

**PESTICIDE RESIDUES IN FOOD****REPORT OF THE 2008 JOINT FAO/WHO MEETING OF EXPERTS****INTRODUCTION**

A Joint FAO/WHO Meeting on Pesticide Residues (JMPR) was held at the headquarters of the Food and Agriculture Organization of the United Nations (FAO), Rome, Italy, from 9 to 18 September 2008. The Meeting brought together the FAO Panel of Experts on Pesticide Residues in Food and the Environment and the World Health Organization (WHO) Core Assessment Group.

The Meeting was opened by Mr Shivaji Pandey, Director, Plant Production and Protection Division of FAO, on behalf of the Director-General of FAO and the Director-General of WHO.

Mr Pandey welcomed the participants, noting that there were 40 participants from 16 countries. Mr Pandey stated that the importance of the work of the JMPR had been highlighted in several important events that had taken place at FAO recently. These included the FAO Independent External Evaluation (IEE), the High Level Conference on World Food Security and the Global Minor Use Summit.

The IEE, an independent evaluation of all aspects of the technical and policy work, governance and structure of FAO, was the first to be carried out since the establishment of FAO in 1945. While the impact of this evaluation was hard to predict, Mr Pandey noted that the IEE report gave a high priority to the work of JMPR, the Joint Meeting on Pesticide Specifications (JMPS) and other scientific advisory bodies that provide scientific advice to Codex Alimentarius to support the Codex standards, and the collaboration between FAO and WHO in the field of food safety standard and pesticide management (Code of Conduct).

The aim of the High Level Conference on World Food Security, held in June 2008 at FAO headquarters by the United Nations and FAO, was to address the impact of soaring food prices, climate change and bio-energy production on world food security. Mr Pandey mentioned how the JMPR recommendations on Codex maximum residue limits (MRLs) for food and feed make an important contribution to the improvement of food availability and enhanced food safety and thus contribute to the resolution adopted by the Conference to continue the fight against food insecurity, hunger and malnutrition.

Mr Pandey mentioned the Global Minor Use Summit – a joint initiative of FAO, the United States Department of Agriculture (USDA), the United States Environmental Protection Agency (US EPA) – which had taken place at FAO headquarters in December 2007. The purpose of the Summit was to seek ways to improve the harmonization of protection measures and residue standards for speciality crops and minor uses. He reminded the JMPR participants that the JMPR had considered the issue of minor uses at its meeting in 2005 and that the Summit was thus an outcome of the JMPR recommendations.

Mr Pandey highlighted the challenges faced by the present Meeting, not only because of the large number of pesticides to be evaluated but also in view of the need to consider some important general issues, in particular, the proposal of achieving globally harmonized MRLs through Codex and also the issue of combination of residue data for the estimation of MRLs and STMRLs.

Mr Pandey thanked the participants for their efforts and their dedication to the Meeting.

The Meeting was held in pursuance of recommendations made by previous Meetings and accepted by the governing bodies of FAO and WHO that studies should be undertaken jointly by experts to evaluate possible hazards to humans arising from the occurrence of residues of pesticides in foods. The reports of previous Meetings (see Annex 5) contain information on acceptable daily intakes (ADIs), acute reference doses (ARfDs), MRLs, and the general principles that have been used

for evaluating pesticides. The supporting documents (residue and toxicological evaluations) contain detailed monographs on these pesticides and include evaluations of analytical methods.

During the Meeting, the FAO Panel of Experts was responsible for reviewing residue and analytical aspects of the pesticides under consideration, including data on their metabolism, fate in the environment, and use patterns, and for estimating the maximum levels of residues that might occur as a result of use of the pesticides according to good agricultural practice. The estimation of MRLs and supervised trials median residues (STMR) values for commodities of animal origin was elaborated. The WHO Core Assessment Group was responsible for reviewing toxicological and related data in order to establish ADIs, and ARfDs, where necessary and possible.

The Meeting evaluated 28 pesticides, including six new compounds and five compounds that were re-evaluated within the Code Committee on Pesticide Residues (CCPR) periodic review programme for toxicity or residues, or both. The Meeting allocated ADIs and ARfDs, estimated MRLs and recommended them for use by the CCPR, and estimated STMR and highest residue (HR) levels as a basis for estimating dietary intakes.

The Meeting also estimated the dietary intakes (both short-term and long-term) of the pesticides reviewed and, on this basis, performed a dietary risk assessment in relation to their ADIs or ARfDs. Cases in which ADIs or ARfDs may be exceeded were clearly indicated in order to facilitate the decision-making process by the CCPR. The rationale for methodologies for long-term and short-term dietary risk assessment are described in detail in the reports of the 1997 JMPR (Annex 5, reference 80, section 2.3) and 1999 JMPR (Annex 5, reference 86, section 2.2). Additional considerations are described in the report of the 2000 JMPR (Annex 5, reference 89, sections 2.1–2.3).

The Meeting also considered a number of general issues addressing current issues related to the risk assessment of chemicals, the evaluation of pesticide residues and the procedures used to recommend maximum residue levels.

## **DECLARATION OF INTEREST**

The Secretariat informed the Committee that all experts participating in the 2008 JMPR had completed declaration-of-interest forms, and that no conflicts of interest had been identified.