

No health risk from traces of nicotine in chicken eggs

Updated BfR Health Assessment No. 006/2008, 7 April 2006

Nicotine is a strong toxin and the main alkaloid of the tobacco plant. This substance is found in tobacco smoke and is used as a medicinal component in nicotine gum and nicotine patches to help people give up smoking. Low levels of nicotine occur naturally in nightshade plants like potatoes, tomatoes and aubergines but also in other plants like cauliflower. Nicotine can be produced synthetically, too.

In conjunction with nicotine traces in chicken eggs, the Federal Institute for Risk Assessment (BfR) has assessed the potential health risk to consumers from the consumption of eggs contaminated with nicotine. As the Institute does not have any concrete figures on nicotine levels in eggs, various exposure scenarios were calculated. BfR compared the estimated exposure to nicotine intake from foods like potatoes, which are consumed regularly, and passive smoking. The result: the temporary consumption of eggs with nicotine levels in the range of 3 to 300 µg nicotine per kilogram whole egg does not constitute a health risk for consumers. In principle, however, eggs may not contain any nicotine.

The full version of this BfR Opinion is available in German on http://www.bfr.bund.de/cm/208/keine_gesundheitsgefahr_durch_nikotinspuren_im_huehnerei .pdf