

## **The intake of nicotinic acid in excessive dosage can have damaging health effects**

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Nicotinic acid (pyridine 3-carboxylic acid) and nicotinamide or nicotinic acid amide (pyridine 3-carboxylic acid amide) are classified as belonging to the vitamin B complex. In Europe, the term niacin covers both substances. This is not the case in the USA where niacin chiefly denotes nicotinic acid. Nicotinic acid and nicotinamide are used to form certain coenzymes in the body. The human body itself is capable of synthesising nicotinic acid and nicotinamide from the essential amino acid tryptophan. At the same time, however, niacin is contained in a number of foods. The German Nutrition Society recommends a daily niacin intake of between 13 and 18 mg for adults. Given the typical diet in Germany, this intake level is now far exceeded, meaning that niacin intake is sufficient.

If nicotinic acid is additionally taken in high dosage, this can lead to various health problems. Typical symptoms include reddening of facial skin and on the neck and arms, sensation of heat, and nettle rash with very itchy wheals and itchy skin, often referred to as flushing symptoms. Nonetheless, even further dosage increases up to several grams of nicotinic acid have been reported. This can lead to diarrhoea, nausea and vomiting and even cause jaundice and liver damage.

In the opinion of the Federal Institute for Risk Assessment (BfR), consumers should therefore refrain from taking products, marketed as food supplement, that contain nicotinic acid in such excessive doses. The Institute considers nicotinic acid products with intake recommendations of up to several grams per day as unsafe foods. This recommendation does not apply to the known use of nicotinic acid as an active ingredient in certain pharmaceutical drugs for the treatment of various metabolic disorders under medical supervision.

The full version of this BfR Opinion is available in German on <http://www.bfr.bund.de/cm/343/die-einnahme-von-nicotinsaeure-in-ueberhoehter-dosierung-kann-die-gesundheit-schaedigen.pdf>