

Magnesium protects against the adverse effects of high calcium doses

By Prof. Hans-Georg Classen

Anyone who takes calcium preparations, e.g. for the prevention of osteoporosis, should make certain that they have a sufficient intake of magnesium. This is according to information provided by the Society for Biofactors. In the opinion of the scientists, this is an important precondition for avoiding the undesirable consequences of high calcium doses.

Only recently, studies performed by the working group under Bolland et al. from Auckland (New Zealand) have aroused a great deal of interest. They showed that there is a suspicion that postmenopausal women who take calcium products to prevent osteoporosis have an increased risk of a heart attack (BMJ 2008; 336:262-6; BMJ 2010: 341::c3856). Although other studies, including those from the USA by LaCroix et al. (J. Gerontol. a. Biol. Sci. Med. Sci. 2009; 64: 559-67) and from London (Shah et al. Pharmacoepidemiol. Drug Saf. 2010; 19: 59-64) have not been able to confirm this suspicion, the Society for Biofactors points out that high oral calcium doses exacerbate any existing magnesium deficiency. In this manner it might trigger undesirable reactions, such as an increased risk of cardiovascular diseases. The experts refer to the American magnesium expert Mildred Seelig (1920-2005). She stressed that rats, dogs and calves which were fed low magnesium and very high calcium concentrations, the development of cardiac necrosis and vascular calcification was found. These changes could be prevented by increasing the intake of magnesium. (MS Seelig: Magnesium Deficiency in the Pathogenesis of Disease. Plenum Med. Book Comp., New York/London. 1980: 169-170).

On the basis of these findings, the Society for Biofactors recommends that people taking oral calcium supplements should also ensure that they have a sufficient supply of magnesium. As the intake of magnesium is frequently borderline or insufficient in normal dietary habits, additional preparations are recommended.

It should also be noted that with the simultaneous administration of magnesium, the absorption of calcium from the intestine is not inhibited.