

Health assessment of ethephon residues in bell peppers

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Residues of the pesticide ethephon were found at a concentration of 1.65 mg/kg on bell peppers during in-house controls of a retail chain. Analyses by the global environmental organisation Greenpeace also revealed the active substance in peppers at concentrations up to 4 mg/kg. Through the release of ethylene, ethephon accelerates the ripening process. In the EU, residues of the active substance may not exceed the maximum residue level of 0.05 mg/kg. Samples that exceed this level may not be distributed on the market. Since children consume relatively high amounts of peppers relative to their body weight, the Federal Institute for Risk Assessment (BfR) finds ethephon residues at a concentration of 1.65 mg/kg to constitute a possible health hazard for children. At these concentrations, a health hazard for adults is unlikely. In contrast, ethephon residues at a concentration of 4 mg/kg constitute an acute health hazard for the whole population. Thus, BfR estimates an overall slight to mild potential of adverse health effects. Temporary symptoms may include increased urination and diarrhoea.

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