

Magnesium in Insomnia, Depression and Excess Stress

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The best-known symptoms of magnesium deficiency are symptoms in the form of muscle cramps (calves, tension) and cardiovascular disorders. In pregnant women, calf cramps and premature labour may be an indication of a deficiency. Just as often, however, psychological problems are also found, such as listlessness, restlessness, irritability, lack of concentration, sensitivity to noises, rapid fatigability, sleep disturbances, depression and confusion. In view of this diversity of symptoms, Professor Fehlinger (1943 - 2005) called the magnesium deficiency spectrum "Tetanic Syndrome".

Since the 1970s, the stress-shielding effect of magnesium in experimental and farm animals, as well as in humans, has been known; this results from attenuation of the pituitary-adrenal axis, which under the influence of stress is over activated. Magnesium has been the subject of particular interest, however, as a natural antagonist ("blocker") of the NMDA receptor, which is named according to its chemical stimulator, **N-Methyl-D-Aspartate**. This NMDA receptor is also inhibited by medications which are used in psychiatry (imipramine = Tofranil^R) or in anaesthesiology (ketamine). As a consequence, magnesium is being increasingly used in the treatment of difficulties falling and remaining asleep, and as co-medication in depression (e.g. in senior citizens with diabetes) and in anaesthesiology, especially in cases of confirmed magnesium deficiency.

Hypomagnesaemia, i.e. serum concentrations of less than 0.76 mmol per litre or suboptimal levels below 0.80 mmol of magnesium per litre are frequently encountered, i.e. in 14.5% of the overall population, and significantly more frequently in the elderly, after the intake of diuretics ("water tablets") and among diabetics. This group of individuals benefits in particular from magnesium supplements. Particularly recommended is the magnesium salt of orotic acid, i.e. magnesium orotate. Orotic acid occurs naturally in milk (whey = oros) and forms part of all living nucleated cells. It has been possible to show in experiments that orotic acid has favourable effects on memory formation and repair processes in the brain, as it stimulates pyrimidine synthesis.

Based on these considerations, magnesium orotate is also indicated in the disorders referred to in the title, whereby the substance should be taken for at least 2 to 3 weeks.

References

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