



Issue 3: August, 2019: This e-bulletin is aimed at health professionals, consumers, growers, farmers, packers, processors, distributors, retailers, and others in the plant foods area.

Outcomes from EFSA pesticide residue survey

EFSA (European Food Safety Authority) has published results (June 2019) of its 2017 survey on pesticide levels prevailing in 12 foods in EU Member States and in Iceland and Norway. Member States are requested to share the results of their official control activities and other relevant information with the European Commission, EFSA and other Member States. Based on the results provided by the reporting countries, a detailed analysis was performed on the pesticide occurrence data in the relevant food products consumed and the dietary risk related to the exposure of European consumers to pesticide residues was estimated. The fact that it took two years to publish the results is testament to the very large size of the survey and the amount of data to be analysed. The food products tested were oranges, pears, kiwi fruit, cauliflower, onions, carrots, potatoes, dried beans, rye grain, husked rice grains, poultry fat and sheep fat. In total 170 pesticides were analysed, 148 in foods of plant origin, 8 in foods of animal origin and 14 in samples of both. Maximum Residue Levels (MRLs) are primarily trading standards and are closely aligned with good agricultural practice. They are set well below the Acceptable Daily Intake (ADI) levels for each pesticide which is a further safeguard for European consumers. The ADI (mg/kg body weight) is the amount of a substance which can be ingested every day in an individual's lifetime, in the practical certainty, on the basis of all known facts, that no harm will result.

Overall results

Overall, 95.9% of the 88,247 samples analysed fell within the legal limits (84,627, samples). In 54.1% of the samples, no quantifiable residues were reported [residue levels below the limit of quantification (LOQ)], while 41.8% of the samples analysed contained quantified residues at or below the MRL. The remainder (4.1% = 3,618 samples) had levels above the MRL. For products of plant origin, the highest MRL exceedance rates were identified for pesticide residues in rice and pears followed by dried beans, carrots, rye, kiwi fruits, potatoes, oranges, cauliflower and onions. Of the 28

MRL exceedances for pears in 2017, four originated from third countries, the rest being of EU origin. For rice, MRL exceedances were recorded in 48 samples, 28 from South-East Asia, mostly from India (21). Exceedances for berries were low at 1.7%. Among the 39 pesticides with residue levels at or above the LOQ, the ones most frequently quantified were isoprothiolane (quantified in 12.1% of samples) and bromide ion (quantified in 10.1% of samples). Pesticides not approved in the EU should not be found in samples grown in the EU. However, these can be used in third countries as long as they do not exceed the legal limit when entering the EU market. In 2017, the MRL exceedance rate was 4.1% vs 3.8% in 2016. This can be partly explained by the increased number of enforcement samples taken in 2017 (10,677) versus 2016 (4,173).

Results for Ireland

In Ireland 1,083 samples were tested as part of the EFSA study and 1.3% were over the MRL compared with an average of 4.1% for the overall study. Percentages below the LOQ were 60.1 and between the LOQ and MRL 38.6. Origin of the samples was domestic (52.4%), EEA countries (23.3%), third countries (22.2%) and unknown (2.2). The analyses were conducted by the Department of Agriculture, Food and the Marine. The Food Safety Authority of Ireland (FSAI) is in close contact with EFSA on an ongoing basis which is reassuring for Irish consumers. In addition, results from Ireland's National Residue Control Programme for 2018 are now available and show a very high level (99.76%) of compliance.

https://www.agriculture.gov.ie/press/pressreleases/2019/august/title_130487_en.html

Conclusions

- Based on the survey results the dietary risk assessment by EFSA indicated the probability of European citizens being exposed to pesticide residue levels that could lead to negative health outcomes is low. The results provide risk managers with soundly based evidence for making decisions on which pesticides and food products should be targeted in risk-based national programmes.
- The EFSA report is intended to provide information to the interested public and all partners who have responsibilities in the food chain, in particular food supply chain operators. The full report is available at: <https://www.efsa.europa.eu/en/press/news/190626>
- Guidelines for the calculation of consumer intake and evaluation of the risk for pesticide residues (updated May, 2016) is available at: https://ec.europa.eu/food/sites/food/files/safety/docs/rasff_reg-guid_sops_wi-2-2_en.pdf

Compiled by Professor Ronan Gormley, UCD Institute of Food & Health, School of Agriculture & Food Science, Belfield, Dublin 4. **More information** from FSAI help/advice line: 1890-33-66-77

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