

BIOGENA STUDY

On top form with magnesium

The connection between magnesium supply, vitality and well-being

Magnesium is no. 1 when it comes to vital substances. People of all ages and in all life situations use the mineral on a regular basis. But do they also get a verifiable health benefit from it? The aim of this study was to determine whether the supply of magnesium influences the state of health, the vitality and the quality of life.

Background:

How does magnesium work and how does a lack of magnesium manifest itself?

Magnesium carries out a number of functions in the body and is required for the central metabolic processes. The mineral plays an important role in muscle activity, carries out vital tasks in the nervous system, supports the normal functioning of the brain, contributes to reducing tiredness and exhaustion and helps to maintain the electrolyte balance in the body. A lack of magnesium can manifest in muscle cramps and twitching, increased vulnerability to stress, sensitivity to noise and irritability, a lack of energy and drive, heart palpitations and tachycardia as well as digestive and blood pressure problems ⁽¹⁾. If the body is provided with sufficient magnesium through diet, either in the form of magnesium-rich foods, such as nuts, bananas, dried fruit or in a concentrated magnesium supplement, the magnesium is absorbed by the blood and is available to the cells for the seamless processes in the metabolism. An unbalanced diet, resorption disorders and intolerance all reduce the availability and absorption. Sport activities, stress, heavy sweating, medications, pregnancy and breast feeding increase requirements ⁽²⁾. Magnesium is required for almost all bodily functions and can directly and indirectly affect the health status of the individual. A sufficient magnesium status is desirable for health, fitness and well-being. In addition, an adequate supply of magnesium in the body guarantees the functionality of cells, should additional magnesium be required at short notice.

The study:

How does magnesium influence our quality of life?

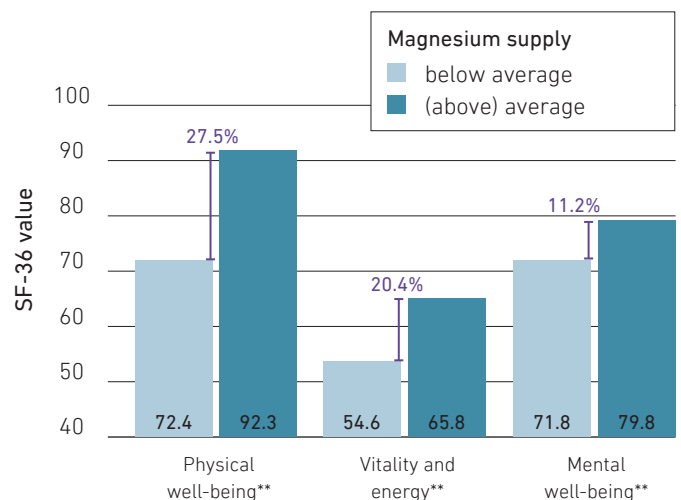
The aim of this study was to determine whether there is a statistical correlation between the amount of magnesium in the serum and the physical and mental well-being and vitality of an individual. The laboratory values of 81 people and their data from the SF-36 data entry form were statistically evaluated ⁽³⁾. The magnesium analysis was carried out on the whole blood, in order to be able to record both the plasma as well as the red blood cell magnesium. This is important since more than 70% of magnesium is found in the red blood cells ⁽⁴⁾. SF-36 is an internationally used, standardised data entry form in which health, emotional, physical and social functions are recorded and which enables conclusions to be drawn about

quality of life and well-being. It also allows a comparison between different groups. Higher values in the SF-36 represent a better health status.

The result:

The well-supplied fare better

The evaluation of the data provided clear and unequivocal results. People with an (above-)average magnesium supply achieve better results than those whose supply is below average. A sufficient magnesium level was related to higher values in all the health categories recorded than a low magnesium level. Thus the group with a better supply achieved 92.3 points for physical well-being, for example, whereas the group with an inadequate supply only achieved 72.4 points. The difference between both groups is 27.5%. In the case of physical well-being, those with a good supply led the field again with 79.8 points, whereas those with a poor supply only achieved 71.8 points, which makes a difference of 11.2%. There were significant differences when it came to vitality and energy. Those with a high magnesium level achieved 65.8 points, but those with low magnesium levels only achieved 54.6 points. The well supplied group had a 20.4% higher value for vitality and energy (Fig.).



** Statistically highly significant difference (p<0.01)

Fig.: The mental and physical well-being as well as vitality and energy of the participants with an inadequate supply of magnesium (n=42) was clearly lower than that of those with an above-(average) supply (n=39), who achieved higher values in all areas. The SF-36 data entry form was used for this.

Conclusion:

Magnesium and vitality go hand in hand

The data that was collected and analysed by Biogena was published in the specialist journal *Trace Elements and Electrolytes* proving for the first time the statistically significant connection between magnesium levels and the individual's personal assessment of their health status.⁽³⁾

For example, there is a highly significant positive relationship between magnesium supply and well-being and vitality.

The higher the magnesium level, the better the person feels and the higher their level of vitality. Accordingly, the lower the magnesium status, the worse a person feels.

The results of the study explain the popularity of the mineral substance and the satisfaction of magnesium users. Every cell in the body requires magnesium. For this reason, all the organs and bodily systems benefit from its effects. The numerous magnesium users are right: **A good magnesium status helps to keep the body in tip-top condition.**

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Literature:

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- ³⁾ Viebahn, I. et al. 2015. Magnesium status correlates with health and quality of life. *Trace Elem Electrolyt.* doi: 10.5414/TEX01420.
- ⁴⁾ Martin, M. (Ed.). 2006. Labormedizin in der Naturheilkunde. Urban & Fischer Verlag/Elsevier GmbH. 3. Edition.

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