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BfR assesses recommended maximum daily level for intake of magnesium via food supplements

BfR Opinion No 034/2017, 12 December 2017

Magnesium is a common element in the earth's crust as well as in the human body, and it is an essential mineral for humans. It plays an important role in many metabolic processes as well as in the formation of nucleic acids, in bone mineralisation, membrane physiology, neuromuscular signal transmission and muscle contraction. The German Federal Institute for Risk Assessment (BfR) has now updated its health assessment on the use of magnesium in food supplements from the year 2004.

The increased intake of magnesium via such products as food supplements in addition to the magnesium ingested through a person's normal diet can lead to diarrhoea. The BfR therefore recommends that the maximum daily intake of magnesium via food supplements should not exceed 250 mg. This maximum daily intake level applies to individuals from the age of four upwards. Due to a lack of data, it is not possible to derive a maximum daily level for children below the age of four. The BfR recommends that the daily dose be divided between at least two intakes per day, as most studies used to derive the maximum level spread the magnesium intake over two or more portions a day, and it is likely that this improves tolerability.

The BfR would like to point out that the best nutritional strategy basically involves a balanced and varied diet with plenty of fruit and vegetables and that such a diet supplies a healthy body with all essential substances. In most cases, therefore, food supplements are superfluous.

The full version of this BfR opinion is available in German on <http://www.bfr.bund.de/cm/343/bfr-bewertet-empfohlene-tageshoechstmenge-fuer-die-aufnahme-von-magnesium-ueber-nahrungsergaenzungsmittel.pdf>

More information on the subject of magnesium in food supplements on the BfR website:

Press release on magnesium in food supplements

http://www.bfr.bund.de/en/press_information/2017/50/bfr_assesses_maximum_daily_level_for_magnesium_in_food_supplements-202892.html

Verwendung von Mineralstoffen in Lebensmitteln (in German only), BfR-Wissenschaft, 4/2004,

http://www.bfr.bund.de/cm/350/verwendung_von_mineralstoffen_in_lebensmitteln_bfr_wissenschaft_4_2004.pdf

Frequently Asked Questions on Food Supplements, 1st February 2008,

http://www.bfr.bund.de/en/frequently_asked_questions_on_food_supplements-70347.html



„Stellungnahmen-App“ des BfR

This text version is a translation of the original German text which is the only legally binding version.

About the BfR

The German Federal Institute for Risk Assessment (BfR) is an independent scientific research institution within the portfolio of the Federal Ministry of Food and Agriculture (BMEL). It advises the Federal Government and Federal Laender on questions of food, chemical and product safety. The BfR conducts its own research on topics that are closely linked to its assessment tasks.