

## SCIENTIFIC OPINION

**Scientific Opinion on the substantiation of a health claim related to glucosamine and maintenance of normal joint cartilage pursuant to Article 13(5) of Regulation (EC) No 1924/2006<sup>1</sup>****EFSA Panel on Dietetic Products, Nutrition and Allergies (NDA)<sup>2,3</sup>**

European Food Safety Authority (EFSA), Parma, Italy

**ABSTRACT**

Following an application from Merck Consumer Healthcare, submitted pursuant to Article 13(5) of Regulation (EC) No 1924/2006 via the Competent Authority of Belgium, the Panel on Dietetic Products, Nutrition and Allergies was asked to deliver an opinion on the scientific substantiation of a health claim related to glucosamine, formulated as glucosamine sulphate or hydrochloride, and maintenance of normal joint cartilage. Glucosamine is sufficiently characterised. The claimed effect is “contributes to the maintenance of normal joint cartilage”. The target population as proposed by the applicant is the general population, and in particular people exposing their joints to high mechanical load and people with joint cartilage deterioration due to normal ageing. The Panel considers that the maintenance of normal joint cartilage is a beneficial physiological effect. The applicant provided references to studies in patients with osteoarthritis, in healthy subjects, in animals and *in vitro* as being pertinent to the health claim. In weighing the evidence, the Panel took into account that no human studies were provided from which conclusions could be drawn on the effect of dietary glucosamine on the maintenance of cartilage in individuals without osteoarthritis, and that the evidence provided in the *in vitro* and animal studies in support of the biological plausibility for a possible contribution of dietary glucosamine to the maintenance of joint cartilage in humans is weak. The Panel concludes that a cause and effect relationship has not been established between the consumption of glucosamine and maintenance of normal joint cartilage in individuals without osteoarthritis. © European Food Safety Authority, 2012

**KEY WORDS**

Glucosamine, joints, cartilage, health claims

*\* velja za glukozamin prehransko dopolnilo*

<sup>1</sup> On request from the Competent Authority of Belgium following an application by Merck Consumer HealthCare, Question No EFSA-Q-2011-01113, adopted on 25 April 2012.

<sup>2</sup> Panel members: Carlo Agostoni, Jean-Louis Bresson, Susan Fairweather-Tait, Albert Flynn, Ines Golly, Hannu Korhonen, Pagona Lagiou, Martinus Løvik, Rosangela Marchelli, Ambroise Martin, Bevan Moseley, Monika Neuhäuser-Berthold, Hildegard Przyrembel, Seppo Salminen, Yolanda Sanz, Sean (J.J.) Strain, Stephan Strobel, Inge Tetens, Daniel Tomé, Hendrik van Loveren and Hans Verhagen. One member of the Panel did not participate in the discussion on the subject referred to above because of potential conflicts of interest identified in accordance with the EFSA policy on declarations of interests. Correspondence: [nda@efsa.europa.eu](mailto:nda@efsa.europa.eu)

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