

Setting standards for chemical residues in food: Challenges for developing countries

Alexander von Hildebrand
Regional Office for South East Asia
World Health Organization

Conference on Health and Environment
March 24-25 2006, New Delhi, India



Risk Analysis Paradigm

**Scientific advice and
information analysis**

**Regulation
and control**

Risk Assessment

Risk Management

Risk Communication

**Dialog with
all stakeholders**



International Activities in Food Safety

Dietary Risk Assessment:

Joint Expert Committee on Food Additives

(JECFA)

Joint Meeting on Pesticide Residues

(JMPR)

Joint Expert Meeting on Microbiological

Risk Assessment

(JEMRA)

International Food Standards (Risk

Management):

Joint FAO/WHO Food Standards Programme

Codex Alimentarius Commission (CAC)



JECFA: Areas of Work

- **Risk assessment/safety evaluation of:**
 - Food Additives (intentionally added)
 - Processing aids (considered as food additives)
 - Flavouring agents (by functional groups)
 - Residues of Veterinary Drugs in animal products
 - Contaminants
 - Natural toxins
- **Specifications and analytical methods, Residue definition, MRL proposals (veterinary drugs)**
- **Development of general principles**



Who is JECFA?

Committee is selected for each meeting:

Drafting experts: assess available data and prepare draft working paper for discussion at the meeting, participate in meeting and contribute in discussions

FAO: *Consultants*

WHO: *Temporary Advisers*

Members: invited by FAO and WHO, are responsible for conclusions and adoption of report (Chairman, Vice-Chairman, two rapporteurs)

Joint FAO/WHO Secretariat of JECFA

FAO: Annika Wennberg, ESNS

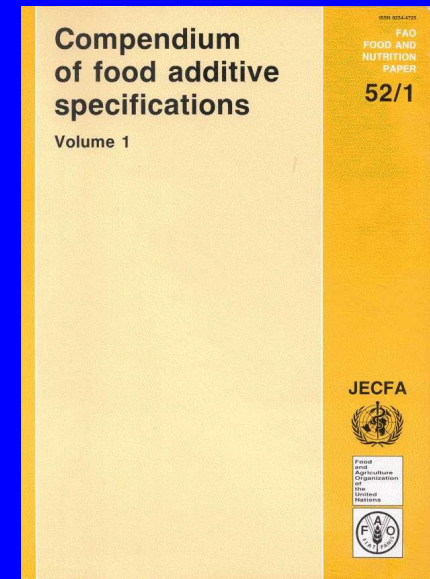
WHO: Angelika Tritscher, IPCS



JECFA Outputs

Report and Monographs:

- Concise summary of relevant information for evaluation and conclusion, including intake estimates
- Detailed description and evaluation of all to date evaluated:
 - Over 1500 additives and flavours
 - Over 40 contaminants
 - Over 90 veterinary drug residues in food



JECFA at WHO:

<http://www.who.int/ipcs/food/jecfa/en/>

JECFA at FAO:

http://www.fao.org/es/ESN/jecfa/index_en.stm



JMPR: Areas of Work

- Risk assessment/safety evaluation of pesticide residues in food
 - chronic and acute intake based on Acceptable Daily Intake (ADI), Acute Reference Dose or ARfD)
- Recommendation of recommended maximum residue limits (MRLs)
- Dietary Risk Assessment
 - long-term and short-term
- Development of general principles



Who is JMPR?

Committee is selected for each meeting:

- **Drafting experts**: assess available data and prepare draft working paper for discussion at the meeting, participate in meeting and contribute in discussions
 - **FAO: Consultants**
 - **WHO: Temporary Advisers**
- **Members**: invited by FAO (**Panel of Experts**) and WHO (**Core Assessment Group**), are responsible for conclusions and adoption of report (Chairman, Vice-Chairman, two rapporteurs)

Joint FAO/WHO Secretariat of JMPR

- **FAO: vacant, AGPP**
- **WHO: Angelika Tritscher, IPCS**



JMPR outputs

Pesticide residues
in food - 2002

Joint FAO / WHO Meeting on
Pesticide Residues

EVALUATIONS

2002

PART II - Toxicological

IPCS

International Programme on Chemical Safety



WORLD
HEALTH
ORGANIZATION

Reports and Monographs:

- Concise summary of relevant information evaluation and conclusion, including intake estimates
- Detailed description and evaluation of all available data used in the to date evaluated over 240 pesticides

JMPR at FAO:

<http://www.fao.org/ag/agp/agpp/Pesticid/Default.htm>

JMPR at WHO:

<http://www.who.int/ipcs/food/jmpr/en/>



Codex Alimentarius Commission



The CAC was founded in 1963 by FAO and WHO to develop standards, guidelines and other documents (e.g. ‘Code of Practice’) for foods.

Objective:

“ . . . to guide and promote the elaboration and establishment of definitions and requirements for foods, to assist in their harmonization and, in doing so, to facilitate international trade” .



<http://www.codexalimentarius.net/>



Codex Alimentarius Commission

Coordinating Committees (sub) regional, coordination of activities, incl. development of regional standards

Codex Committees to develop standards for CAC

Commodity Committees ('vertical committees')
Standards for specific foods and food groups

General Subject Committees ('horizontal committees')

General standards relevant for all commodities, e.g. limits for pesticide residues by CCPR; limits



Codex Alimentarius and WTO

The **Codex Alimentarius** is the collection of international science-based food standards

World Trade Organisation: Multilateral Agreements on Trade in Goods

TBT : 'Agreement on Technical Barriers to Trade': Harmonization of technical rules and standards, e.g. packaging and labeling.

SPS: 'Agreement on the Application of Sanitary and Phytosanitary Measures': Acknowledges the right of all countries to take measures to protect the health of consumers, if: scientifically justified



Development of international Food Standards

For food safety, Codex Alimentarius is the scientific standard



Some challenges to developing countries

1. Information: access, management, use
2. Human resources: quantity and quality
3. Equipment & technologies: cost or investment?
4. Legislation: harmonization, responsibilities
5. Implementation of rules: integrity
6. National consumption vs. export goods
7. Food security or /and food safety
8. Consumer's voice
 - Who benefits?

Ways forward? Take action!

- Consumption choices
- “Non” or “less chemical” foods
- Integrated production systems
- Clean environments
- Consumer organisations
- Media
- Participation in standard setting: have your voice heard!

Get involved!

- 1. Call for JECFA experts for 2007 – 2011**
http://www.fao.org/ag/agn/jecfa/experts_en.stm
- 2. Call for experts for the WHO Core Assessment Group**
http://www.who.int/ipcs/food/jmpr/expert_calls/en/index.html
- 3. Call for Experts by the FAO Joint Secretariat (JECFA)**
<http://www.fao.org/ag/agn/jecfa/files/faocall.pdf>
- 4. Call for experts for the Joint FAO/WHO Project to Update Principles and Methods for the Risk Assessment of Chemicals in Food (JECFA/JMPR):**
http://www.who.int/ipcs/food/en/expert_call.pdf

- **Thank you for your kind attention!**