart failure when they receive oral therapy with magnesium orotate," explains the medical expert Prof. Kisters.

Magnesium deficiency in hypertension should therefore be avoided without fail in order to minimise further consequential damage and a

reduction in the patient's quality of life – this is the clear statement of the scientists from the German Society for Biofactors.

## Bibliography:

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