Assessment of candy sprays with high citric acid content

BfR opinion No. 15/2012, 14 July 2011

Candy sprays are a type of confectionary sold in pump sprays and sprayed directly into the mouth. To achieve a particularly sour taste, candy sprays typically have a high citric acid content.

The BfR has assessed the health risks potentially arising from the consumption of such products. The BfR notably regards candy sprays as problematic which are high in citric acid. High citric acid contents can, for example, lead to irritations of the mucous membrane in the mouth and may cause breathing difficulties and damage to teeth.

Additionally, the BfR is critical of the use of such products as a spray, because candy sprays may – either inadvertently or deliberately – be inhaled or sprayed into the eyes. Another potential misuse of is the removal of the spray head for the purpose of drinking the product.

The effects of the citric acid on the skin, mucosa, eyes and enamel depend on the acid’s concentration, the pH value of the product, as well as duration and frequency of use. However, on the basis of the available data, no citric acid content can be defined up to which the acid is safe to use. Given the misuses to be expected and against the background that children are the main user group, the BfR therefore rates the products as an unsafe food overall.

In the view of the BfR, options for improving consumer protection include: labelling of products with additional warnings, equipping the packaging with a mechanism that stops consumers screwing or twisting off the spray head, and limiting the content of citric acid approximately to the level contained in lemon juice (i.e. a maximum of 7%).

The full version of this BfR Opinion is available in German on http://www.bfr.bund.de/cm/343/bewertung-von-candy-sprays-mit-erhoehtem-zitronensaeuregehalt.pdf