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AGATA WITCZAK, ANNA POHORYŁO

*Department of Toxicology, Faculty of Food Science and Fisheries, West Pomeranian University of Technology in Szczecin, Papieża  
Pawła VI 3, 71-459 Szczecin, e-mail: agata.witczak@zut.edu.pl*

ASSESSMENT OF CONTAMINATION OF FOOD ORGANOPHOSPHORUS PESTICIDES AND HEALTH RISKS OF  
CONSUMERS

Summary

Globalization of the food production and the need to secure food for the constantly growing world population enforces application of increasing amounts of pesticides in plant protection. Of particular concern appears to be the presence in food of organophosphate pesticides, which may pose a significant risk for consumers health due to their high persistence and toxicity. Moreover, it is known that consumers are exposed to these xenobiotics almost every day. Organophosphates primarily enter the human body through oral tract, respiratory system, and skin. In many cases, residual organophosphates along with their metabolites have been detected in human tissues and urine of the whole populations. Even low doses of these substances can cause adverse health effects, such as hormonal disorders, reduced intelligence level, disturbances in reproduction and cancer.