

codex alimentarius commission

FOOD AND AGRICULTURE
ORGANIZATION
OF THE UNITED NATIONS

WORLD HEALTH
ORGANIZATION

JOINT OFFICE: Via delle Terme di Caracalla 00100 ROME Tel.: 57971 Telex: 625852-625853 FAO I Cables: Foodagri Rome Facsimile: (6) 57973152-5782610

ALINORM 91/24A

JOINT FAO/WHO FOOD STANDARDS PROGRAMME

CODEX ALIMENTARIUS COMMISSION

Nineteenth Session
Rome, 1-10 July 1991

REPORT OF THE TWENTY-THIRD SESSION OF THE
CODEX COMMITTEE ON PESTICIDE RESIDUES
The Hague, The Netherlands, 15-22 April 1991

Note: This report incorporates Codex Circular Letter CL 1991/15-PR.

W/27353

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CX 4/40.2

CL 1991/15-PR
May 1991

TO: - Codex Contact Points
- Participants at the Twenty-third Session of the Codex Committee on Pesticide Residues
- Interested International Organizations

FROM: Chief, Joint FAO/WHO Food Standards Programme, FAO,
Via delle Terme di Caracalla, 00100 Rome, Italy

SUBJECT: Report of the Twenty-third Session of the Codex Committee on Pesticide Residues

The report of the Twenty-third Session of the Codex Committee on Pesticide Residues (CCPR) (Ref. ALINORM 91/24A) will be considered by the Nineteenth Session of the Codex Alimentarius Commission to be held in Rome from 1-10 July 1991.

PART A: MATTERS OF INTEREST TO THE CODEX ALIMENTARIUS COMMISSION

1. Draft MRLs and Draft Amendments to Codex MRLs at Steps 5 and 8
These are included in document ALINORM 91/24A - Add. 1, distributed separately.
2. Proposed Non-Substantial Changes to Codex Maximum Residue Limits
These are included in document ALINORM 91/24A - Add. 1, distributed separately.
3. Other matters requiring action by the Commission will be included in document ALINORM 91/21 to be distributed prior to the Commission's session.
4. Draft Method of Sampling for the Determination of Pesticide Residues in Meat and Poultry Products for Control Purposes Advanced to Step 8 (Appendix II, ALINORM 89/24A and amendments included in Appendix VIII, ALINORM 91/24A).

The Draft Method of Sampling will be submitted for adoption to the 19th Session of the Commission. Governments wishing to propose amendments should do so in writing in conformity with the Guide to the consideration of Standards at Step 8 (see Seventh Edition of the Procedural Manual of the Codex Alimentarius Commission).

PART B: COMMENTS AND/OR INFORMATION REQUESTED FROM GOVERNMENTS AND INTERESTED INTERNATIONAL ORGANIZATIONS

1. Inclusion of further pesticides in the Codex Priority Lists (para. 312, ALINORM 91/24A)

Governments wishing to propose the pesticides mentioned in para. 312, for inclusion in the Codex Priority List or other pesticides are requested to forward comments to Dr. J. Taylor, Pesticide Directorate, Agriculture Canada, SBI Building, 2323 Riverside Drive, Ottawa, Ontario K1A 0C6, Canada, with a copy to this office.

2. Proposed Procedure for the Periodic Review of Pesticides (paras. 313-315 and Appendix VII, ALINORM 91/24A)

Countries are requested to forward comments on a proposed procedure for the Periodic Review of Pesticides, attached to the report as Appendix VII to Dr. J. Taylor, Pesticide Directorate, Agriculture Canada, SBI Building, 2323 Riverside Drive, Ottawa, Ontario K1A 0C6, Canada, with a copy to this office.

3. Specific Requests for Residues and Toxicological Data

Information on use patterns, good agricultural practices, residues data, national MRL, etc., should be sent to Dr. F.W. Kopisch-Obuch, AGP, FAO, Via delle Terme di Caracalla, 00100 Rome, Italy.

Toxicological data should be sent to Dr. J.L. Herrman, International Programme on Chemical Safety, World Health Organization, 1211 Geneva 27, Switzerland.

(i) Pesticides for which the ADI was established prior to 1976 and a review by the JMPR is based on new data

Data on current GAP are requested for compounds included in para. 316 of the report (ALINORM 91/24A).

(ii) Pesticides for which the ADI was established prior to 1976 and a review by the JMPR is based on old and some new data

Data on current GAP are requested for compounds included in para. 319 of the report (ALINORM 91/24A).

(iii) Pesticides for which the ADI was established between 1977 and 1980

Countries and manufacturers are requested to provide information with respect to current use and registration status on the compounds included in para. 321 of the report (ALINORM 91/24A).

(iv) Pesticides for which MRLs are being elaborated

Aldrin and Dieldrin (001)	Monitoring data are awaited for evaluation by the 1992 JMPR (23.71, 239).
Captan (007)	Several Codex MRLs were maintained as temporary, awaiting residue data and GAP information to the 1992 JMPR (23.74).
DDT (21)	Countries are requested to supply information on residue data including monitoring data and GAP to the 1993 JMPR (23.77, 242).
Dimethoate (27)	Data on GAP for Brussels sprouts; cabbages, head; lettuce, head; peach; plums (including prunes); wheat should be provided to the 1992 JMPR (23.82, 83, 84, 85, 86).
Endrin (33)	Monitoring data for MRLs converted to TERLs and especially for poultry meat are requested for the 1992 JMPR (23.92).

- Ethion (34)** As the TMDI for this compound exceeds the new ADI, governments were requested to send information on actual GAP and relevant residue data to FAO (23.93).
- Folpet (41)** Scheduled for re-evaluation on residues and current GAP in 1992. CXLs are maintained until 1992 (23.94).
- Omethoate (55)** An update for omethoate separate from dimethoate and formothion was needed for GAP residues and toxicology. Countries are requested to present data to the 1992 JMPR (23.101).
- Ortho-phenylphenol (56)** Actual GAP and relevant residue data for evaluation by the 1994 JMPR (23.103).
- Cyhexatin (67)** The Committee decided that if no further information on current GAP became available to the 1991 JMPR, the MRLs would be deleted at the next Session (23.108).
- Carbendazim (72)** Countries are requested to provide GAP and residues data on a number of commodities maintained at Step 7B to the 1992 JMPR (23.110).
- Demeton compounds (73), (164), (166)** The registered use would change significantly and GAP and residue data should be supplied in time for re-evaluation by the 1992 JMPR (23.111).
- Thiophonate-methyl (77)** Deletion of MRL for celery of 20 mg/kg was recommended unless data to support this limit are provided.
- Vamidothion (78)** Countries are requested to provide updated GAP and residue data especially for pome fruits to the 1992 JMPR (23.116).
- Chlorothalonil (81)** Request for new residue data, especially for grapes to the 1992 JMPR (23.118).
- Dinocap (87)** Countries were urged to provide data on current use and GAP to the 1992 JMPR (23.124).
- Acephate (95)** Information on current GAP and residue data are requested for a further evaluation at the 1993 JMPR (23.128).
- Methamidophos (100)** Several proposals were maintained at Step 7B and countries are invited to supply their comments in writing to the 1993 JMPR (23.130).
- Fenbutatin oxide (109)** Countries were requested to supply GAP data to the 1992 for review (23.141).
- Phorate (112)** Information on carrot, peanut and on the fate of residues in potatoes during peeling and cooking were requested (23.144, 147,148).
- Etrifos (123)** Information on GAP and residue data for lettuce, head to the 1992 JMPR (23.158).
- Methacrifos (125)** Information on GAP residue data and the fate of the residue to the 1992 JMPR (23. 159).

- Azocyclotin (129)** Where registered uses had changed, countries were requested to submit current uses pattern data to the 1991 JMPR (23.161).
- Triadimefon (133)** New data will be submitted by manufacturers. Countries were also requested to provide data on GAP to the 1991 JMPR (23.163).
- Deltamethrin (135)** Data on residues for wheat bran, wheat flour and wheat wholemeal should be submitted to the 1992 JMPR (23.166).
- Procymidone (136)** Countries are urged to supply information on GAP and national MRLs to the 1992 JMPR (23.167).
- Metalaxyl (138)** Countries were requested to provide GAP to the 1992 JMPR (23.172).
- Prochloraz (142)** Written comments on clarification of residue levels, reported in the feeding study, should be provided to the 1991 JMPR (23.178).
- Triazophos (143)** Written comments should be provided to the 1991 JMPR following the concern expressed by several delegations regarding the interpretation of residue data (23.181).
- Flucythrinate (152)** Written comments to the 1992 JMPR about residues in animal products resulting from feeding animal feeding-stuffs treated according to GAP (23.186).
- Thiodicarb (154)** Countries are invited to comment on a combined list of proposals between thiodicarb and methomyl, especially for cotton seed, sweet corn and tomato (23.190).
- Glyphosate (158)** Comments are solicited to provide information on factor requested to convert residues from wheat to wheat bran (23.197).
- Vinclozolin (159)** Data for apricot should be provided to the 1992 JMPR (23.199).
- Anilazine (163)** Delegations and manufacturers are urgently requested to supply more data to the 1992 JMPR (23.207).
- Profenofos (171)** All proposals are temporary pending receipt of information on GAP to the 1992 JMPR (23.334).
- (v) Evaluation of Pesticides for which Guideline Levels have been set
- Bioresmethrin (93)** Data on requested for evaluation in the 1991 JMPR (23.262).
- Ethepon (106)** Data on current GAP for evaluation by the 1993 JMPR are requested (23.263).
- Propylenethiourea (150)** Data on residues and current GAP for evaluation by the 1993 JMPR are requested (23.266).
- Pyrazophos (153)** Data on residues and current GAP for evaluation by the 1993 JMPR are requested (23.267).

(vi) Fumigant Residues in Food

Countries are requested to provide relevant information on residues of inorganic bromide resulting from the use of 1,2 dibromoethane for review by the 1992 JMPR together with methyl bromide (23.272).

4. Expression and Application of MRLs for Fat Soluble Pesticides in Meat, Animal Fat and Edible Offal (Mammalian) (paras. 299-301)

The Committee noted that "fat soluble" was not clearly defined and was informed through an analysis by the representative of AOAC of the status of compounds where MRLs had been established for animal products. The Committee agreed that comments would be requested in regard to a previous decision taken by the Committee concerning the establishment of MRLs for low fat and higher fat products.

Comments should be sent to Dr. W.H. Van Eck, Ministry of Welfare, Health and Cultural Affairs, Foodstuffs Division, P.O. Box 5406, 2280 H.K. Rijswijk, the Netherlands, with a copy to this office, preferably not later than the end of December 1991.

5. Questionnaire for information on pesticides in current use in developing countries (paras. 307-309)

The CCPR agreed that a questionnaire for information on pesticides in current use in developing countries will be circulated in order to identify major pesticides used in developing countries and the food crops on which they are used.

Responses to the questionnaire attached to this document as Annex I should be directed according to the appropriate region to:

Regional Chairman for Asia: Dr. Edhbal Taheri
Head of Toxicology Department
and Deputy Director of Food and
Drug Laboratories
Ministry of Health
No. 31 Emam Khomeini Ave
P.O. Box 9385, Teheran, Iran

Regional Chairman for Latin
America and the Caribbean: Dr. R. Gonzalez
Faculty of Agricultural Sciences
University of Chile
P.O. Box 1004
Santiago, Chile

Regional Chairman for Africa: Mr. M.F. Macklad
Director of Pesticides
Research Station
Ministry of Agriculture
Etay El Baroud
Cairo, Egypt

Regional Chairman for
the South-West Pacific: Mr. G.N. Hooper, Director
Agricultural and Veterinary
Chemicals Section
Department of Primary Industries
and Energy
Canberra, A.C.T. 2600, Australia

with a copy to this office, preferably not later than the end of December 1991.

6. Request for Comments on Draft Codex MRLs at Steps 3 and 6 of the Codex Procedure

The proposed Maximum Limits for Pesticide Residues included in this paper were discussed at the 23rd Session of the CCPR. In accordance with the Codex Procedure, they are sent to members of the Commission and interested international organizations for comments on all aspects, including possible implications of the draft standard for their economic interests. Comments should be sent to: Dr. W.H. Van Eck, Ministry of Welfare, Health and Cultural Affairs, Foodstuffs Division, P.O. Box 5406, 2280 H.K. Rijswijk, the Netherlands, with a copy to this office, preferably not later than the end of December 1991.

32 ENDOSULFAN

ADI 0,006 mg/kg body weight ; (1989)

Residue Sum of alpha- and beta- endosulfan and endosulfan sulphate (fat-soluble).

Commodity		MRL (mg/kg)	Step	JMPR	CCPR
Code No.	Name				
MM 0095	Meat	0.1 (fat)	6	74,	23.90
ML 0106	Milks	0.004 F	6	74,	23.90

55 OMETHOATE

ADI 0,0003 mg/kg body weight ; (1985)

Residue Omethoate.

Commodity		MRL (mg/kg)	Step	JMPR	CCPR
Code No.	Name				
FP 0226	Apple	2	6	71, 75, 84, 86, 90	20.77: 21.101
FS 0240	Apricot	2 1/	6	71, 84, 86, 90	20.77
FI 0327	Banana	0.2 (*) 3/	3	90	
VB 0041	Cabbages, Head	0.5 T	3(a)	90	
FS 0013	Cherries	2	6	71, 84, 86, 90	20.77
FB 0269	Grapes	2	6	71, 75, 90	21.101
VA 0385	Onion, Bulb	0.5	3(a)	90	
FS 0247	Peach	2	6	71, 84, 86, 90	20.77
FP 0230	Pear	2	6	71, 84, 86, 90	20.77: 21.101
FS 0014	Plums (including Prunes)	1 4/	6	71, 75, 84, 86, 90	20.77
AV 0596	Sugar beet leaves or tops	1 T	6	75, 84, 86, 90	20.77
VO 0448	Tomato	0.5	3(a)	90	
VS 0469	Witloof chicory (sprouts)	0.5 2/	6	86, 90	20.77

1/ Proposed deletion by 1990 JMPR in view of not expected uses.

3/ The estimate is intended to accommodate post-harvest uses of dimethoate and/or pre-harvest uses of omethoate.

4/ Changed from 2 mg/kg by 1990 JMPR

86 PIRIMIPHOS-METHYL

ADI 0,01 mg/kg body weight ; (1976)

Residue Pirimiphos-methyl (fat soluble).

Commodity					
Code No.	Name	MRL (mg/kg)	Step	JMPR	CCPR
OR 0697	Peanut oil, edible	10 PoP 2/	6		23.122

2/ Changed from 15 mg/kg by 22nd CCPR (22.123).

100 METHAMIDOPHOS

ADI 0,004 mg/kg body weight ; (1990)

Residue Methamidophos.

Commodity					
Code No.	Name	MRL (mg/kg)	Step	JMPR	CCPR
VS 0624	Celery	1	6	76, 90	23.131

156 CLOFENTEZINE

ADI 0,02 mg/kg body weight ; (1986)

Residue Sum of all residues containing the 2-chlorobenzoyl moiety,
expressed as clofentezine.

Commodity					
Code No.	Name	MRL (mg/kg)	Step	JMPR	CCPR
FC 0001	Citrus fruits	0.2	6	86, 89, 90	23.193
FB 0021	Currants, Black, Red, White	0.05	6	87	23.194

QUESTIONNAIRE FOR INFORMATION ON PESTICIDES IN CURRENT USE
IN DEVELOPING COUNTRIES

1. What are the most important pesticides used in your country.

2. For each of the above, please provide copies of product labels or details of the following:-
 - Manufacturer
 - Concentration of active ingredient in the product
 - Formulation type
 - Crops on which product is used
 - Pests/Diseases controlled
 - Application rate
 - Number of applications
 - Timing of applications
 - Method of application
 - Pre-harvest intervals
 - Special notes/instructions

3. Have MRLs been established for the food commodities on which these pesticides are used? If so, please provide details.

4. Which crops are exported from your country.

SUMMARY AND CONCLUSIONS

The Twenty-third Session of the Codex Committee on Pesticide Residues (CCPR) reached the following conclusions during its deliberations, presented in order of the Agenda:

1. The Committee noted that some compounds fell within the definition of veterinary drugs and pesticides and that the elaboration of potentially divergent MRLs might create problems as to their acceptance by Codex member governments and suggested that the CCRVDF note the CCPR deliberations concerning dual use compounds which had already been evaluated by the CCPR (paras. 11-13).
2. The report of the 1990 Joint FAO/WHO Meeting on Pesticide Residues (JMPR) was discussed in detail (paras. 28-39). The Committee noted that the 1990 JMPR drew attention to the fact that requests or suggestions from CCPR should always be accompanied by a clear explanation of the reasons and should be supported by relevant data. The Committee was informed that proposed Guidelines on GAP and the evaluation of residue data including the estimation of MRLs were under preparation.
3. The Committee received a report on replies from governments in response to the Form of Acceptance issued in May 1990 and noted that several countries had transmitted their position on acceptance of Codex MRLs, indicating preference for the form of acceptance of "free distribution" and that other countries were currently in the process of notifying their position on acceptance of MRLs (paras. 40-41, 46).
4. The Committee received a report of the Working Group on Acceptances and adopted its recommendations with some amendments (paras. 42-44).
5. The Committee received a report from WHO on dietary intake estimates and it was stressed that for several compounds, where the TMDI exceeded the ADI, the calculation of EMDIs does not contain all of the correction factors that may be justified and are still substantial overestimates of the true intake. Reports from GEMS/Food and from national monitoring programmes were received (paras. 47-60).
6. The Committee decided to include in the Codex Classification of Foods and Animal Feed Commodities the proposed amendments for Virgin Olive Oil (paras. 67-69).
7. Draft MRLs were considered in the light of comments received. The Committee discussed the status of general Codex MRLs for fruits and vegetables and decided to recommend to the Commission the deletion of several Codex MRLs and to postpone the consideration of possible withdrawal for other MRLs in the light of new requested comments (paras. 238-258).
8. In the light of comments received the Committee considered the Guideline Levels and decided to delete several Guidelines and to request more information to support a full evaluation of other compounds (paras. 259-267).

SUMMARY AND CONCLUSIONS (Cont'd)

9. The Committee concluded that, based on the information available, the major fumigants are methyl bromide (052), phosphine (046) and hydrogen cyanide (045) and recommended maintaining the MRLs and/or GLs for these compounds (paras. 268-272).
10. The Committee identified 14 compounds as being used as grain protectant insecticides and all included in the Codex system, and agreed to have Australia prepare a progress report for the use of grain protectant insecticides for consideration at the next session (paras. 273-279).
11. The Committee advanced to Step 8 the "Recommended Method of Sampling for the Determination of Pesticide Residues in Meat and Poultry Products for Control Purposes", as in Appendix II, ALINORM 89/24A and minor changes included in Appendix VIII, ALINORM 91/24A. The Committee was informed that a draft prepared by the United Kingdom for sampling of milk and fish, will be available for discussion at next year's session (paras. 280-287).
12. The Committee agreed that a list of methods of analysis revised by the Working Group, would be transmitted to the participants for comments and that a finalized version could be transmitted to the Codex Secretariat before the end of the year. Specific recommendations would be made for the validation of methods to be incorporated in the future version of the "Good Practice in Residue Analysis". The inclusion of screening methods in Part 8 of the Guide should be referred to the pesticide/matrix combination concerned. Further limits of determination for several pesticides were recommended. The Committee decided that the JMPR should clarify the expression and application of MRLs for "fat soluble" pesticides in animal products (paras. 288-303).
13. The Committee agreed that an amended questionnaire should be circulated for government comment and information on pesticides in current use in developing countries. The Committee also agreed to a revised term of reference for the Working Group on Developing Countries (paras. 304-310).
14. Priority lists of pesticides were adopted for the guidance of the JMPR, governments and industry, regarding the generation of data and the evaluation of pesticides and their residues. A tentative list of compounds to be considered by the JMPR was drawn up until 1996 (Appendix VI, Annex I). The Committee noted that a proposed procedure for the Periodic Review of Pesticides was elaborated (Appendix VII) and comments would be requested for discussion at the next session.

SUMMARY AND CONCLUSIONS (Cont'd)

The Committee agreed that the Codex MRLs be deleted for several compounds evaluated prior to 1976 and for which there appears to be no continued support for registration. For other compounds additional information has been requested and JMPR reviews will be scheduled. A list of 12 pesticides evaluated between 1976 and 1980 was identified for future review (paras. 311-327).

15. The Committee concluded not to establish MRLs for processed foods except in a few special cases, to be established on a case-by-case basis, and that information on the influence of processing in residues was required. It was agreed that data on processing effects should be included as part of the Guidelines to be developed on Good Agricultural Practice (GAP) and the evaluation of residue data (paras. 328-338).

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APPENDIX VIII:	DRAFT METHOD OF SAMPLING FOR THE DETERMINATION OF PESTICIDE RESIDUES IN MEAT AND POULTRY PRODUCTS FOR CONTROL PURPOSES

INTRODUCTION

1. The Codex Committee on Pesticide Residues held its 23rd Session in The Hague, The Netherlands, from 15-22 April 1991. Mr. J. van der Kolk, on behalf of the Ministry of Welfare, Health and Cultural Affairs, acted as Chairman. The Session was attended by government delegations, experts, observers and advisers from 45 countries and 8 international organizations. The list of participants, including officers from FAO and WHO, is attached as Appendix I to this report.

OPENING OF THE SESSION (Agenda Item 1)

2. The Session was opened by Mr. S. van Hoogstraten, Director for Food and Product Safety, Ministry of Welfare, Health and Cultural Affairs. The text of Mr. van Hoogstraten's speech is attached as Appendix II.

3. The Chairman thanked Mr. van Hoogstraten for his encouraging overview of the Committee's task and for the continuing governmental support to the Committee's activities in this time of budgetary restraints.

ADOPTION OF THE AGENDA (Agenda Item 2)

4. The agenda and the time schedule for the plenary session and for Working Groups were announced in CX/PR 91/1 and were adopted as such, with the insertion of additional documents under existing agenda items.

APPOINTMENT OF RAPORTEURS (Agenda Item 3)

5. Ms. E. Campbell (United States of America) was appointed to act as rapporteur to the Committee.

MATTERS OF INTEREST TO THE COMMITTEE (Agenda Item 4)

6. The Committee had before it document CX/PR 91/2 and Conference Room Documents 7 and 8 when discussing this agenda item.

(a) Matters arising from Codex Committees(a.1) Codex Committee on Fish and Fishery ProductsCode of Hygienic Practice for Products of Aquaculture

7. The Committee was informed that a first draft Code of Practice for Aquaculture had been elaborated by an expert consultation sponsored by the FAO Fisheries Department in December 1990. The CCPR noted that the subject Code included parameters for the regulation and use of pesticides in aquaculture as well as end product specifications which provided that fish should comply with any requirements established by the Commission concerning pesticide residues. The CCPR was also informed that the Codex Coordinating Committee for Africa had agreed to the importance of establishing maximum residue limits for pesticide use in fish as several countries in the region used pesticides for processed fish storage.

8. The Delegation of Egypt agreed with the importance of establishing MRLs for pesticides used in aquaculture, but also stated that ERLs needed to be established for chlorinated hydrocarbons as well, because intense application of these pesticides in other African countries, resulted in contamination of fish. The Chairman encouraged the submission of monitoring data to GEMS/Food in order to address this issue as well as information on use of pesticides in aquaculture and in storing fish.

(a.2) Codex Committee on Residues of Veterinary Drugs in Foods (CCRVDF)

Proposed Draft Glossary of Terms and Definitions

9. The Committee noted that the CCRVDF had agreed with the CCPR position that the Codex Classification of Foods and Animal Feeds should be consulted when elaborating the CCRVDF Glossary in order to prevent duplication of efforts or confusion. The subject Glossary of CCRVDF was currently being forwarded to Step 5 for adoption by the 19th Session of the Commission.

10. The Committee agreed that it was important that the two Committees coordinate efforts and that aligning the relevant duplicate definitions was evidence of the success of such efforts. The Committee decided to forward this information to the CCRVDF.

Priority List of Veterinary Drugs Requiring Evaluation

11. The Committee was informed that the CCRVDF had discussed the appropriateness of including lindane as a veterinary drug in their priority list of veterinary drugs requiring evaluation. While several Delegations at the CCRVDF meeting had noted that lindane fell within the definition of a veterinary drug, other Delegations had noted that this compound was one of many external animal treatments, and to include it in the priority list would possibly result in prioritizing compounds which should more aptly be considered as pesticides. While noting that lindane had recently been evaluated by the JMPR, the CCRVDF nevertheless agreed to maintain this compound on its priority list, with the understanding that additional discussions would be held at its next meeting to consider the appropriate evaluating body (i.e., JECFA or JMPR).

12. Some Delegations noted that the recent JMPR evaluation of lindane included animal applications and therefore, its re-evaluation was not necessary. It was also noted that there were many other veterinary drugs without dual applications that should be prioritized by the CCRVDF. The Committee was of the opinion that the elaboration of potentially divergent MRLs for the same compound might create problems as to their acceptance by Codex member governments.

13. The Committee decided to suggest that the CCRVDF note the CCPR deliberations concerning lindane and other dual use compounds which had already been evaluated by the JMPR, especially in view of the Committee's extensive experience in this area. In this regard, the Committee agreed to remind the CCRVDF that compounds with dual use applications were highlighted by the letter "V" in the List of Codex Maximum Residue Limits for Pesticides.

(a.3) Coordinating Committee for Africa (CCAFRO)

Data on Good Agricultural Practice

14. The Committee noted that the CCAFR0 had agreed that the generation of data on good agricultural practice for geographical areas with similar climatic conditions in developing countries should be a prerequisite for the registration of pesticides. The Delegation of Egypt, while supporting the CCAFR0 conclusions, stressed that data should also be supplied for regions within individual countries.

Computerized data system on MRLs

15. The Committee was informed that within the Joint FAO/WHO Food Standards Programme a computerized system had been developed for all the data on Maximum Residue Limits. It had been used to produce the document CX/PR 2-1991 in three languages. The Committee noted that the system was available on diskette and will be distributed in the near future to member countries, international

organizations and other interested institutions in order to facilitate the dissemination and use of international standards on Maximum Residue Limits for Pesticides in food. The Secretariat agreed that copies of the diskette could be made as long as FAO was identified as the source.

(b) Matters of Interest arising from the FAO/WHO Conference on Food Standards, Chemicals in Food and Food Trade

16. The Committee had before it Conference Room Documents 7 and 8 (ALICOM 91/21) when discussing this agenda item. They were an extract from the Conference report of those matters directly applicable to the CCPR and JMPR and a document prepared by the United States for discussion at the Conference concerning acceptance issues. The Committee was informed that the Conference had reached many important conclusions and recommendations for consideration by the Codex Alimentarius Commission, which included the following issues directly applicable to the CCPR:

- the strengthening of general subject committees (e.g., pesticides, additives, labelling, methods of analysis and sampling) to allow for deliberations with wider application;
- the strengthening of participation by consumer organizations at national and international levels in the work of the Commission;
- the review and evaluation of mechanisms to facilitate developing country participation, import/export certification and elaboration/acceptance procedures;
- the improvement of information availability concerning the backgrounds of experts selected for food safety evaluations;
- means for establishing closer cooperation with other organizations involved in food safety evaluations, with a view towards the exchange of information and scientific data;
- the establishment of similar criteria for determining the prioritization of compounds scheduled for evaluation by JECFA or JMPR;
- the establishment of specific criteria for the periodic review of substances previously allocated an ADI; and,
- the establishment of internationally agreed principles for risk assessment of residues for substances that had been shown to be carcinogenic in animal studies.

17. The Committee noted with satisfaction that recommendations concerning the CCPR were similar to those reached in its previous sessions. The Committee decided that it should report to the next Session of the Commission its agreement with relevant recommendations of the Conference.

18. Noting that the Committee could benefit from information on problems in trade due to pesticide residues, especially for prioritizing evaluations, the Chairman encouraged countries to provide such information.

(c) Matters Arising from Work of FAO

19. The Representative of FAO gave an outline of matters of interest to the Committee.

Prior Informed Consent (PIC)

20. Prior Informed Consent was included in Article 9 of the International Code of Conduct on the Distribution and Use of Pesticides. The amended version of the Code of Conduct had been available since the end of 1990 in English, French and Spanish. In addition, 14 Decision Guidance Documents (DGDs) on banned or severely restricted pesticides had been prepared in cooperation with UNEP and were ready for printing. Also a document entitled "Guidance to Governments on the Operation of PIC Procedures" had been prepared. This Guidance and the DGDs would be distributed to more than 100 designated national authorities by next month to start the PIC procedure. Work on the FAO/UNEP joint PIC database was progressing. The third FAO/UNEP Joint Meeting on Prior Informed Consent would take place in Rome from 3 to 7 June 1991.

Workshops

21. FAO, in cooperation with other UN organizations, the United States EPA and AID, the German Technical Assistance Agency (GTZ), and others, had held regional workshops in Thailand, the Philippines, New Caledonia and Chile on pesticide registration and control. At the end of March 1991 a regional workshop for 16 ECOWAS (Economic Community of West Africa States) countries was held in Cotonou/Benin. All these workshops contained modules and case studies on PIC. In May 1991 an additional workshop would be held in Harare/Zimbabwe for 10 SADCC countries (Southern African Development Coordination Conference).

Projects for Developing Countries

22. The Technical Cooperation and Trust Fund projects for developing countries in Africa, South East Asia and the Pacific, the Caribbean and Central America mentioned at CCPR 1990 are still operational. The regional project for Africa on safe and efficient use of pesticides under the Code of Conduct had been finally approved by UNDP and would start with a one year preparatory phase during 1991.

Guidelines and Specifications

23. Six additional guidelines under the Code of Conduct and 20 additional specifications on pesticides had been published and more were being prepared.

(d) Matters arising from activities in the European Economic Community (EEC)

24. The Representative of the EEC informed the Committee about the recently published Council Directive 90/642, fixing maximum levels of pesticide residues in and on certain products of plant origin, including fruits and vegetables. This directive did not establish any new MRLs but laid down the legislative framework for the future establishment of Community maximum levels.

25. The directive provided for the establishment of mandatory MRLs applicable in all the Member States of the Community. These levels would apply to Community produced products and to those imported from third countries. The directive would also apply to Community produce exported to third countries, subject to certain well defined exceptions. A significant result of this directive should be the improved transparency resulting from a single MRL for each product circulating in the Community territory.

26. The provisions of the directive covered produce in a fresh, chilled, frozen or dried state intended for human consumption and animal feeding-stuffs where specific Community provisions did not exist. In addition to the range of fruit and vegetables previously covered by Directive 76/895, the MRLs established under the new directive would also apply to pulses, oilseeds, potatoes, tea and hops.

27. The classification of produce provided for in the annex of the directive was based on the Codex system. This should result in greater conformity between the description of products under the Codex and Community systems and thereby facilitate acceptance of Codex MRLs. The Directive was published in the Official Journal L350, 14 December 1990, p.71.

CONSIDERATION OF THE REPORT OF THE 1990 JOINT FAO/WHO MEETING ON PESTICIDE RESIDUES (JMPR) (Agenda Item 5)

28. The report was briefly introduced by Mr. D.J. Hamilton, Chairman of the 1990 JMPR, and the Joint Secretaries Mr. J. Herrman (WHO) and Mr. Kopisch-Obuch (FAO).

29. At the Workshop last year and at the CCPR Session itself Delegations had expressed the feeling that more details should be provided about the assessment criteria utilized by JMPR in establishing MRLs, both for toxicology and residue evaluation. The Committee was informed that the Evaluations now contained more information.

30. Section 2.8 dealt with residues in the edible portion and evaluation for intake studies. In the monograph sometimes this information had been buried in discussions on residue trials. It was proposed that the information, when available, be assembled in the monograph in a special section under Fate of Residues. The new section would be entitled Residues in the Edible Portion of Food Commodities.

31. Section 2.10 dealt with stability of pesticides in stored analytical samples. It was often necessary to hold analytical samples for extended periods prior to analysis. Storage conditions should be established so that residue concentrations did not change. When studies on effects of storage conditions became available their results would be recorded in a section entitled Stability of Pesticide Residues in Stored Analytical Samples. This would also come under the Fate of Residues heading.

32. Section 2.9 dealt with questions and referrals from the CCPR. The 1990 JMPR drew attention to a statement in the 1988 report that requests or suggestions from CCPR should always be accompanied by a clear explanation of the reasons and should be supported by relevant data. Furthermore, it would assist the process if the CCPR Report were to record in all cases who would assemble the necessary documentation, and when it would be delivered to the FAO or WHO Joint Secretary of the JMPR. This would assist the Secretaries in following-up such proposals. The documentation should include:

- a clear statement of the problem or question and the CCPR reference (report and paragraph number);
- residue data (raw data and summaries) and trial details, etc., which were relevant to the question;
- GAP information relevant to the question and to the residue data supplied. It was most important that the GAP information be available for evaluating the supervised trials.

The documentation should be delivered to the FAO Secretary of the JMPR by the end of May if it was to be dealt with that year by the JMPR.

33. The matter of extraneous residue limits (ERLs) had been raised at the CCPR last year as a result of the Working Group on Priorities programme to re-evaluate old pesticide uses and MRLs. Section 2.7 described the kind of monitoring data and supporting information required to set ERLs, or to convert MRLs to ERLs.

34. The statistical evaluation of residues data for estimating maximum residue levels was reported in Section 2.6, with some examples in Annex IV of the Report. A statistical procedure developed by the Biological Research Centre for Agriculture and Forestry (BBA) in Germany showed promise for use in MRL estimation. The approach was based on a reasonably simple idea and did not assume a normal distribution of data. The method should be considered as an additional tool to assist evaluations and was not a substitute for applying judgement in assessing data validity and other qualitative considerations. The method would be useful and the JMPR Chairman thanked the BBA for making its reports available to the JMPR.

35. The Committee was informed that proposed Guidelines on Good Agricultural Practice (GAP) and the evaluation of residue data including the estimation of MRLs were under preparation. A first draft would be available for discussion at the 1991 JMPR. An amended draft would be made available for the next CCPR for comment.

36. The Committee was informed that the toxicological evaluations were expected to be published in June or July 1991. Thirteen pesticides had been evaluated toxicologically, three of them for the first time. Acceptable Daily Intakes (ADIs) were established or maintained on eleven of them; a temporary ADI was extended on one of them; and an ADI could not be established on one pesticide.

37. Dietary intakes of pesticide residues using the Guidelines for Predicting Dietary Intake of Pesticide Residues, (published by WHO) had been estimated for all of the pesticides that were on the agenda. Annex III to the JMPR report listed those compounds for which the TMDI (theoretical maximum daily intake) did not exceed the ADI or temporary ADI and those compounds on which additional data for the calculation of EMDIs (estimated maximum daily intakes) were required.

38. The Representative of GIFAP stated that a working group on residues was preparing a set of guidelines on storage stability of analytical samples for residue analysis. They would be made available to FAO.

39. The Representative of the EEC asked that more details on the intake calculations, particularly the dietary patterns used, be provided. The Representative of the EEC also provided support for the approach outlined in Section 2.7 of the report regarding data requirements for extraneous residue limit (ERL) estimations and agreed that future monographs should contain details on residues in the edible portion of food commodities. He recommended that information on concentration or reduction of residues by household and/or industrial processes be included on a regular basis.

REPORTS ON ACCEPTANCES BY GOVERNMENTS OF CODEX MRLs (Agenda Item 6)

(a) Summary of acceptances received since the adoption of the new system of acceptance

40. The Committee had before it documents CX/PR 91/3, CX/PR 91/3 Add. 1 and Conference Room Document 6 (CX/PR 91/3 Add. 2) concerning a report on acceptances by governments of Codex MRLs in response to the Form of acceptances sent in May 1990 from the Codex Secretariat to member countries and International Organizations to which competence in the matter of acceptance of Codex Standards had been transferred by their member states. The Committee was informed that it was necessary that each member country clearly notified its position with respect to all Codex MRLs, including those on which prior notification of acceptance had been given in order to allow a clarification of the acceptance of Codex MRLs used in international trade and distinguish between

no reply and no acceptances, using the acceptance adopted by the Commission in 1989.

41. The Committee noted that New Zealand, Singapore, India, Romania, Mozambique and Egypt had transmitted their positions on acceptance of Codex MRLs, indicating significant preference for the form of acceptance of "free distribution". The Delegations of Cuba and Israel informed the Committee that these countries had sent their response of acceptance of Codex MRLs recently.

(b) Consideration of the Report of the Ad Hoc Working Group on Acceptances

42. The Committee had before it the report of the Working Group which was introduced by its Chairman, Mr Bill Murray. The *Ad Hoc* Working Group on Acceptances met to determine ways to overcome the obstacles, identified by the Workshop on MRL Development (April, 1990), to the acceptance of Codex MRLs by governments.

43. The Committee considered and adopted the recommendations of the report with some amendments. A brief summary of the discussion at the meeting of the Working Group is contained in Appendix III. The amended recommendations are presented below:

RECOMMENDATIONS

Recommendation 1

That member countries and basic manufacturers provide up-to-date information on national Good Agricultural Practices (GAP) to the JMPR in the format to be prescribed in the Guidelines under development.

Discussion of Recommendation #1. Countries were urged not to delay submissions to the 1991 JMPR. The guidelines will not be ready in time to provide guidance for this year. They should, however, be available, at least in draft form, to be discussed at the next CCPR.

Recommendation 2

That member countries and basic manufacturers provide all relevant data on pesticide residues and toxicology to the JMPR, as are provided to national registration authorities, in the appropriate format and within the time frames specified by the JMPR.

Recommendation 3

That the concerns expressed by Delegations during CCPR deliberations with respect to the evaluations of the JMPR on the ADI, proposed MRL, dietary intake, etc., must be clearly defined and supported by a scientific rationale. These concerns must be outlined to the CCPR and the relevant supporting data provided to the JMPR for their (re)consideration.

Discussion of Recommendation #3. It was pointed out that this recommendation included ensuring the early submission of positions in writing for the meeting of the CCPR as well as providing the proper written support to the JMPR for interventions made during the CCPR meeting. This recommendation further expanded the points considered in section 2.9 of the Report of the 1990 JMPR.

Recommendation 4

That the recommendations of the Workshop on MRL development be reaffirmed. These recommendations should be brought to the attention of the JMPR and the FAO in

particular in order that they might be considered in the development of the FAO guidelines on all aspects of the submission and evaluation of information on GAP and residue data and the estimation of maximum residue levels.

Recommendation 5

That FAO consider ways (e.g., consultant or circular letter) of determining the procedures followed by national governments in establishing Good Agricultural Practices (GAP) with a particular view to the role of efficacy evaluation.

Discussion of Recommendation 5. This recommendation was accepted in principle by FAO with the understanding that resources may not permit implementation in time for the next meeting.

Recommendation 6

That the CCPR initiate the development of representative case studies for examining GAP information and supporting efficacy data as a means of resolving disputed GAP. The GAP descriptions should, if possible, comply with the format in the proposed FAO guidelines. The CCPR suggested to the FAO that the European Plant Protection Organization (EPPO) be approached for identification of relevant experts to participate in these case studies. Such experts would need to be conversant with pest control practices in a variety of geographic and climatic regions.

Case studies representative of those proposed include:

- dichloran, onions
- carbendazim, peppers, tomatoes
- methomyl, citrus fruits
- inorganic bromide, celery
- permethrin, lettuce

Discussion of Recommendation 6. It was suggested that additional examples of potential case studies should be noted in the course of the Session, (see also para 344).

Recommendation 7

That the JMPR be requested to provide guidance as to the appropriate interpretation of Codex MRLs, either as strict limits, or with the allowance of a further margin when considering the analysis of samples for enforcement purposes.

Discussion of Recommendation 7. This point raised several related issues, some of which had been considered in previous Reports of the *Ad Hoc* Working Group on Methods of Analysis. The FAO Secretary was requested to incorporate information from these Reports in the Guidelines and provide further clarification in this area.

Recommendation 8

That countries or groups of countries, such as the EEC, provide information about their residue and toxicology evaluation procedures to the Working Group on Acceptances with an aim to harmonizing these processes.

Recommendation 9

That countries adopt the Codex classification system for foods and animal feeds in establishing MRLs.

Recommendation 10

That WHO seek to develop internationally agreed principles for the risk assessment of residues of substances (including pesticides) that have been shown to be carcinogenic in animal studies. That this be the first toxicological end point considered and that IPCS continue this work in other areas of toxicology, e.g., teratology, neurotoxicity, etc.

Discussion of Recommendation 10. This item was also discussed at the Food Standards Conference in Rome, March 1991. It was reported that the IPCS is prepared to follow through on the recommendation with respect to carcinogens, with the assistance of IARC. It was noted that because of widely varying national approaches to dealing with carcinogenesis, it would be difficult to arrive at an approach to suit all countries and that it would require flexibility on the part of countries.

Recommendation 11

That scientific data submitted to the JMPR for evaluation be required to comply with appropriate Good Laboratory Practice (GLP) procedures recognizing that these increased requirements should not generally be applied retrospectively.

Discussion of Recommendation 11. It was agreed that while GLP is desirable, a too rigid application of GLP protocols should be avoided, and that a case-by-case approach should be maintained.

Recommendation 12

That the Codex and JMPR Secretariats estimate the requirements for resources, procedures and expertise necessary to meet the demand for evaluations and reevaluations of compounds, as well as potential GATT requirements. This estimate should be available for the meeting of the Codex Alimentarius Commission in July 1991.

Discussion of Recommendation 12. The JMPR Secretariat noted that, in view of the imprecise nature of the new demands being made and the short period of time before the July meeting of the Commission, it would be possible only to supply general proposals and resource estimates. It was also pointed out that should the finances become available, there was still the problem of finding relevant expertise.

Recommendation 13

That companies, to the extent possible when developing uses of pesticides, suggest consistent MRLs to national authorities and the JMPR.

44. In the general discussion the Representative of IOCU expressed full support for Recommendation 2 and welcomed the increased openness of the evaluation process. IOCU recommended consumer input be included in guidelines for evaluation of pesticide and risk assessment, including both needs assessment and exposure assessment. Also, Codex should develop, in consultation with consumer organizations, criteria for selecting experts for risk assessment and other deliberations. The Representative encouraged the widest possible access to all information on residue data, toxicological data and GAP.

Appointment of a new Ad Hoc Working Group

45. It was decided to establish a new Ad Hoc Working Group which should function until the end of the next session under the Chairmanship of Mr. B. Murray (Canada).

(c) Reports by Delegations

46. The Representative of the EEC informed the Committee that a procedure had been undertaken by the Community to establish a mechanism permitting significant acceptance of Codex MRLs in the future. The Delegation of Australia pointed out that their country had started work to align national limits with Codex limits, including description of commodities as in the Codex classification, and that in the future significant acceptance of Codex MRLs by this country would be possible. The Delegation of the United States informed the Committee that their position on acceptances would be notified soon.

CONSIDERATION OF INTAKE OF PESTICIDE RESIDUES (Agenda Item 7)

(a) Progress report by WHO on dietary intake estimates

47. The WHO Representative pointed out that Mr. van Hoogstraten in his opening remarks had emphasized the importance of dietary intake estimates in promoting the acceptance of Codex MRLs. Similarly, the March 1991 FAO/WHO Conference on Food Standards, Chemicals in Food and Food Trade had recommended that countries make every effort to provide adequate data for improving these estimated intakes. Such data were particularly important in arriving at generally acceptable MRLs.

48. Following the methodology described in the "Guidelines for Predicting Dietary Intake of Pesticide Residues" (WHO, 1989), Theoretical Maximum Daily Intake (TMDI) and, where applicable, Estimated Maximum Daily Intake (EMDI) calculations had been made for all pesticides evaluated at the 1990 JMPR.

49. As pointed out in the Guidelines, the TMDI was a gross overestimate of the true pesticide residue intake because, among other things, very few of the crops treated with a pesticide contained the maximum residue level. Normally, residues were reduced through processing and cooking and it was unlikely that each and every food for which an MRL was proposed would have been treated with the pesticide.

50. While the EMDI was a better estimate of intake than the TMDI, it was still an overestimate of the true pesticide residue intake because the proportion of a crop treated with a pesticide was usually far less than 100% and very few of the crops treated contained residue levels as high as the MRL, from which levels in the edible portions were derived.

51. For the following compounds the TMDI did not exceed the ADI or temporary ADI: acephate, aldicarb, amitraz, bendiocarb, bitertanol, captan, chlorothalonil, clofentezine, cyfluthrin, cypermethrin, cyromazine, deltamethrin, dimethoate, ethylenethiourea, fenvalerate, flucythrinate, flusilazole, folpet, hexaconazole, metalaxyl, methamidophos, methomyl, paraquat, prochloraz, procymidone, profenofos, terbufos, thiophanate-methyl, tolylfluanid, vamidothion, vinclozolin.

52. In carrying out EMDI calculations for those pesticides where the TMDI exceeded the ADI, information on residue levels in food as consumed was seldom available. Thus the EMDIs calculated for benomyl, carbendazim, chlorpyrifos-methyl, ethion, etrimfos, methacrifos, omethoate, 2-phenylphenol, phorate, triazophos did not contain all of the correction factors that might be justified and were still substantial overestimates of the true intake.

53. To remedy this situation, the JMPR in its 1990 report had recommended that information be collected on residue levels in the edible portion of a commodity with emphasis on those commodities that contributed most to the theoretical intake. This information would be presented in the JMPR evaluation in a consistent and systematic manner in a new sub-section of "Fate of Residues"

entitled "Residues in the Edible Portion of Food Commodities". The availability and easy accessibility of such information would simplify and considerably improved the calculation of EMDIs. It was planned to repeat this same exercise at the 1991 JMPR.

54. The FAO Representative informed the Committee that the FAO Guideline under preparation for submission of information on good agricultural practices and residue data for estimation of MRLs would include a section on the generation of residue data in the edible portion of commodities.

55. The Delegation of Canada pointed out that intake estimates should include an assessment of the intake of extreme consumers. This was particularly important where the acute toxicity of pesticide residues was of concern. WHO was asked to consider defining toxicological parameters which would indicate a need to utilize high as opposed to average food consumption data when developing estimates of dietary exposure.

56. The Delegation of the United States supported the ongoing effort by WHO to obtain food consumption information and recommended that the CCPR make a renewed request for national governments to provide these data to WHO. Secondly, they believed such dietary estimates conducted by WHO and supported by their own independent calculations, warranted a concern. The CCPR should move cautiously and carefully before adopting or endorsing MRLs for those pesticides where such theoretical dietary estimates exceeded an established toxic endpoint, as noted in the JMPR Report. In such cases, additional EMDI or EDI data should be made available in order to alleviate such concerns. Where such data were available it had illustrated that large differences could and did exist between the TMDI estimates and the more refined EMDI/EDI dietary intake estimates.

(b) Report on pesticide residue intake studies through the Joint FAO/WHO/ UNEP Food Contamination Monitoring Programme

57. From the 39 countries participating in GEMS/Food, only nine countries had provided information on the mean dietary intake of several organochlorine and organophosphorus pesticides since the previous data collection. These countries were Australia, Egypt, Finland, Guatemala, Japan, New Zealand, Thailand, the United Kingdom and the United States of America.

58. For organochlorine pesticides, with the exception of Egypt, mean intakes in recent years were all below 10 per cent of the respective ADIs and in most cases the intakes were less than 1 per cent of the ADI. In a university study in Egypt, intakes exceeding the ADI were reported for aldrin/dieldrin, endrin and lindane. Such high intakes warranted further investigations.

59. In the case of the organophosphorus pesticides intakes reported by several countries were below 1 per cent of the respective ADIs. Australia reported intake of fenitrothion of 30-60% of the ADI and would continue to assess the significance of this finding.

60. Intake data would be desirable from additional countries that were known to use organochlorine and organophosphorus pesticides extensively.

(c) Reports on pesticide residue intake studies by Delegations

61. The Delegation of Egypt expressed its doubts as to the validity of the dietary intake data generated by the university study discussed in the previous item.

62. The Delegation of Germany reported on an extensive monitoring study in which 9,000 food samples were analysed for pesticide residues. These data would be used to determine consumers dietary exposure to pesticide residues.

63. The contamination of potatoes and white cabbages with pesticide residues was very low. A higher percentage of apples, lettuce and strawberries samples were found to contain detectable levels of pesticide residues. In a considerable number of these samples, more than one pesticide was detected. In addition, about 3% to 6% of the samples contained residue levels higher than the applicable MRLs. Overall, a large number of samples did not reveal any detectable residues indicating that Good Agricultural Practice and integrated pest management had resulted in a decreased use of pesticides.

64. The United States of America had conducted dietary intake studies for the past 30 years. In the most recent study reported (1989) five individual market baskets, each comprising some 230 foods were analysed for 53 different pesticide residues. The intake of six different age/sex population groups was determined. In all cases, intake levels were far below the ADIs.

65. In Italy a study had been carried out to evaluate the intake of pesticide residues. The information came from the results of analyses performed by regional official laboratories in charge of monitoring contamination of food in that country. The samples had been taken from crops, both from national production as well as from import (fruits, vegetables and cereals) and from processed products of plant and animal origin. The data were reported according to the FAO/WHO/UNEP Guidelines and the EDI had been calculated. Sampling covered several years, (1980-1987) which made it possible to obtain a significant number of results (almost 9000) on which a statistical evaluation could be performed. The variability of the combination of residue/food could be appreciated. For each food the average consumption per person in Italy had been considered for the same period. The EDI had been calculated for about 30 active substances which were most frequently found in foods. They belonged to the dithiocarbamate, organophosphorus, organochlorine, carboximide and benzimidazole groups. The EDI had been compared with the ADI established by WHO for each active substance. The EDI amounted to only a small portion of the ADI. The highest intakes were reported for dithiocarbamates and amounted to only 9% of the ADI. Most pesticide residues showed a decreasing intake trend. The results of these studies would be sent to GEMS/Food.

66. From its total intake studies, the Delegation of Finland reported a 60% reduction in intake over recent years. The results of these studies were regularly provided to GEMS/Food.

THE CODEX CLASSIFICATION OF FOODS AND ANIMAL FEEDS (Agenda Item 8.1.(a))

67. The Committee considered document CX/PR 91/6 which contained amendments to the Codex Classification of Foods and Animal Feeds (CAC/PR 4-1989) including the addition of Virgin Olive Oil as requested at the 22nd session of CCPR. The document also contained a list of several commodities with a provisory code number arising from the previous Codex Classification and for which Codex MRLs had been defined.

68. The Committee decided that the following proposed amendments should be included in the Codex Classification of Foods and Animal Feeds Commodities:

Page XXX

OC 0305 "Olive oil, crude" should read: "Olive oil, Virgin"
OR 0305 "Olive oil, refined" remains as it is.
Insert after this entry: OR ---- Olive-residue oil, refined,
see Olive oil

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OR 0305 "Olive oil, crude" change to: "Olive oil, Virgin". See definition in Codex STAN 33-1981.

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OR 0305 Insert under this entry: "Olive oil, refined" as defined in Codex STAN 33-1981

OR ---- Insert below OR 0305: "Olive-residue oil" as defined in Codex STAN 33-1981. See Olive oil, refined.

69. With reference to the commodities with a provisory code number scheduled for future deletion, the Committee noted that several commodities, such as milk products and cheese were not clearly defined and agreed that a specific study examining their substitution with commodities included in the Codex Classification should be carried out by the Committee in the near future.

CONSIDERATION OF MAXIMUM RESIDUE LIMITS (Agenda Item 8.1 (b), (c), (d))

70. The Committee had before it the following documents:- CL 1990/20-PR, 29-PR and 40-PR containing MRLs at Steps 4 and 7;

- CAC/PR 2-1991, Part 2 of the "Guide to Codex Maximum Limits for Pesticide Residues" in which MRLs are listed;
- CX/PR 91/7, 8 and 9 containing government comments on the MRLs under discussion.

In the interest of economy, the following paragraphs refer only to those MRLs and ERLs on which there was detailed discussion, where Delegations expressed reservations, or where relevant information had to be recorded. The Step in the Codex Procedure to which the Committee advanced or returned individual MRLs or ERLs or at which limits were held is indicated for each pesticide as follows:

<u>Step</u>	<u>Action</u>
5	The draft MRL is submitted to the CAC for consideration and advancement to Step 6 for comments.
5/8	The draft MRL is submitted to the CAC at Steps 5 and 8, because the CCPR has recommended the omission of Steps 6 and 7.
7A	The draft MRL is held at Step 7 only because the ADI is temporary. It is submitted by the Secretariat to the Commission at Step 8 as soon as a full ADI is estimated.
7B	The draft MRL is held at Step 7 pending further consideration by the JMPR. Immediately after such consideration it is returned to Step 6 by the Secretariat for comments by Governments.
7C	The draft MRL is held at Step 7 to await developments (other than review by the JMPR) on which further action by the CCPR is contingent. After such developments it is returned to Step 6 by the CCPR.
8	The draft MRL is submitted to the CAC for adoption as a Codex MRL ("CXL").
(a) (following Step number)	The MRL is a proposed amendment to a Codex MRL (CXL).

ALDRIN AND DIELDRIN (001)

71. The Committee agreed with the recommendation of the 1990 JMPR to convert existing CXLs to TERLs.

72. The Committee was informed that the CXL for potato reported as 0.2 mg/kg was apparently in error and agreed to leave it at 0.1 mg/kg, as that figure had been sent to governments for acceptance.

CAPTAN (007)

73. The Committee was informed that the 1990 JMPR had proposed withdrawal of CXLs for several commodities, and agreed to delete the CXLs for apricot; common bean (pods and/or immature seeds); cranberry; cucumber; currants, black, red, white; endive; lettuce, head; peppers, plums (including prunes); raspberries, red, black; rhubarb; spinach and withdraw the limit for cherries and potato at Step 7C.

74. The Committee agreed with the recommendation of the 1990 JMPR to leave temporary the levels for apple, blueberries, peach, pear, strawberry and tomato until 1992 pending receipt of residue data and GAP information.

75. The Committee agreed with temporary levels for citrus fruits as proposed by the Delegation of Spain for which it would provide residue data and GAP.

76. Because data on GAP and residues would be provided for grapes by the manufacturer to the JMPR 1992 the MRL for dried grapes was not withdrawn, but converted to a TMRL.

DDT (021)

77. The Committee agreed with converting the limits to temporary pending review by the JMPR in 1993. Delegations were requested to supply information on residue data including monitoring and GAP.

DIMETHOATE (027)

78. The representative of the EEC informed the Committee that dimethoate was under review in the Community and that available data on GAP would be supplied to the 1992 JMPR. Delegations were of the opinion that the MRLs had generally been derived from very old data. Furthermore, less reliable methods of analysis had been used and data were provided on the total residue of dimethoate and omethoate. The limits for dimethoate had generally been extrapolated from the total residue figures. It was agreed that data were needed on the separate compounds. Countries were requested to provide data on GAP and residues to the JMPR. The Delegation of the United States asked for clarification of why the effect on brain cholinesterase activity had not been taken into account in the establishment of the ADI,

Apricot

79. Several Delegations expressing support, the Committee accepted the withdrawal of the proposed limit.

Banana

80. The Committee noted that there was post harvest use for quarantine purposes.

Beans, except broad bean and soya bean; broccoli; cauliflower; cucumber; lettuce, leaf

81. Several Delegations indicated that available data were not sufficient to support a decision. The Delegation of the United States informed the Committee that MRLs of 2 mg/kg were adequate even though it used the total residue of dimethoate and omethoate. No additional information on the availability of further residues data on those commodities could be obtained.

Brussels sprouts; Cabbages, Head

82. The Delegation of The Netherlands indicated a preference for 1 mg/kg based on the available GAP data already evaluated by the JMPR. The JMPR was requested to review the proposals on the basis of a detailed comment to be submitted by the Netherlands.

Lettuce, Head

83. The Delegation of The Netherlands preferred an MRL of 1 mg/kg. The Delegation of the United States indicated the use of an MRL of 2 mg/kg (total residue of dimethoate and omethoate). The Delegation of the United Kingdom stated that data on GAP and data on residues would be provided for the 1992 JMPR.

Peach

84. Several Delegations indicated that an MRL of 1 mg/kg would be sufficient. The Committee agreed to refer the matter to the JMPR in order to investigate whether an MRL of 1 mg/kg would be justified.

Plums (including Prunes)

85. The Delegation of The Netherlands could not accept a limit of 2 mg/kg taking into account the available data on GAP and preferred a limit of 1 mg/kg. The JMPR was requested to review the proposals on the basis of a detailed comment to be submitted by The Netherlands.

Wheat

86. The Delegation of France preferred an MRL of 0.05 mg/kg. The Delegation of the United States indicated the use of an MRL of 0.04 mg/kg (total residue of dimethoate and omethoate). The Delegations of Germany and Italy also had registered uses and were asked to send data to the 1992 JMPR.

Status of MRLs

At Step 7B:	Brussels sprouts; cabbages, head; lettuce, head; peach; plums (including prunes); wheat.
At Step 7C:	beans, except broad bean and soya bean; broccoli; cauliflower; cucumber; lettuce, leaf.
At Step 8:	banana; celery; grapes; hops, dry; spinach.
Withdrawn:	apricot.

ENDOSULFAN (032)

87. On request of the Delegation of the United States the Committee decided to request the WHO to calculate the TMDI and the EMDI for endosulfan.

Calculation in the United States based on an average American diet had resulted in a TMDI of 210% of the ADI.

Broccoli; Cabbages, Head; Cabbage, Savoy; Cauliflower

88. The Delegation of Portugal informed the Committee that new residue data on cabbages would be available for evaluation by the 1993 JMPR.

Common bean

89. An MRL of 2 mg/kg would be required to reflect current GAP in the United States. The United States would check whether additional data may be made available to the JMPR.

Meat; Milks

90. New data had been requested by the JMPR for meat and milk on several occasions but had not been forthcoming. The Committee decided that the data available to the JMPR would support limits of 0.1 mg/kg fat in meat and 0.004 mg/kg in milk and that it was not necessary to maintain the temporary status of the proposals.

Plums

91. An MRL of 2 mg/kg would be required to reflect current GAP on the United States. Supporting data from the United States could be made available to the JMPR.

Status of MRLs

- At Step 5: broccoli; cabbages, head; cabbage, Savoy; cauliflower; chard; chicory leaves; common bean; endive.
- At Step 6: meat, milks.
- At Step 5/8: alfalfa forage; celery; cherries; clover; garden pea; kale; lettuce, head; lettuce, leaf; plums; pome fruits; spinach; sugar beet; sugar beet leaves or tops; trefoil.

ENDRIN (033)

92. The 1990 JMPR had no evidence that MRLs for this compound had any relationship to current registered uses, and therefore recommended that they should be converted to TERLs, pending receipt of further information. Monitoring data, especially on poultry meat, were requested for the 1992 JMPR. The Delegation of the United States informed the Committee that they had action levels (comparable to ERLs) for endrin, some recently established. The underlying database could be made available to the JMPR.

ETHION (034)

93. As the TMDI for this compound exceeded the new, lower ADI, the Committee felt the need to review the GAP of ethion. Delegations were requested to send information on actual GAP and relevant residue data to FAO. The matter would be referred to the JMPR if the information received warranted further revision.

FOLPET (041)

94. The Committee noted that folpet had been reviewed by the 1990 JMPR and was scheduled for re-evaluation on residues and current GAP in 1992. As a

consequence of the 1990 evaluation, the JMPR had proposed to withdraw several CXLs because these uses no longer existed.

95. The manufacturer's representative informed the Committee that residue data on citrus fruits, lettuce, head and melons (except watermelon) could be made available to the 1992 JMPR and requested not to withdraw the CXLs for these commodities. In addition, residue data on potatoes would be made available to the 1992 JMPR. The Committee decided to propose a withdrawal of the CXLs for blueberries; currants, black, red, white; raspberries, red, black; and watermelon; and to maintain the CXLs for all other commodities, regarding them as temporary until 1992.

INORGANIC BROMIDE (047)

96. The Delegation of Germany informed the Committee about their concern with respect to the intake of this compound, which could possibly exceed the ADI. Moreover, as the ADI was not based on an absolute no-effect level, Germany was reluctant to accept the proposed MRLs.

Celery

97. Several Delegations expressed their reluctance to accept the proposed limit of 300 mg/kg, although the limit was based on residue data supporting current GAP.

Fruits

98. The Committee was informed that the CXL was based on old data and should be replaced by separate MRLs. The Delegation of Chile indicated that methyl bromide was used for quarantine purposes for the import of fruits into the United States. The Delegations of Israel and Chile informed the Committee that residue data on both methyl bromide and inorganic bromide were currently being developed by a panel in the United States and would be made available to the FAO for evaluation in 1992. The Committee decided to await the outcome of the 1992 evaluation.

Lettuce, head

99. The Committee noted that no data were received supporting a limit other than the proposed 100 mg/kg.

Status of MRLs

At Step 8: celery; lettuce, head.

OMETHOATE (055)

100. The Delegation of Egypt indicated that the list of commodities for omethoate was not consistent with that of dimethoate. Several Delegations were firmly opposed to the proposed MRLs in view of the very low ADI, the broad range of uses of dimethoate and omethoate and the possibility of a considerable intake as seen from the TMDI and EMDI.

101. The Committee agreed that an update for omethoate separate from dimethoate and formothion was needed for GAP, residues and toxicology. All proposals for MRLs and the CXLs based on data obtained for GAP and residues in the past were considered obsolete, unless they could be confirmed by more recent data. Because the JMPR did not have enough data at its disposal countries were urgently requested to present data to the 1992 JMPR. The Committee agreed that the entries for omethoate in the Guide should indicate the source of each residue. The representative of the manufacturer stated that residue data and

data on GAP for peaches, pome fruits, grapes, wheat, citrus fruits, peppers and olives would be provided. In view of the review by the 1992 JMPR the Committee did not discuss the individual proposals.

ORTHO-PHENYLPHENOL (056)

102. The Delegation of the United Kingdom, supported by the Delegation of Germany, drew the attention of the Committee to the fact that the TMDI exceeded the ADI and suggested re-evaluation of GAP to update all CXLs. In the view of the United Kingdom, EMDI calculations were not relevant where for example apples were eaten whole and raw. The Representative of WHO informed the Committee that no reduction factors were used for apples, only for citrus fruit.

103. The Committee decided to request information on actual GAP and relevant residue data for evaluation by the 1994 JMPR. The manufacturer undertook to explore possibilities of sending information to the JMPR.

Melons, except Watermelon (edible portion)

104. Since no new information had become available since the last CCPR the Committee decided to delete the MRL.

PARAQUAT (057)

105. The Committee decided to change the Note in the Guide: ADI and MRLs were based on data resulting from the use of paraquat dichloride.

Soya bean (dry)

106. As no GAP data that would support 0.2 mg/kg had been supplied, the Committee decided to withdraw the proposal and retain the CXL for soya bean (dry) at 0.1 mg/kg.

CYHEXATIN (067)

107. The Committee was aware that in 1990 countries had been urgently requested to provide data on current GAP for evaluation by the 1991 JMPR. The Delegation of France reported registered use, mainly on apples. The Delegation of Chile reported minor use and indicated that the proposed limit of 5 mg/kg for peaches was too high. The Delegation of Spain reported registered use and would provide GAP data. The Delegation of Germany informed the Committee that it had no registered use for toxicological reasons. The Delegation of Italy informed the Committee that its country had suspended the registration and was reviewing new toxicological data received from the manufacturer. These data were the same as those submitted to the 1991 JMPR.

108. The Committee decided that if no further information on current GAP became available to the 1991 JMPR, the MRLs would be deleted at the next Session.

CARBENDAZIM (072)

109. This compound, together with benomyl and thiophanate-methyl, was reviewed by the 1988 and 1990 JMPRs. Both reviews highlighted the need for GAP and residues data on a number of commodities. Countries were requested to provide this information for all three compounds for the 1992 JMPR. The EEC would be providing GAP information for the upcoming review.

110. A survey of Delegations indicated that there was still substantial post-harvest use of carbendazim and benomyl. This would be clarified further when

GAP information was provided by countries for the 1992 JMPR. Discussion of individual commodities was postponed in view of the 1992 re-evaluation.

Status of MRLs

At Step 7B: apricot; bean fodder; berries and other small fruits; carrot; cereal grains; cherries; citrus fruits; lettuce, head; mushrooms; nectarine; peach; peppers; pineapple; plums (including prunes); pome fruits; sugar beet leaves or tops; tomatoes.

At Step 8: all other proposals.

DEMETON-S-METHYL (073), DEMETON-S-METHYLSULPHON (164), OXYDEMETON-METHYL (166)

111. Most of the proposed MRLs dated from 1973. GAP and residue data for all three compounds would be re-evaluated by the 1992 JMPR. The manufacturer's representative indicated that registered uses would change significantly and that GAP and residue data would be supplied in time for the re-evaluation. It was noted that, in the written comments, there were a number of serious objections relating to MRL in view of the low ADI. Further consideration of these compounds would be delayed until after the re-evaluation.

Status of MRLs

At Step 5: all proposals.

THIOPHANATE-METHYL (077)

112. The Committee recalled its decision to delete CXLs for thiophanate-methyl when the proposed MRLs for carbendazim (072) reached Step 8. It was noted however, that there were no carbendazim MRLs to replace those for thiophanate-methyl for the following commodities: apples; chicken meat; currants, black; gooseberries; grapes; pears; raspberries and strawberries. It was agreed that these CXLs would be added to those for carbendazim with an indication that they were derived from the application of thiophanate-methyl.

113. The different ADIs among the carbendazim generating compounds, benomyl, thiophanate methyl and carbendazim were noted. These compounds would be reviewed together by the 1992 JMPR.

Celery

114. It was uncertain whether the proposed MRL of 2 mg/kg for carbendazim would accommodate the post-harvest application of thiophanate-methyl for which a 20 mg/kg CXL had been established. The Committee recommended deletion of this CXL unless data to support this higher limit were provided.

VAMIDOTHION (078)

115. The 1990 JMPR had noted that residue studies were in progress and concluded that the results of these studies should be reviewed before any MRL proposals were modified. The Committee noted that the TMDI was only 23% of the ADI. In view of the fact that intake estimates were below the ADI the need for processing data was questioned. It was recognized that while processing data were desirable, decisions to generate such data were generally made on a case-by-case basis following consideration of a number of factors. The Committee recommended that the FAO guidelines on the evaluation of residue data included a section outlining the criteria to be considered in determining when processing data should be required.

Pome fruits

116. The Delegations of France and Chile indicated that residue data and GAP information on apples and pears would be available in 1992. This information was tentatively scheduled for review by the 1992 JMPR. Countries were requested to provide updated GAP to the JMPR to coincide with this review.

Grapes

117. The Delegation of The Netherlands expressed concern with respect to potential residues in wine. The Delegation of France indicated that data were likely to be generated soon. It was noted that such data were not expected to affect the proposed MRL.

Status of MRLs

At Step 7B: pome fruit.

At Step 8: cereal grains; grapes; rice.

CHLOROTHALONIL (081)

118. Chlorothalonil had been reviewed by the 1990 JMPR and the TADI replaced by an ADI at a higher level. A request for new residue data, especially in grapes, was repeated as no data had been provided to the 1990 JMPR. Several Delegations expressed concern with respect to the toxicologic evaluation of the JMPR. Detailed comments would be provided by the United States of America, Germany and the European Economic Community in time for the 1991 JMPR. Sweden indicated that no uses of chlorothalonil would be permitted in that country after 1993. The Delegation of Germany stated that they no longer had registrations for this compound.

119. The manufacturer informed the Committee that in addition to grapes, new residue data were being produced on all crops for which there were CXLs and that these data would be available for the 1992 JMPR.

Status of MRLs

At Step 7B: grapes.

DICLORAN (083)

120. The Committee noted that dicloran was on the agenda of the 1994 JMPR for review of both toxicology and residues. No residue data were anticipated prior to this date.

Status of MRLs

At Step 8: onion; bulb.

PIRIMIPHOS-METHYL (86)

121. The Committee noted that the compound was included in the review process and also noted concerns expressed by several Delegations, taking into consideration that several CXLs were relatively high, and agreed that the TMDI and EMDI should be calculated by WHO.

Peanut oil, edible

122. The Committee was informed that information had not been received from African countries on post harvest uses for peanuts as requested at the previous

session. The Delegation of the United States noted that the proposal was based on US trials, although there was no GAP. The Delegation of Egypt pointed out that this compound was used for several commodities in their country, but not for peanuts. The Committee noted that the product was still used in other African countries such as Nigeria, Senegal, Tanzania and Gambia and therefore, decided to return the proposal to Step 6 awaiting information on GAP from countries in which it was used.

Cheese

123. The Committee noted that the MRL for cheese was established as a result of the treatment of racks in store rooms against cheese mites and considered that the MRL was related to a product not clearly defined and of limited interest for products moving in international trade. The Committee decided to propose the withdrawal of this MRL to the Commission, and to inform the CCFAC of this decision.

Status of MRLs

At Step 6: peanut oil, edible.
Withdrawn: cheese.

DINOCAP (87)

124. The Committee was informed that the product was on the agenda of the 1992 JMPR for residue evaluation and that written comments expressed reservations on the proposed MRLs (which were from 1974) as it was felt that information on current use and GAP were necessary. The Committee agreed to postpone the discussion of this product until after the 1992 JMPR. Countries were urged to provide data.

Status of MRLs

At Step 5: all proposals.

CHLORPYRIFOS-METHYL (90)

125. This product was on the agenda of the 1991 JMPR for toxicological and residue evaluation and the Committee noted that information on GAP had already been provided by Germany and further information would be available from the United Kingdom and Spain.

METHOMYL (94)

126. The Committee recalled its decision at its 22nd Session to combine MRLs for thiodicarb and methomyl into a single list. In cases of different MRLs, the higher limit would prevail. The list should contain an indication as to on which compound the MRL was based.

Grapes

127. The Delegation of France underlined its concern related to the application of this product to grapes, taking into consideration its solubility in hydro-alcoholic solutions and its effect as a residue in wine, which needed a systematic study. The Committee decided to move the proposal to Step 8 and considered a future JMPR review, pending information concerning the fate of residue from grape to wine.

Status of MRLs

At Step 8: all proposals.

ACEPHATE (95)

Broccoli; Brussels sprouts; Cabbages, Head; Cauliflower; Citrus fruits and Tomato

128. Several Delegations expressed reservations because the proposed MRLs were too high in relation to GAP or the data were inadequate to use as a basis for limits. The Committee decided to set the draft MRLs at Step 7B while awaiting further evaluation at the 1993 JMPR. The Delegation of Germany pointed out that CXLs for meat, milks and eggs needed further evaluation.

Status of MRLs

At Step 7B: all proposals.

CARBOFURAN (96)

129. The Committee agreed with the suggestion of the Chairman that the Working Group on Methods of Analysis and that JMPR should align the residue definitions for carbofuran and carbosulfan (145), (see also para. 185).

METHAMIDOPHOS (100)

130. The Committee noted that the ADI for this compound had been increased and given full status at the 1990 JMPR. The Committee was also reminded that methamidophos was a metabolite of acephate (095) for which separate MRLs had been recommended. The Delegation of The Netherlands, supported by the Delegations of several other countries, noted that the 1990 JMPR data did not support the proposed MRLs for several commodities. The Committee decided to maintain these proposals at Step 7B for re-evaluation by the JMPR and invited in particular the Delegations of the Netherlands, Germany and the Representative of the EEC to supply their comments in writing to the JMPR.

Celery

131. The Committee agreed to lower the MRL from 2 mg/kg to 1 mg/kg as the latter figure was supported by GAP.

Peach

132. The Committee decided to maintain the proposal at Step 7B, noting that residue data if available would be provided by Spain, Italy and Australia to the JMPR.

Cotton seed

133. The Delegation of the United States was of the view that 0.1 mg/kg for methamidophos was not high enough to accommodate acephate uses.

Soya bean (dry)

134. The Delegation of the United States was of the view that an MRL of 0.2 mg/kg was needed to accommodate US acephate uses.

Status of MRLs

- At Step 5: melons, except watermelon; peppers, Chili; peppers, sweet; watermelon.
- At Step 6: celery.
- At Step 7B: broccoli; cabbages, head; cauliflower; citrus fruits; cotton seed; eggplant; peach; potato; tomato.
- At Step 8: Brussels sprouts; cucumber; lettuce, head; soya bean (dry); sugar beet; sugar beet leaves or tops.

DAMINOZIDE (104)

135. The Committee recommended that the proposed draft MRLs for this compound be withdrawn, as the actual GAP data did not support the establishment of MRLs for these commodities (i.e., apples and pears).

DITHIOCARBAMATES (105)

136. The Committee noted that all MRLs for these compounds, except for head lettuce, were regarded as temporary because further information on use patterns and data from residue trials were required. These compounds were scheduled for JMPR evaluation in 1993, except that thiram was scheduled for toxicological evaluation in 1992. The Committee decided to rephrase the note to read "MRLs are determined and expressed as mg CS₂/kg and refer to the total residues arising from any or each of the groups of dithiocarbamates".

137. The Delegation of Belgium on behalf of the manufacturer indicated that data on thiram would be provided to the 1993 JMPR, while the Delegation of Germany on behalf of the manufacturer also agreed to provide residue and toxicology data on propineb and PTU to the same JMPR meeting. The observer of GIFAP also agreed to solicit data for the evaluation of maneb and zineb while the Delegation of France noted that current studies undertaken on mancozeb and ETU would be forwarded for JMPR consideration.

ETU (108)

138. The Delegation of Chile indicated that data on residues were not sufficiently consistent to derive an MRL. The representative of the EEC informed the Committee that the EEC intended to establish MRLs for EBDCs (Ethylenebisdithiocarbamates) but not for ETU. The EEC review of the toxicology would be submitted to the JMPR 1993. The Delegation of the United Kingdom indicated that exposures greater than 0.02 mg/kg b.w. per day would not constitute a risk to health. The Delegation of Canada indicated that they had proposed a national MRL of 0.05 mg/kg for all food crops. They would submit substantiating data to the JMPR.

139. The Delegation of the United Kingdom informed the Committee that 0.02 mg/kg was an appropriate limit of determination. The Delegation of Canada reported 0.001 mg/kg as a general limit of determination. The matter was referred to the Working Group on Methods of Analysis for their opinion.

140. The Committee agreed with the recommendation of the 1990 JMPR to withdraw limits for several commodities.

Status of MRLs

- At Step 7A: carrot; celery; lettuce, head; potato.

Withdrawn: apple; common bean (pods and/or immature seeds); pear; tomato.

FENBUTATIN OXIDE (109)

141. The Committee noted that fenbutatin oxide was due for review by the 1992 JMPR for residues and toxicology. Countries were requested to supply GAP data to the JMPR. One manufacturer's representative promised to send data on toxicology and residue data to the JMPR.

IMAZALIL (110)

142. The Committee noted that the compound was on the agenda of the 1991 JMPR for toxicological evaluation.

PHORATE (112)

143. The Committee noted that the TMDI was greater than the ADI and that no sufficient reduction factors were found.

Carrot

144. The Delegation of the United Kingdom informed the Committee that data on GAP for carrots were supplied to the 1990 JMPR. However, they asked for more time in order to re-examine safety margins for the residues. The Delegations of Spain, Sweden and The Netherlands indicated that they could not agree to an MRL of 0.5 mg/kg. The Committee decided to maintain the proposal at Step 7B, pending further information from the United Kingdom and evaluation by the JMPR.

Maize forage

145. The Committee noted that the proposed limit for maize forage was acceptable to the Delegation of The Netherlands. The Delegation of the United States indicated, however, that the limit was too low because GAP required an MRL of 0.5 mg/kg. Although data on residues were supplied on two occasions, the Delegation of the United States of America also stated that uses had been revised as a result of the re-registration procedure. The Committee decided to advance the proposal to Step 5 and requested the manufacturer and the Delegation of the United States of America to clarify whether the limit had to be revised.

Milks

146. The Committee noted that, the MRL was for whole milk. The Delegation of the United States of America indicated that they had an MRL of 0.02 mg/kg. The Committee decided to advance the proposal to Step 8 at the limit of determination.

Peanut

147. The Committee noted that the data on GAP for peanut referred to by the Delegation of the United States of America in 1989 had not been provided to the JMPR. The Committee decided to wait for additional information.

Potato

148. Several Delegations expressed reservations regarding the proposed MRL for potato. More information was desired on the fate of residues in potatoes during peeling and cooking in view of the risk of exceeding the ADI by consumption of treated products in the diet. The representative of the manufacturer informed the Committee that data on processing and cooking would be provided to the JMPR for evaluation in 1991.

Status of MRLs

- Step 5: maize forage; peanut oil, crude; peanut oil, edible.
- Step 7B: carrot; peanut; potato.
- Step 8: maize fodder; milks; sugar beet; sugar beet leaves or tops.

TECNAZENE (115)

149. The Delegations of Sweden and Finland indicated that the proposed MRL for potato caused trade problems. The Delegation of Germany expressed a reservation based on the evaluation of GAP, while the Delegation of Spain opposed the MRL for toxicological reasons. The Delegation of France indicated that the residue data were not very precise. This was explained by the representative of AOAC indicating that washing potatoes reduced the great variability in residues arising from the adhering soil. In view of the fact that the United Kingdom and the United States of America needed the use on potatoes, the Committee decided to await further data from ongoing studies in the United Kingdom.

150. The representative of GIFAP indicated that studies on toxicology and metabolism were underway. Although the compound was scheduled for review in 1993, it was decided to postpone the evaluation to the 1994 JMPR so that the new data could be considered.

Status of MRLs

- At Step 5A: potato.

ALDICARB (117)

151. The Committee noted that the compound was on the agenda of the 1992 JMPR for toxicological evaluation.

152. The Delegation of Egypt informed the Committee that the limit of determination was sometimes difficult to achieve, especially with respect to the metabolites which are included in the residue definition. It was decided to bring this problem to the attention of the *Ad Hoc* Working Group on Methods of Analysis. The Committee noted that data promised by Portugal for citrus fruits had not been received.

Status of MRLs

- At Step 5: Brussels sprouts.
- At Step 8: citrus fruits.

CYPERMETHRIN (118)

153. The Committee was informed that new data on berries and other small fruits could possibly be made available by the manufacturer this year.

Status of MRLs

- At Step 8: berries and other small fruits.

FENVALERATE (119)

154. The Committee noted that the 1990 JMPR had proposed a lowering of the limit for Brussels sprouts from 5 to 2 mg/kg.

Status of MRLs

At Step 8: Brussels sprouts.

PERMETHRIN (120)

155. The Committee was informed by the Delegation of Australia that commercial-scale milling studies had been completed and that the results would be made available to the 1992 JMPR.

Status of MRLs

At Step 7B: Wheat bran, unprocessed; wheat flour; wheat wholemeal.

AMITRAZ (122)

Tomato

156. The Delegation of France, supported by the Delegation of the United States of America, opposed the residue definition given for this compound, because the residue was calculated as the metabolite. They preferred a calculation as amitraz. One view expressed was that the residue definition could require a re-examination of the data base. The Delegation of the United States noted that only a factorial conversion was needed to express the limit as amitraz *per se*. It was decided to bring this to the attention of a future meeting of the JMPR. The Committee decided to add the letter V to milk and edible offal of meat to reflect veterinary uses.

Status of MRLs

At Step 8: tomato.

ETRIMFOS (123)

157. The Committee noted that the compound was on the agenda of the 1992 JMPR for residues evaluation.

Lettuce, head

158. The Delegation of Germany informed the Committee that data were to be expected from the manufacturer and would be sent to the JMPR. Delegations were requested to supply GAP information.

Status of MRLs

At Step 7B: lettuce, head.

At Step 8: grapes.

METHACRIFOS (125)

159. The Committee noted that the compound was on the agenda of the 1991 JMPR for residue evaluation. Several Delegations expressed reservations concerning the very high toxicity of the compound and the persistence of the residue after processing. They were reluctant to accept post-harvest uses for this compound unless it could be shown that the residues disappeared almost completely in processing. They also referred to the EMDI-calculation made by WHO. All Delegations were invited to send information on GAP, residue data and the fate of the residue to the JMPR.

Cereal grains: Wheat bran, unprocessed: Wheat flour: Wheat wholemeal

160. The Delegation of the United Kingdom indicated that they had a post-harvest use on stored grain and an MRL of 10 mg/kg, which could be lowered in the future to 5 mg/kg. They also offered to send additional information to WHO on reduction factors relevant for EMDI calculations and their own intake assessment. The Delegation of Australia announced that they currently had no registration on wheat, but that data on milling/processing studies would be available for evaluation by the 1992 JMPR. The Representative of the manufacturer confirmed that all available information had already been submitted to the JMPR.

Status of MRLs

At Step 7B: all proposals.

AZOCYCLOTIN (129)

161. The Committee noted that azocyclotin, together with cyhexatin, was on the agenda of the 1991 JMPR for both toxicological and residue evaluation. Where registered uses had changed, Delegations were requested to submit current use pattern data to the JMPR. In combining the lists of azocyclotin (129) and cyhexatin (67), the origin of the MRL should be indicated. The Delegation of the United States informed the Committee that they had withdrawn all uses for cyhexatin.

Status of MRLs

At Step 7B: all proposals.

TRIADIMEFON (133)

162. The Committee noted that because this compound was closely related to triadimenol (168), a complete residue review of both compounds was needed by the JMPR in order to derive separate MRLs.

163. The representative of the manufacturer stated that new data on both compounds would be submitted to the 1991 JMPR. Countries were also requested to provide data on GAP.

Status of MRLs

At Step 7B: all proposals.

DELTAMETHRIN (135)

164. The Delegation of The Netherlands indicated that it preferred a limit of detection of 0.05 mg/kg. This would be referred to the Working Group on Methods of Analysis.

Meat

165. The Delegation of Egypt suggested an MRL of 0.05 mg/kg instead of 0.5 mg/kg in meat. The Committee noted that the MRL was, in fact, "in the fat" and did not recommend omission of Steps 6 and 7 so that countries could comment on this aspect.

Wheat bran, unprocessed: Wheat flour: Wheat wholemeal

166. The Delegation of France informed the Committee that data would be supplied by the manufacturer to the 1991 JMPR. The Delegation of Australia

informed the Committee that their data could not be submitted for the 1991 JMPR. The Committee requested postponement of the review to the 1992 JMPR.

Status of MRLs

- At Step 5: meat.
- At Step 7B: wheat bran; wheat flour; wheat wholemeal.
- At Step 5/8: edible offal (mammalian); eggs; poultry meat; poultry, edible offal of.
- At Step 8: milks.

PROCYMIDONE (136)

167. The Committee noted that procymidone was on the agenda of the 1992 JMPR for residue evaluation. The GAP varied greatly from country to country and in addition appeared to be changing rapidly. This supported the need for updated GAP information supplied in a standard format. A number of countries indicated, for several of the commodities, that the amount of residue data available was insufficient for the proposal of MRLs. The Representative of the manufacturer indicated that new residue studies for grapes, cucumber, tomato and onions were underway and should be submitted in time for the 1992 JMPR. In addition, the manufacturer would update the GAP information and supply that at the same time. Sweden and Finland would be able to supply monitoring data from several years. Countries were also urged to supply information on GAP and national MRLs, both established and proposed.

168. All proposals would be referred to the Commission at Step 5, in view of the requests for updated information and the upcoming review of the JMPR.

Grapes

169. The MRL proposed for grapes was temporary pending data to be supplied in 1992. A time limited MRL of 7 mg/kg had been proposed for grapes in the United States and was to be adopted shortly. This MRL would apply only to grapes grown and treated prior to 1990. Treated grapes harvested after that time would not be allowed for import into the United States. The manufacturer had been developing additional data in order to establish a permanent MRL in the United States for grapes. The Delegation of the United States noted that no additional US tolerances had been petitioned for and was concerned that another grape/wine situation could develop. The Committee noted that the annex included in the 1990 JMPR Report contained errors; for peach, raspberries and strawberries the limit should be 10 and 5 for tomatoes.

Status of MRLs

- At Step 5: all proposals.

BENDIOCARB (137)

Barley: Barley straw and fodder, dry; Oat straw and fodder, dry; Oats; Pome fruits; Wheat straw and fodder, dry

170. The Committee agreed to recommend to the Commission deletion of the CXLs based on the recommendation of the 1990 JMPR. No comments, residue data or GAP had been received in response to the recommendation of the 1989 JMPR for deletion.

Mushrooms; Rice, straw and fodder; Rice, husked

171. The MRLs proposed for these commodities were temporary pending review by the 1993 JMPR.

METALAXYL (138)

172. This pesticide was on the agenda of the 1992 JMPR for residue review. The manufacturer was currently compiling national GAP data which could be submitted to the JMPR for 1992. Countries were also requested to provide GAP to the JMPR.

Broccoli; Cabbages, Head; Cauliflower

173. The Delegation of the Netherlands indicated that MRLs should be no more than 0.2 mg/kg based on the data in the evaluations. The Netherlands would provide written comments in time for the 1992 JMPR.

Lettuce, Head; Onion, bulb; Spinach

174. The MRLs were temporary. New residue data would be supplied by the manufacturer for the 1992 JMPR for spinach and for the 1993 JMPR for lettuce and onion.

Pome fruits

175. The Delegations of Egypt and Chile preferred lower MRLs in consideration of national GAP and also intake. An MRL of 1 mg/kg (Po), however was supported by GAP from the United Kingdom. The Delegation of The Netherlands noted that more information was needed on pears. The data for apples were however extensive and could be extrapolated to pears, for which the data were more limited. The Delegation of France expressed its reservation on this extrapolation as the database was not consistent.

Strawberry

176. The Delegation of Spain had provided GAP and residues data to support an MRL of 0.5 mg/kg. Several other countries needed 0.5 mg/kg. Canada had requested the manufacturer to supply the data used to support a similar level in that country.

Status of MRLs

- At Step 5A: pome fruits.
- At Step 7B: broccoli; cabbages, head; cauliflower; lettuce, head; onion, bulb; spinach; strawberry.
- At Step 8: Brussels sprouts; cacao beans.

PROCHLORAZ (142)

177. The Committee noted that as a result of the 1990 JMPR the temporary status of certain MRLs was removed while others were withdrawn.

Cattle fat; Cattle meat; Cattle, Edible offal of; Milks

178. Several Delegations requested further clarification of the residue levels reported in the feeding study data evaluated by the JMPR. There were concerns about the dose level fed to animals in transfer studies and the lack of specific

information on levels in milk. The Delegation of The Netherlands agreed to provide written comments to the JMPR detailing these concerns.

Status of MRLs

- At Step 7B: cattle fat; cattle meat; cattle, edible offal of; milks.
- At Step 5/8: oranges, sweet, sour; coffee beans.
- At Step 8: papaya; stone fruits.

TRIAZOPHOS (143)

179. The Committee noted that the TADI for triazophos was scheduled for toxicological re-evaluation by the 1991 JMPR. The Delegation of the United Kingdom expressed the opinion that this could result in an increase in the ADI in the light of the revised JMPR procedure on cholinesterase inhibition and relieve possible concerns related to intake.

Banana: Citrus fruit

180. Concern was expressed about the interpretation of the residue data available to the JMPR. The Delegations of France, The Netherlands and Germany were requested to provide written comments of these concerns to the JMPR for re-evaluation of the data.

Brussels sprouts: Cabbages: Carrots: Common bean

181. GAP in the United Kingdom would support a higher MRL on carrots and GAP data would be available to the 1992 JMPR. The manufacturer would supply residue data. The Delegation of The Netherlands expressed the opinion that data available to the JMPR on Brussels sprouts and cabbages supported a higher MRL, while that on common bean required a lower limit.

Cereal grain: Onion, bulb: Potatoes: Sugar beet

182. The question was raised as to whether 0.01 or 0.05 mg/kg was the appropriate limit of determination for triazophos. It was noted that the 1990 CCPR had recommended 0.01 mg/kg. The manufacturer was requested to review the data base and the develop further data in support of this limit. These data would be referred to the JMPR for comment when they were available.

Pome fruits

183. The Delegation of Sweden reserved its position and also stressed that washing as a reduction factor for pesticide residues on pome fruits should not be included in the EMDI calculation made by WHO.

Status of MRLs

- At Step 5: broad bean, shelled, (succulent); cattle meat; cattle milk; cauliflower; common bean (pods and/or immature seeds).
- At Step 7A: coffee beans; cotton seed; peas; pome fruits.
- At Step 7B: banana; Brussels sprouts; cabbages, head; carrot; cereal; citrus fruits; onion, bulb; potato; sugar beet.

BITERTANOL (144)

184. It was noted that 1990 CCPR had requested re-evaluation of data available to the 1988 JMPR on individual commodities to replace the current group draft MRL on stone fruits. It was agreed that this would be considered at the 1991 JMPR if time permitted.

Status of MRLs

At Step 7B: stone fruits.

CARBOSULFAN (145)

185. The Committee noted the relationship of carbosulfan residues to carbofuran. The *Ad Hoc* Working Group on Methods of Analysis discussed the consequences of combining the residues (para 128). This question was referred to the 1991 JMPR.

Status of MRLs

At Step 7B: citrus fruits.

FLUCYTHRINATE (152)

Cattle meat, cattle milk, goat meat

186. The Delegation of The Netherlands supported by the Delegation of France, stated that limits could not be accepted unless adequate information was available about residues in animal products resulting from feeding animal feeding-stuffs treated according to GAP, and the resulting residue levels in animal products were considered acceptable. The Chairman of the 1990 JMPR informed the Committee that the JMPR awaited full details of the studies. The Delegations of the Netherlands and France were asked to submit their comments in writing for evaluation by the 1992 JMPR.

Eggs

187. The Committee noted that the MRL was based on minimal data and had been recommended for withdrawal. Since no more data would be available, the Committee decided to delete the MRL.

Maize fodder; maize forage

188. The Committee decided to make the limits temporary, because the feeding studies to be evaluated would affect MRLs for these commodities.

Status of MRLs:

Deleted: eggs.

At Step 7B: all other proposals.

THIODICARB (154)

189. The 1990 CCPR had decided that entries related to thiodicarb would be deleted when the MRLs for methomyl reached Step 8. The Committee noted that not all entries of thiodicarb were consistent with those of methomyl. The Delegation of Spain preferred the higher MRL limit of 1 mg/kg for tomatoes.

190. The Committee decided to revise the residue definition including thiodicarb and methomyl and to combine both in one list in such a way that the

origin of the MRL was indicated. It was also decided to take the highest level for the MRL with the possibility of amendment next year. The Chairman encouraged the Delegations to comment on the combined list of proposals.

Status of MRLs

At Step 6: all proposals.

BENALAXYL (155)

191. The Committee noted that the existing multi-residue method was not yet published. The Delegation of Germany would provide information on a limit of determination hopefully for the 1992 JMPR.

Status of MRLs

At Step 8: grapes.

CLOFENTEZINE (156)

192. The Committee noted that on the basis of reservations presented at last session, the JMPR had changed the definition of residue to include total residues. The Delegation of the United States was of the view that parent compound only was adequate for plant products.

Citrus fruits

193. Several Delegations were in favour of a limit lower than 0.5 for citrus fruits, on the basis of national GAP. The Delegation of the United States was of the opinion that the data evaluated by the JMPR supported the proposal. The Committee decided to lower the proposal to 0.2 mg/kg and to request more information on this level from producing countries.

Currant, Black, Red, White

194. Some Delegations considered the proposed MRL to be unacceptable, since it did not reflect current GAP. More information about use patterns was needed. The Delegation of Germany recommended a limit of 0.05 mg/kg as considered previously at the 20th CCPR Session. The Committee agreed to lower the limit and to request more information on the new proposed level.

Grapes

195. The Delegation of France supported the proposal and expressed the need to obtain more information on processed products. The Committee was informed that new data were not expected for review and decided to advance the draft MRL to Step 8, with the understanding that it could be reviewed in the future on the availability of new data.

Status of MRLs

At Step 6: citrus fruits; currant, black, red, white.

At Step 8: grapes.

CYFLUTHRIN (157)

196. The Committee decided to retain all temporary MRLs at Step 5, pending a review by the 1992 JMPR, while noting that the draft MRL for cattle milk was not at the limit of determination. The Committee decided to request clarification from JMPR.

Status of MRLs

At Step 5: all proposals.

GLYPHOSATE (158)

Wheat bran, unprocessed

197. The Committee noted that the proposal was not supported by several countries. The Delegation of Germany, supported by France, disagreed with the use of a factor of 8 to convert residues from wheat to wheat bran and informed the Committee that written comments would be sent to JMPR. The Committee decided to await JMPR review of this proposal.

Status of MRLs

At Step 7B: wheat bran, unprocessed.

VINCLOZOLIN (159)

198. The Committee was informed by the Delegation of the United Kingdom that as a result of an interim review, a higher safety margin had been introduced and a new interim ADI set pending completion of further studies by the manufacturer. This had led to the suspension of many of the UK uses of this compound for operator exposure reasons. The results of this review would be transmitted to the JMPR for its consideration.

Apricot

199. The Committee noted that the Delegations of France and Chile were against a post-harvest treatment of this commodity, while other Delegations noted their national limits and GAP for post harvest treatment. The Representative of the EEC stated that the Community would shortly establish MRLs for vinclozolin and it would have difficulties with the level proposed for apricots due to insufficient data for the establishment of a post-harvest MRL. The Committee decided to request further consideration and the review of this proposal.

Lettuce, Head

200. The Committee noted that at its last session, the CCPR had requested a review of this proposal by the JMPR. The Delegation of the US was of the view that data already provided supported a limit of 10 mg/kg. However, as data on lettuce were submitted too late for consideration, it would be reviewed at a later meeting.

Peppers, Sweet

201. The Committee noted the position of the Delegation of France, which considered the data insufficient for this proposal. The Committee, however, decided to advance the draft MRL to Step 8, with a recommendation for the deletion of the Codex MRL of 2 mg/kg.

Status of MRLs

At Step 7B: apricot; lettuce, head.

At Step 5/8: peppers, sweet; rape seed.

At Step 8: blueberries.

PROPICONAZOLE (160)

202. The Committee noted that the product was scheduled for residue evaluation at the 1991 JMPR and that data had been provided from Spain. It reiterated its request for establishing separate MRLs for cereals.

TOLYFLUANID (162)

203. The Committee noted that the compound had been reviewed by the 1990 JMPR at the request of the CCPR. It was informed that new toxicological data were being developed and would be provided to the JMPR.

Currants, Black, Red, White

204. The Delegation of France disagreed with the MRL of 5 mg/kg for these products, in view of the limited number of trials conducted. The Committee, however, decided to advance the current MRL to Step 8.

Pome Fruits

205. The Delegation of France indicated that 15 applications did not reflect GAP. The Delegation of Germany informed the Committee that this was registered use in their country.

Status of MRLs

At Step 8: currants, black, red, white; pome fruits.

ANILAZINE (163)

206. The Committee was informed that this compound was scheduled for a 1992 JMPR residue evaluation.

Barley

207. The Committee noted that although the 1990 JMPR had requested additional data, it appeared that the variability of the data was the important issue. Delegations and manufacturers were urgently requested to supply more data. The Committee agreed to maintain the MRL at Step 5.

Barley Straw and Fodder, Dry; Wheat Straw and Fodder, Dry

208. The Delegations of the Netherlands and Spain reminded the Committee that the MRLs for these commodities were temporary, in view of a lack of transfer data from straw to animals. However, in view of the forthcoming 1992 JMPR evaluation, which would examine data provided by Germany concerning this issue, the Committee agreed to maintain these MRLs at Step 5.

Celery

209. The Delegation of the Netherlands, as supported by the Delegation of France, noted that the data was insufficient, as it was based on only four trials conducted in one country at a high level of application. The Representative of GIFAP informed the Committee that no additional data on use trials was available. The Committee decided to maintain this MRL at Step 5, with the understanding that more data on GAP and residue data were required, especially as related to the residue/GAP relationship.

Tomato

210. The Delegations of France and the United States of America indicated that there were gaps in the toxicological data. The Representative of GIFAP and the Delegation of France were invited to supply data or comments in writing to the JMPR.

Status of MRLs

At Step 5: barley; barley straw and fodder, dry; celery; tomato; wheat; wheat straw and fodder, dry.

FLUSILAZOLE (165)

211. The Committee was informed that the compound was scheduled for a 1991 JMPR residue evaluation, and that the majority of the MRLs were temporary. It was indicated that sufficient manufacturers' data had been supplied as well as national data from Canada, New Zealand and Spain.

212. The Committee agreed to maintain all proposals at Step 5.

213. The Committee agreed with the opinion of the Working Group on Methods of Analysis that 0.01* was the limit of determination. As, however, a major part of the database that supported the MRLs had been generated with a higher limit of determination, the Committee decided to request JMPR review of new data to be generated with a 0.01 mg/kg limit of determination.

Status of MRLs

At Step 5: all proposals.

TERBUFOS (167)

Banana

214. The Committee, while noting that the residue trials indicated a maximum residue level of 0.025 mg/kg, supported advancing the MRL to Step 5/8.

Broccoli; cabbages, head

215. The Committee agreed to the need for a re-evaluation by JMPR, as data evaluated had been generated with a high limit of determination, especially in view of the low ADI. The Committee agreed to maintain the MRL at Step 5, with the understanding that data would be requested concerning a lower level of determination.

Cauliflower; potato, sweet corn (kernels)

216. The Committee agreed to withdraw these MRLs, as recommended by the JMPR.

Cotton seed

217. The Delegation of the United States noted that the data base did not support the proposed MRL, and suggested that the MRL be withdrawn. The Committee agreed to consider withdrawing the MRL at its next Session unless additional supporting data became available.

Eggs

218. Notwithstanding reservations recorded by the Delegation of the United Kingdom as to difficulties in MRL enforcement, the Committee agreed to advance the MRL to Step 8.

Fodder beet leaves or tops

219. The Delegation of the United States reserved its position in this matter, as new data was currently being collected. The Committee, however, agreed to advance the MRL to Step 8.

Mustard seed; onion, bulb; peanut; peanut fodder; peanut forage (green)

220. In view of the high limit of determination, the Committee agreed to maintain these MRLs at Step 5.

Straw and fodder (dry) of cereal grains

221. The Committee agreed with the opinion of the United States that additional data was required to support a general limit, and decided to maintain the MRL at Step 5.

Sugar beet

222. Although Delegations of several countries indicated that 0.1 appeared to be higher than necessary it was decided to maintain the MRL.

Sweet Corn

223. The Delegation of the United States reserved its position for this commodity as most of the residue data was based on a limit of determination of 0.05 mg/kg. The Delegation felt that the residue data were insufficient to support a limit of 0.01 mg/kg. The Committee agreed to maintain the MRL at Step 5.

Wheat; Barley

224. The Committee agreed to raise the MRL to a level of 0.01* (limit of determination).

Status of MRLs

- | | |
|--------------|---|
| At Step 5: | broccoli; cabbages, head; cattle meat; cattle, edible offal of; chicken meat; chicken, edible offal of; coffee beans; cotton seed; mustard seed; onion, bulb; peanut; peanut fodder; peanut forage (green); rape seed, rape seed oil (crude), Soya bean (dry), straw and fodder (dry) of cereal grains; sugar beet; sweet corn. |
| At Step 5/8: | Banana; barley; maize; maize fodder; cattle milk; eggs; fodder beet leaves or tops; popcorn; wheat. |
| Withdrawn: | Cauliflower; potato; sweet corn (kernels). |

TRIADIMENOL (168)

225. The Committee noted that because this compound was closely related to triademefon (133) an evaluation of residue data was needed, in order to derive separate MRLs. The compound was scheduled for the 1991 JMPR.

Status of MRLs

At Step 5: all proposals.

CYROMAZINE (169)

Residue definition

226. The Delegation of the United States expressed its reservation regarding the definition of the residue. The Codex proposals were for cyromazine only, this Delegation supported inclusion of the melamine metabolite in MRLs. (One of the criteria for applying the indicator compound concept was that the indicator be a reasonable indicator of the total residues. The Delegation of the United States did not believe that criterion was met for cyromazine). Melamine residues could equal or significantly exceed those of cyromazine *per se* in both plants and animals and the percentage of melamine compared to total residues of cyromazine and melamine was highly variable. The Delegation of The Netherlands made the same observation but suggested that this should be taken into account when evaluating the risk from a toxicological point of view. Assuming that melamine had the same toxicity as cyromazine, only half of the ADI of cyromazine was available for evaluating the risk of residue intake. Both Delegations agreed to present their comments to the JMPR.

Eggs; Milks; Poultry meat; Sheep meat

227. As the residues in these products were a result of the veterinary use of this compound, these proposals should be followed by a V.

Peppers

228. The Delegation of Spain informed the Committee that their GAP would require an MRL of 2 mg/kg. Supporting residue data would be sent to the JMPR as soon as possible.

Status of proposals

At Step 5: all proposals.

HEXACONAZOLE (170)

229. The Delegation of the United States of America informed the Committee that an error had apparently been made in the 1990 Evaluations; the rates "2 x 40 kg ai/ha and 2 x 80 kg ai/ha" specified in line 15 on page 218 should probably read "2 x 40 g ai/ha and 2 x 80 g ai/ha".

Apple juice

230. The Delegation of the United Kingdom was of the opinion that this commodity should be deleted. In the discussion on processed foods (paras. 328-338) deletion should be considered at the next session.

Banana

231. The Delegations of Germany and the United States of America asked for clarification regarding the proposed limit of 0.05 mg/kg, as the data base in the Evaluations mentioned residues up to 0.07 mg/kg. It was decided to refer the matter to the JMPR for reconsideration.

Grapes

232. The Delegation of France was of the opinion that the available data presented in the 1990 Evaluation were not clear, but could accept the proposed MRL of 0.1 mg/kg.

Wheat: Wheat straw and fodder, dry

233. The Committee noted that these limits were temporary pending the availability of data on processing studies and on transfer into animal products. Several Delegations were of the opinion that, in view of the low MRLs, data on transfer into animal products were not required. Processing studies were, however, required by some Delegations, although the representative of the manufacturer announced that such studies were not to be expected.

Status of MRLs

At Step 5: all proposals.

PROFENOFOS (171)

234. The Delegation of the United States expressed a reservation concerning the residue definition. The United States tolerances were based on profenofos and its metabolites containing the 4-bromo-2-chlorophenol moiety. The compound would be reconsidered at the 1992 JMPR and countries were reminded that all proposals were temporary pending receipt of information on GAP.

Cotton seed

235. The Delegation of The Netherlands noted that the limit for cotton seed was too low.

Cotton seed oil, edible

236. The Delegation of the United States indicated that an MRL for the commodity was not necessary.

Spring onion

237. The Delegation of the United States stated that a higher limit seemed necessary for this commodity, since residues from GAP were up to 2.5 mg/kg.

Status of MRLs

At Step 5: all proposals.

(e) Codex General Maximum Limits for Fruits and Vegetables

238. The Committee had before it document CX/PR 91/10 which contained a summary of General Maximum Residue Limits for fruits and vegetables and the present status. During the conversion of the Guide for Codex MRLs from the old classification to the classification adopted by the Commission at its 18th Session (CAC/PR 4-1989), it became clear that a number of pesticide/commodity combinations such as "fruit" and "vegetables" could not be considered under this new classification. The Committee discussed the status of general Codex MRLs for fruits and vegetables for the following compounds.

ALDRIN AND DIELDRIN (001)

Fruits 0.05 mg/kg

239. The Committee agreed to convert all CXLs to TERLS. The Committee noted that monitoring data were awaited for evaluation by the 1992 JMPR.

AZINPHOS-METHYL (002)

Fruits 1 mg/kg; Vegetables 0.5 mg/kg

240. The Delegation of Germany, on behalf of the manufacturer, informed the Committee that data on GAP and residues were provided to the 1991 JMPR.

CHLORDANE (012)

241. The Committee noted that no action was required and maintained the MRL.

DDT (021)

Fruits and vegetables 1 mg/kg T

242. The Committee decided to withdraw the CXLs. The Delegation of Sweden had supplied monitoring data to the 1991 JMPR. No residues were found above the limit of determination (0.05 mg/kg). The Delegations of Denmark and Sweden were invited to provide monitoring data to the JMPR as well as other countries (e.g. Egypt) before December 1992 in order to develop ERLs for the 1993 JMPR.

DIAZINON (022)

Fruits and Vegetables 0.5 mg/kg

243. The Committee agreed to maintain the MRL. The compound was on the agenda of the 1993 JMPR for residue review.

1,2-DIBROMOETHANE (023)

244. The compounds were discussed during the consideration of Fumigants (see paras. 268-272).

DICHLORVOS (025)

Fruits 0.1 mg/kg; Vegetables 0.5 mg/kg

245. The representative of the manufacturer and the Chairman of the Working Group on Priorities informed the Committee that data on GAP, residues and toxicology could be made available to the 1993 JMPR. The Committee agreed to maintain the MRLs pending re-evaluation.

DICOFOL (026)

Fruits and Vegetables 5 mg/kg

246. The Committee agreed to maintain the MRL awaiting the decision of the 1992 JMPR.

DIOQUAT (031)

Vegetables 0.05 mg/kg

247. The Committee noted that no action was required, as the MRL was at or about the limit of determination, and the uses of the compound would not normally give rise to residues in vegetables.

ENDOSULFAN (032)

Fruits and Vegetables 2 mg/kg

248. The Committee noted that its 22nd Session it had recommended deletion of the general CXLs as indicated in the footnote in the Guide, Part 2. However, the Committee noted that as the compound was on the agenda of the 1993 JMPR for residue evaluation, it would await this review before taking any decision.

HEPTACHLOR (043)

Vegetables 0.05 mg/kg E

249. The Committee noted that no action was required and re-introduced the CXL for sugar beet 0.05 mg/kg E which had been erroneously dropped in the past. The compound was scheduled for the 1991 JMPR.

INORGANIC BROMIDE (047)

Fruits 20 mg/kg

250. The Delegation of Chile and the manufacturer's representative indicated that data could be made available to the 1992 JMPR.

PARAQUAT (057)

Vegetables 0.05 (*)

251. The Committee noted that no action was required.

PARATHION (058)

Fruits 0.5 mg/kg and Vegetables 0.7 mg/kg

252. The compound was scheduled for the 1991 JMPR. The Delegation of Germany informed the Committee that the manufacturer had provided data on GAP and residues to the JMPR. The Delegation of Germany and the Chairman of the Working Group on Priorities indicated that data on toxicology would be available in 1992. The evaluation of the toxicology was scheduled for the 1994 JMPR. The Committee decided to maintain the MRL.

PARATHION-METHYL (059)

Fruits 0.2 mg/kg

253. The Delegation of Germany informed the Committee that the manufacturer had provided data on GAP and residues to the 1991 JMPR. The Chairman of the Working Group on Priorities noted that data on toxicology could be made available in 1992. The Committee decided to maintain the MRL.

PIPERONYL BUTOXIDE (062)

Fruits and vegetables 8 mg/kg Po

254. The Delegation of France undertook to obtain information on residues and toxicology from the manufacturer. The Committee decided to delete the MRLs.

PYRETHRINS (063)

Fruits and Vegetables 1 mg/kg Po

255. The Committee decided to delete the MRLs.

BROMOPROPYLATE (070)

Vegetables 1 mg/kg

256. The Committee was informed by the representative of the manufacturer that residue data could be made available in 1992 for review by the 1993 JMPR. Review of the toxicology was scheduled for the 1994 JMPR. It was decided to maintain the MRL, pending the re-evaluation.

DISULFOTON (074)

Vegetables 0.5 mg/kg

257. The Committee noted that data were available for the 1991 JMPR and decided to maintain the MRL, pending the re-evaluation.

PROPOXUR (075)

Vegetables 3 mg/kg

258. The Delegation of Germany informed the Committee that the manufacturer had provided data on GAP and residue data to the 1991 JMPR. The Committee decided to maintain the MRL.

RECONSIDERATION OF GUIDELINE LEVELS (Agenda Item 8.2)

259. The Committee had before it the Guide to Codex Maximum Limits for Pesticide Residues - Part 3 (CX/PR 3 - 1991, April 1991).

CARBON DISULPHIDE (009); CARBON TETRACHLORIDE (010); 1,2-DIBROMOETHANE (023); 1,2-DICHLOROETHANE (024); METHYLBROMIDE (052).

260. As these compounds were fumigants they were referred to the discussion at that agenda item (see paras. 268-272).

COUMAPHOS (018)

261. The Delegation of Germany informed the Committee that information would not become available before 1994. The GLs were maintained, with a view to having the *Ad Hoc* Working Group on Priorities consider them next year.

BIORESMETHRIN (093)

262. The Delegation of France informed the Committee that GAP data were provided for evaluation in the 1991 JMPR. The GLs were maintained.

ETHEPHON (106)

263. The compound was scheduled for evaluation by the 1993 JMPR and toxicological data were available. Countries were requested to provide data on current GAP to the JMPR. The GLs were maintained.

BUTOCARBOXIM (139)

264. The Committee was informed that no toxicological data had been received for evaluation by the 1991 JMPR.

265. The Delegation of Spain informed the Committee they had registered use on citrus fruits. Israel mentioned registered uses for citrus fruits and cotton. The Delegation of Germany informed the Committee that the compound was currently registered but it could not be used after completion of a national review at the end of the year. Since no further indications of data were available, the Committee decided to withdraw the GLs.

PROPYLENETHIOUREA (PTU) (150)

266. The compound was scheduled for evaluation by the 1993 JMPR and data would be available. The GLs were maintained.

PYRAZOPHOS (153)

267. The compound was scheduled for evaluation by the 1992 JMPR and data would be available. The GLs were maintained.

FUMIGANT RESIDUES IN FOOD (Agenda Item 9)

268. The Delegation of Israel had summarized the data on fumigants received from Spain, Thailand, Guatemala, Germany and The Netherlands (see document CX/PR 91/11 and CX/PR 91/11-Add.1). The document was presented by Ms. M. Freund of this Delegation. The Delegation of Spain informed the Committee that the use of ethylene dibromide was prohibited in Spain and the information given on that compound referred to methylbromide. The Representative of FAO informed the Committee that FAO had received no new information on fumigants.

269. The Committee concluded that, based on the information available to the Committee at this moment, the major fumigants were methyl bromide (052), phosphine (046), hydrogen cyanide (045), and recommended maintaining the MRLs and/or GLs for these compounds.

270. The Committee further decided to recommend deletion of GLs for carbon disulphide (009), carbon tetrachloride (010) and 1,2-dichloroethane (024) as there were no uses which justified an international MRL.

271. On 1,2-dibromoethane (023) the Delegation of Australia informed the Committee that it was used for quarantine purposes for fruits and vegetables. The Delegation of Germany, supported by the Delegation of France, suggested deletion of the GLs for toxicological reasons. Taking into account the fact that the GLs for this compound no longer reflected current GAP, the Committee decided to delete the GLs for 1,2-dibromoethane. Where it was still used in quarantine matters, Delegations were requested to send all relevant information necessary for establishing an MRL to the JMPR. The Working Group on Priorities should look at the possibility for a review of this compound by the JMPR at a later date.

272. The Delegation of Israel noted that caution would be necessary if limits for methyl bromide or 1,2-dibromoethane were to be based on residues of inorganic bromide, as there were substances other than these two compounds that

could contribute to such residues. All Delegations were requested to provide relevant information on residues of inorganic bromide resulting from the use of 1,2 dibromoethane for review by the 1992 JMPR together with methyl bromide. The Committee thanked the Delegation of Israel for its document and the presentation thereof.

The Use of Grain Protectant Insecticides

273. The Committee had before it document CX/PR 91/11 (b) concerning the uses of grain protectant insecticides prepared by Mr. Webley of the Delegation of Australia. The paper was introduced by Mr. G.N. Hooper of that Delegation.

274. Cereal grains such as wheat, rice maize and sorghum formed a large proportion of the diet of the world's population. Stored as dry seeds these cereals had been the main food reserve throughout agricultural history. Cereals, raw or as processed products now also made up a significant part of world trade. An ability to safely store this durable produce was essential to survival between harvests and to allow for crop failures caused by regional, social or climatic conditions. To prevent damage caused by insect pests it was necessary to disinfest the grain and prevent re-infestation. This could be achieved in a number of different ways of which the two ways most significant to the CCPR were by addition of a grain protectant insecticide or by fumigation in an appropriate storage structure. In recent meetings, the CCPR had devoted a significant amount of time to the discussion of MRLs for grain protectants. The paper attempted to address all the queries which were so often debated in the Committee.

275. The information in the paper was collected through an extensive survey of both government and industry on the use of grain protectant insecticides. 17 countries and many manufacturers reacted to this request for information. As not all reactions were received in time for inclusion in this paper, the Delegation of Australia offered to present an updated paper at the next session. There was still a lack of information on the use of grain protectants in South-east Asia and Africa. All Delegations which had not yet reacted were requested to do so.

276. The Delegation of the United Kingdom informed the Committee that they had not sent information yet because they had just completed a major review on contact organophosphorus pesticides used in cereal grains. This information had already been handed over to the Delegation of Australia for inclusion in next year's paper with a copy to the Secretariat.

277. The Delegation of Germany drew the attention of the Committee to the fact that the information on East Germany given in Table 1 was no longer relevant. The Delegation of Spain informed the Committee that in Table 1 the MRLs for deltamethrin and permethrin should read 1 and 2 mg/kg, respectively.

278. The Committee noted that all 14 compounds identified in the paper as being used as grain protectant insecticides were already in the Codex system.

279. The Committee thanked the Delegation of Australia for preparing this paper and looked forward to new information next year.

RECOMMENDED METHOD OF SAMPLING FOR THE DETERMINATION OF PESTICIDE RESIDUES IN MEAT AND POULTRY PRODUCTS FOR CONTROL PURPOSES (Agenda Item 10)

280. The Committee had before it document CX/PR 91/12, which was introduced by Mr. R. Carnevale of the Delegation of the United States of America.

281. At the 22nd Session of the CCPR, Appendix II of ALINORM 89/24A "Recommended Method of Sampling for the Determination of Pesticide Residues in

Meat and Poultry Products for Control Purposes" had been discussed by the Committee and returned to Step 5. The Delegation of the United States had proposed to modify the document dealing with sampling of animals prior to, or at the time of slaughter. The purpose of the modification was to more clearly define that sampling and control methods for pesticide residues in food animals was most effectively applied in the exporting country. The change would assist with harmonization efforts between the CCPR and CCRVDF since that Committee was developing a similar guideline embodying this principle for animal drug residues. The Committee, by way of Circular Letter CL 1990/20-PR, had requested comments from all countries on the proposal.

282. Comments were received from Canada, Thailand and Germany. All three countries supported the modification.

283. Subsequent to these comments the guideline was revised. No other changes had been made to the guideline.

284. The Committee discussed a request from Australia to reconsider the need for a minimum fat sample quantity of 0.5 kg from animals in Groups 031A and 031B in the Table. The sample quantity of 0.5 kg however had not been modified because it seemed to be a reasonable sample size for large animals and could be needed where duplicate analyses were performed. For smaller species a footnote was included to allow for the whole commodity, without bone, to be analyzed when adhering fat is insufficient to yield a 0.5 kg sample.

285. The Delegation of France questioned the need for a sample as large as 6 whole livers which for "foie gras" could amount to 6 to 7 kg (animals defined in Group 038B). The Committee decided to modify this provision by adopting the same instructions for taking a primary sample as in Group 032 for liver.

286. The Committee considered this change to be minor and advanced the guidelines to Step 8. The proposed changes are summarized in Appendix VIII to this report.

287. The Committee noted that guidelines for sampling of milk and fish had not been submitted by the Delegation of the United Kingdom. The Delegation of the United Kingdom stated that these guidelines would be available for discussion at next year's Session.

CONSIDERATION OF THE REPORT OF THE WORKING GROUP ON METHODS OF ANALYSIS (Agenda Item 11)

288. The report, which was introduced by the Chairman of the Working Group, Mr. L. Tuinstra (The Netherlands) is attached to this Report as Appendix IV.

289. Mr. Tuinstra informed the Committee that a list of methods of analysis, revised by the Working Group on the basis of information received, would be transmitted to the participants for comments and that a finalized version could be transmitted to the Codex Secretariat before the end of the year. The Working Group considered that Part 7 of the Guide was in principle still valid, although certain paragraphs could be revised or up-dated. Simple methods of analysis were also considered, and the Working Group decided that the inclusion of screening methods in Part 8 of the Guide should be referred to the pesticide/matrix combination concerned. It was the opinion of the Working Group that, for regulatory purposes as few as possible compounds should be included in the definition of the residue, and that for carbofuran (96) and carbosulfan (145) the relevance of the inclusion of 3-ketocarbofuran in the residue description should be reviewed by JMPR. The Committee was also informed that specific recommendations would be made for the validation of methods to be incorporated in the future version of the "Good Practice in Residue Analysis". The importance of publication of information on the extension of multi-residue

methods in the open literature was emphasized. The Working Group considered the expression and application of MRLs for fat soluble pesticides in meat, animal fat and edible offal and concluded that for several compounds the distribution of the compound between the fatty and non-fatty components was not well understood, and that the use of the term "fat soluble residue" in Codex was not well defined. Finally, it was indicated that the Working Group had examined the questions raised by the previous session of the CCPR on limits of determination for several compounds.

Discussion of the Working Group Report by the Committee Paragraph 1. Revision of the list of recommendations for methods of analysis

290. The Committee noted that methods of analysis were not available for clofentezine (156) and agreed that validated methods of analysis were an important requirement for setting Codex MRLs. The Committee decided that it could not recommend CXL unless a published method was available.

291. The Delegation of the United States informed the Committee that there was a tolerance for clofentezine in their country and that a method for this compound would have been published in "FDA Pesticide Analytical Manual" Vol. II it could be obtained for future consideration by the Working Group.

Paragraph 2. Good practice in pesticide residue analysis

292. The Delegation of China emphasized the importance of GAP and GLP to provide data for establishing MRLs, and noted that Guidelines should be established on the collection of data.

Paragraph 3. Simple methods

293. The Committee discussed the question related to the improved availability of "simple" methods of analysis, in order to provide support to developing countries which lacked facilities for laboratory control. The Committee noted the conclusion of the Working Group that simplified methods generally did not meet the basic requirements for the determination of residues for regulatory purposes. The Committee was also informed of the discussion held at the Codex Committee on Methods of Analysis and Sampling at its 17th Session, where a conclusion was reached that in the framework of selecting Codex methods of analysis on the basis of defined Codex criteria, the concept of a "simple" method was unclear.

294. The Delegation of Botswana stated that the introduction of "simple" methods for regulatory purposes in international trade could create confusion between importing and exporting countries and therefore, disagreed with this concept. The Committee agreed that the terminology "single method" should not be further used.

295. The Committee agreed with the conclusions of the CCMAS in that the Working Group should select additional screening methods.

Paragraph 4. Expression of residues

296. At the suggestion of the Delegation of Germany, the Committee agreed that the JMPR should examine conjugate residues in the compound, as they were considered to be significant and biologically available, and therefore should be included in the residue definition.

Paragraph 5. Validation of methods

297. The Committee was informed that the Fourth International Symposium on the "Harmonization of Quality Assurance Systems in Chemical Analysis" organized by IUPAC/ISO/AOAC would be held in Geneva from 2-3 May 1991.

298. At the suggestion of the Delegation of the United States, the Committee agreed that ring studies should be referred to as collaborative studies. The Committee noted that developing country participation in collaborative studies should be encouraged.

Paragraph 7. Expression and application of MRLs for fat soluble pesticides in meat, animal fat and edible offal

299. The Chairman indicated that "fat soluble" was not clearly defined and therefore, recommended its clarification by the JMPR. In this regard, the observer of the AOAC had summarized those compounds where MRLs had been established for animal products. Out of the 171 compounds examined by the Committee, only 83 compounds had MRLs based on animal products. 45 of these compounds dealt with specified animal species and therefore, the establishment of MRLs for lower fat animals would require new data. 22 compounds had MRLs "at or about" the limit of determination. Only 2 compounds were expressed in "meat" with no reference to portion.

300. Of the 14 remaining compounds, 6 organochlorine compounds had ERLs that were based on old data. Of the remaining 8 compounds, all but 2 indicated use as veterinary products specific to species, and likewise, any additional use would require new data. The 2 remaining compounds Propargite (113) and Fenvalerate (119) presented problems with unequal fat distribution.

301. The Committee agreed to defer any decision concerning this matter until the next session of the CCPR. In the interim, the Committee agreed that the above analysis, as well as a definition for "fat soluble", should be forwarded to the JMPR for consideration. Comments would also be requested by Circular Letter, especially in regard to a previous decision taken by the Committee concerning the establishment of MRLs for low fat and higher fat products. Specific attention was needed for the organochloride compounds. The Delegation of Australia noted that there was considerable variation in fat content between and within species which should be taken into account. The Committee agreed to proceed with caution.

Paragraph 8. Limits of determination

302. The Committee examined the proposal of the Working Group of limits of determination for Phorate (112), Triazophos (143), Benalaxyl (155), Clofentezin (156), Flusilazole (165), Terbufos (167) and agreed with their conclusion. The Committee endorsed the report of the Working Group. The manufacturer's representative noted that for terbufos no national regulatory authority had requested limits of determination below 0.05 mg/kg.

Appointment of an Ad Hoc Working Group on Methods of Analysis

303. The Committee thanked the Working Group and its Chairman and Vice-chairman and decided to set up a new Ad Hoc Working Group under the Chairmanship of Mr. L. Tuinstra and Vice chairmanship of Mr. P. van Zoonen.

CONSIDERATION OF THE REPORT OF THE AD HOC WORKING GROUP ON PESTICIDE RESIDUE PROBLEMS IN DEVELOPING COUNTRIES (Agenda Item 12)

304. The report of the *Ad Hoc* Working Group on Pesticide Residue Problems in Developing Countries (see Appendix V) was introduced to the Committee by its Chairman, Ms. Salwa Dogheim (Egypt).

305. The Committee was informed that the Working Group reiterated its support for the recommendations arising from its previous session, and agreed that their efforts should continue to emphasize these points (see Appendix IV of ALINORM 91/24). In this regard, several members of the Working Group, as well as the FAO representative, summarized their activities addressing these recommendations.

306. The Working Group re-emphasized the needs of developing countries with regard to pesticides, including assistance in establishing national infrastructures and means of coordination between different government ministries, easing information transfer, the identification of inexpensive, reliable and accurate methods of analysis and general information on pesticide use in developing countries and regions.

307. The Working Group also decided to amend and revise the Questionnaire for Information on Pesticides in Current Use in Developing Countries, which was circulated for government comments in November 1990 (CL 1990/40-PR, Annex III). In taking this decision, the Working Group agreed that the questionnaire should solicit information and data on the types of pesticides used, types of commodities traded and on identification of problems in international trade.

308. The Committee agreed that the amended questionnaire should be circulated for government comment and information (see CL 1991/15-PR, attached to this report), with a view towards a discussion of government responses at next year's session. At the suggestion of the Delegation of the United States, and as supported by the Delegations of Egypt and Nigeria, the Committee also agreed that information submitted in regard to pesticide formulations should include a complete description, especially as related to the active ingredients.

309. The Committee concluded that the questionnaire would be circulated to Codex Contact Points, CCPR participants, international organizations and representations of developing countries who had attended previous CCPR sessions. It was also agreed that responses to the questionnaire would be directed to the newly elected Working Group Regional Chairmen (see Appendix V) as an initial first step, with the understanding that responses would also be provided to the Codex Secretariat.

310. The Committee thanked the Working Group for its efforts and decided to support the reinstatement of the Group to allow for the analysis of government comments and other issues at its next Session. The Committee also agreed to the following revised terms of reference for the Group:

- to identify major pesticides used in developing countries and the food crops on which they are used;
- to provide information that would allow for the elaboration of MRLs for pesticides used in individual countries;
- to identify pesticide residue issues of concern to developing countries for referral and consideration by the CCPR;
- to promote the exchange of information on pesticides between countries;

- to liaise with Codex Regional Coordinating Committees where appropriate.

CONSIDERATION OF THE REPORT OF THE WORKING GROUP ON PRIORITIES (Agenda Item 13)

311. The report of the Working Group on Priorities (see Appendix VI) was introduced to the Committee by its Chairman Ms. J. Taylor (Canada).

Consideration of the 1991 Proposals for the Priority List

312. In consideration of the information on the availability of data and the heavy schedules of the JMPR for the years 1991, 1992 and 1993 new proposals were scheduled as presented in the table below:

Schedule for New Proposals

Common Name	Country	Manufacturer	JMPR
metiram	(1)	Bayer	1993
fenpropathrin	Spain	Sumitomo	1993
etofenprox	Spain	Mitsui Toatsu	1993
tebuconazole	FRG	Bayer	1994
clethodim (2)	USA	Chevron	1994
teflubenzuron (3)	Netherlands	Shell	1994

- (1) It was agreed by the Committee that metiram would be added to the priority list for 1993 review by the JMPR. The dithiocarbamates are being reviewed that year. The manufacturer has agreed to submit the new toxicological data.
- (2) Clethodim and Sethoxydim should be reviewed simultaneously by the JMPR as the majority of metabolites measured by the analytical methods are identical. GIFAP will contact the manufacturer of sethoxydim to determine if data could be submitted for the 1994 JMPR.
- (3) The Netherlands will propose this compound as a priority. The manufacturer has already indicated that the data could be made available to the JMPR.

Proposals Not Yet Scheduled

Common Name	Country	Manufacturer	Year Data are Available
Quinalphos (1)	Sweden	Sandoz	To be determined
Fenarimol (1)	Sweden	Elanco	To be determined
Tolclofos-methyl (2)	Sweden	Sumitomo Schering	To be determined
Bupirimate (2)	Sweden	ICI	To be determined
Fenpyroximate (3)		Nihon Nohyaku	Tox May '92 Res March '93

- (1) These compounds are carried forward from the 1990 meeting. Availability of data is still to be established.
- (2) Sweden proposed these compounds based on the detection of residues in imported food commodities. Availability of data is still to be established. GIFAP has agreed to assist in this respect.
- (3) The manufacturer informed the Working Group that the data for this pesticide could be made available to the JMPR if there is a country interested in proposing it as a priority. The full list of compounds scheduled up to JMPR 1996 is attached as Appendix VI, Annex I.

Proposed Procedure for the Periodic Review of Pesticides

313. A proposed procedure for the periodic review of pesticides based on an initial draft presented by the Delegation of Australia, is appended (See Appendix VII). An additional step was added in order to establish:

- a) whether there is still use
- b) is there is still use, what is the current GAP

314. If no GAP information is received from countries, review of toxicology and residues data will not be scheduled by the JMPR and a recommendation will go forward to delete CXLs. If GAP information is received it may be used to determine the significance of remaining uses and be helpful in establishing the priority for the review.

315. Countries were requested to forward comments to the Chairman of the *Ad Hoc* Working Group on Priorities by December 1991. This proposal, together with the comments received, would be discussed at the 1992 Working Group meeting and at the 1992 CCPR.

Pesticides for Which the ADI was Established Prior to 1976

316. The status of the pesticides for which ADIs had been established before 1976 was reviewed and were divided into the following categories:

REVIEW BY THE JMPR BASED ON NEW DATA

azinphos-methyl (002), carbaryl* (008), chlorfenvinphos (014), diazinon (022), dichlorvos (025), dicofol (026), fentin (040), malathion* (049), methidathion* (051), mevinphos* (053), monocrotophos (054), parathion* (058), parathion-methyl* (059), phosalone (060), piperonyl butoxide (062), quintozene (064), thiabendazole (065), bromopropylate* (070), disulfoton (074), amitrole (079), dodine (084), chlorpyrifos-methyl (090)

* GAP was requested from countries for all of the above, but particularly for those with an asterisk.

317. All of the above had been scheduled by the JMPR. Some of the scheduling was tentative. Manufacturers should contact the JMPR Secretariat to confirm dates. The schedule is given in Appendix VI, Annex I.

REVIEW BY WHO. NO NEW TOXICOLOGICAL DATA

318. No new toxicological data were available for the pesticides listed below. WHO would review the monographs to determine the significance of data gaps. As a result of the review there were two possible courses of action:

- a) recommendation for deletion of CXLs/ERLs or
- b) scheduling for rereview of the old data base by the JMPR

endrin (033), pirimiphos-methyl (086)

REVIEW BY JMPR BASED ON OLD AND SOME NEW DATA

chlormequat (015), ethoxyquin (035), formothion (042), heptachlor (043), hydrogen cyanide (045), pyrethrins (063),

319. Reviews by the JMPR had been scheduled for all of the above. GAP data should be submitted by countries to the JMPR Secretariat as soon as possible as this would provide some indication of whether these reviews should proceed. Manufacturers should submit all toxicological, residues and GAP data available according to the proposed schedule. Problems with the scheduling should be brought to the attention of the JMPR Secretariat as soon as possible.

RECOMMENDATION FOR DELETION OF CXLS

bromophos (004), bromophos-ethyl (005), crufomate (019), dioxathion (028), fenclorphos (036)

The Committee recommended deletion of the MRLs for these compounds, as it had no indication of valid GAP data.

TO BE HELD PENDING FURTHER INFORMATION FROM COUNTRIES OR MANUFACTURERS

320. 2,4-D (020) - Manufacturer to contact the WHO Secretariat with respect to conditions for submission of data.

diphenyl (029) - Information to be supplied by the Delegation of the United States regarding possible uses and data development in that country.

Pesticides for Which the ADI Was Established Between 1977 and 1980 (Inclusive)

321. As requested by the 22nd CCPR (para. 362, ALINORM 91/24), the Working Group reviewed the list of 12 compounds for which the ADIs had been established between 1977 and 1980 inclusive. The pesticides were: carbophenothion (011), chlorobenzilate (016), diquat (031), fenthion (039), trichlorfon (066), thiometon (076), thiophanate-methyl (077), dichloran (083), cartap (097), phosmet (103), guazatine (114), triforine (116)

322. Countries and manufacturers would be asked, by circular letter, to provide information with respect to current use and registration status to the Chairman of the *Ad Hoc* Working Group. GIFAP was also requested to contact the manufacturers about the availability of toxicology and residues data.

Naturally Occurring Microorganisms

323. The Abbott Laboratories' proposal, regarding the possible review by the JMPR of the data available with respect to the naturally occurring strains of *Bacillus thuringiensis* products, was favourably considered.

324. This matter was already under discussion within IPCS. It was likely that an Expert Group would be convened to consider the data requirements and criteria. As a next step this group could review the data on *Bacillus thuringiensis* products. It was emphasized that data on all products should be reviewed at the same time, especially the newer products which contained higher levels of endotoxin. Countries and groups of countries were requested to supply a copy of any existing guidelines to IPCS at the following address: Dr. M. Mercier, Manager, International Programme on Chemical Safety, World Health Organization, CH-1211 Geneva 27, Switzerland.

Other Items

325. The Delegation of the United States informed the meeting of problems with residue data generated by Craven Laboratories of the United States. Residue data for a number of registered products, including some currently on the JMPR agenda, had been supplied, at least partly, by this laboratory. The matter was currently under investigation.

326. The need for a revised system for prioritizing pesticides for reviewed was raised. This had become important in view of the increasing workload of the JMPR. The Chairmen of the Working Groups on Acceptance and Priorities would consider the matter over the coming year.

Appointment of a new Ad Hoc Working Group

327. It was decided to establish a new *Ad Hoc* Working Group which would function until the end of the next Session under the Chairmanship of Ms. J. Taylor (Canada).

CODEX MAXIMUM LIMITS FOR PESTICIDES IN PROCESSED FOODS (Agenda Item 14)

328. The Committee had before it document CX/PR 91/13 (English only) containing government comments on a summary of the decisions taken by it on the subject at earlier sessions (Appendix VI, ALINORM 91/24; CL 1990/20-PR).

329. The Delegation of Germany informed the Committee that it supported the view that specific MRLs for processed foods should only be established in relevant cases, and that during the authorization procedure in Germany information on processing studies had to be submitted.

330. The Delegation of the Netherlands held the same view, and stated that MRLs for processed foods should only be established on an *ad hoc* basis.

331. The Delegation of Thailand was of the opinion that MRLs should not be set in processed food containing raw material for which MRLs had already been established, unless the processed food contained many types of raw materials.

332. The Delegation of the United States of America stated that its position was the same as in 1980, e.g. it supported the principle of not establishing MRLs for processed products unless the residue exceeded that in the raw agricultural commodity from which the processed product was derived.

333. The Delegations of Italy and France supported the view that setting of MRLs for processed foods should be restricted to the case that the food product comprised an important item of international trade, and residues could not easily be determined on the primary food commodity, as in the case of wine.

334. Several other Delegations (the United Kingdom, Canada, Egypt, Australia and Sweden) were also of the opinion that as a rule MRLs for processed foods should not be established, with the exception of a few cases (e.g., wine, olive oil, baby food, etc.), while taking into account toxic metabolites. The Committee was informed that in some of these countries processing studies were required.

335. The Delegation of Mexico drew the attention of the Committee to a decision which was made at a previous session of the Commission that separate MRLs for wine should not be established.

336. The Delegation of Chile said that the different regulatory approaches of countries towards what MRLs were applied to processed foods could cause trade problems.

337. It was concluded that the general approach not to establish MRLs for processed foods except in a few special cases, to be established on a case-by-case basis, was widely supported by Delegations, and that information on the influence of processing on residues was required.

338. It was agreed that processing data requirements should be included as part of the FAO guidelines to be developed, and the issue raised by the Delegation of Chile should be brought to the attention of the *Ad Hoc* Working Group on Acceptances.

OTHER BUSINESS (Agenda Item 15)

339. The Delegation of Canada requested countries submitting information for incorporation in the list of national pesticide residues to highlight changes from data provided previously.

340. The Committee was informed that the development of this list into a computerized format was underway. The Delegations were requested to adopt the Codex Classification on Food and Animal Feed to make the information more accessible and to facilitate a comparison of MRLs between governments.

341. The Delegation of Germany noted that at the 22nd session of the CCPR it had been decided to refer the definition of the portion of commodity to which MRLs applied for the oil seed group to the Working Group on Methods of Analysis and asked what follow up was given to this decision.

342. The Committee decided to bring this subject to the attention of the Working Group on Methods of Analysis next year.

343. The Delegation of Brazil stated that: "Considering that important matters to Brazil had already been discussed before information and technical data from the Codex Committee of Brazil were received, it will be informed that it should, again, present those matters during the meeting in Rome, in July, as well as during the 24th Session of the CCPR, in 1992". The Committee was informed of the statement of Brazil by a written document.

344. The Chairman of the Working Group on Acceptances noted that four additional pesticide/commodity combinations had been proposed for consideration as case studies: tolylfluanide on apples, vinclozolin on apricots, tecnazene on potatoes, methacrifos on cereals. Countries were invited to provide GAP information and supporting efficacy data to Mr. Bill Murray of Canada who would collate this information for submission to the JMPR. It was suggested that the GAP data be provided in the format adopted in the EEC. This request would be followed up by a letter, but countries were encouraged to supply this information as soon as possible.

DATE AND PLACE OF THE NEXT SESSION

345. The Chairman informed the Committee that the 24th Session would be held in The Hague from 6-13 April 1992. The Committee was informed that the *Ad Hoc* Working Group on Acceptances and the *Ad Hoc* Working Group on Priorities would hold their meetings on 4 April 1992.

VALEDICTION

346. The Committee expressed its deep appreciation to the following persons who had served the Committee for the last time, Mr. J. van der Kolk, Chairman of the Committee, Mrs. P. Hakkenbrak, head of the organizing Dutch Secretariat, Mr. L. Schuddeboom, head of the technical Dutch Secretariat, and to Mr. F. Kopisch-Obuch of FAO for their outstanding contributions to its work during many years.

347. The Committee wished them well for the future, and presented them with a token of their highest esteem.

SUMMARY STATUS OF WORK

Recommendation	Step	For Action by:	Document Reference
Notification of acceptances using the new form	--	Governments Secretariat	paras. 40-41, 46, ALINORM 91/24A
Notification of intake data from countries using organochlorine and organo-phosphorus pesticides	--	Governments WHO	para. 57-60, ALINORM 91/24A
Amendments in the Codex Classification for Virgin Olive Oil	--	Secretariat	paras. 67-69, ALINORM 91/24A
Proposed Draft MRLs	5	CAC	ALINORM 91/24A, Add. 1
Proposed Draft MRLs	5/8	CAC	ALINORM 91/24A, Add. 1
Draft MRLs	8	CAC	ALINORM 91/24A, Add. 1
Proposed non-substantial amendments to Codex MRLs	--	CAC	ALINORM 91/24A, Add. 1
Proposed Draft MRLs	3	Governments	CL 1991/15-PR (ALINORM 91/24A)
Draft MRLs	6	Governments	CL 1991/15-PR (ALINORM 91/24A)
Draft MRLs and matters arising from the 23rd Session of CCPR	7	Governments JMPR	CX/PR JMPR 1991
The Use of Grain Protectant Insecticides	--	Australia Governments	paras. 273-279, ALINORM 91/24A
Guideline Levels	--	Governments	paras. 259-267, ALINORM 91/24A
Fumigant Residues in Food	--	Governments	paras. 268-272, ALINORM 91/24A
Recommended Method of Sampling for the Determination of Pesticide Residues in Meat and Poultry Products for Control Purposes	8	CAC	App. II, ALINORM 89/24A App. VIII, ALINORM 91/24A
Recommendation for methods of residue analysis	--	Government Secretariat	paras. 288-303, ALINORM 91/24A
Circulation of an amended questionnaire on pesticides in current use in developing countries	--	Governments of developing countries Secretariat	paras. 304-310, ALINORM 91/24A

SUMMARY STATUS OF WORK (Cont'd)

Recommendation	Step	For Action by:	Document Reference
Consideration of the 1991 Proposals for the Priority List	--	Governments Industry, CCPR	para. 312, ALINORM 91/24A
Proposed Procedure for the Periodic Review of Pesticides	--	Governments Secretariat	paras. 313-315, ALINORM 91/24A
Review of Pesticides for which the ADI was established Prior to 1976	--	Governments Industry CCPR	paras. 316-320, ALINORM 91/24A
Review of pesticides for which the ADI was established between 1977 and 1980 (inclusive)	--	Governments Industry CCPR	paras. 321-322, ALINORM 91/24A
Establishment of Codex MRLs for pesticides in processed foods only on a case-by-case basis	--	Governments CCPR	paras. 328-338, ALINORM 91/24A

ALINORM 91/24A
Appendix I

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Appendix II

Speech of Mr. S. van Hoogstraten, Director for Food and Product Safety, Ministry of Welfare, Health and Cultural Affairs, on the occasion of the opening of the 23rd Session of the Codex Committee on Pesticide Residues, The Hague, 15 April 1991.

Ladies and Gentlemen,

It is a great pleasure for me to welcome you in The Hague on behalf of the State Secretary for Welfare, Health and Cultural Affairs, Mr Simons.

In January 1966, now 25 years ago, the first Session of the Codex Committee on Pesticide Residues was held in The Hague. Since then, 22 Sessions of this Committee have taken place, all in The Netherlands, most of them in The Hague. At that first Meeting, there were 49 participants from 16 countries. In the last five years, attendance is more or less stable at about 45 countries and more than 10 international organizations, together more than 200 persons, the largest Codex Meeting after the Codex Alimentarius Commission itself.

In the course of these years, many things have changed. The ways pesticides and their residues are viewed nowadays can hardly be compared with those of 1966. Environmental considerations did hardly play a role in those early days, consumer perception was an unknown subject, pesticides were essentially a technical, not a political subject. Developing countries did hardly play a role in the discussions. Chemical analysis of those days was in an early stage of development. In a certain way, life was easy then.

You know, how much all this has changed. Agriculture has changed, pest control has changed, and the political and public perception of pesticides and their residues in food and drinking water have dramatically changed.

Four weeks ago, FAO and WHO convened a Conference in Rome, together with GATT, the General Agreement on Tariffs and Trade. The title of the Conference was "FAO/WHO Conference on Food Standards, Chemicals in Food, and Food Trade". The Conference aimed at a review of the total food-standards programme of the Codex Alimentarius and its relations with other activities of FAO and WHO. Important on the agenda were also the developments within GATT and the role Codex is intended to play in the framework of GATT. 79 countries attended this important and successful Conference. In this Conference, both the Codex Committee on Food Additives and Contaminants and the Codex Committee on Pesticide Residues were largely discussed. Major attention was also given to the Joint FAO/WHO Expert Committee on Food Additives (JECFA) and the Joint FAO/WHO Meeting on Pesticide Residues, JMPR. A paper, prepared by the delegation of the United States of America for the Conference was very instrumental for the discussions. It highlighted in a critical but constructive manner the many difficulties in the adoption and acceptance of worldwide Codex standards for pesticide residues.

The Conference echoed the concerns which your Committee has often expressed on the limited number of formal acceptances that has been given to many Codex standards, certainly also to those concerning pesticide residues. Often, reference was made to situations in which trade in foodstuffs had suffered from the lack of acceptance of Codex standards and recommendations. The Conference discussed a number of suggestions to improve the situation and formulated certain recommendations concerning the work of CCPR and JMPR. I am sure that during this week, often reference will be made to the discussions that took place at the Conference.

It appeared from the discussions at the Conference, that the initiative of this Committee at its 22nd Session to start a review of its procedures and those of JMPR and which resulted in the establishment of the *Ad Hoc* Working Group on Acceptances was greatly appreciated. And many are looking at you with high

expectations that the activities of the Working Group and of the plenary Committee will contribute in the near future to a largely increased acceptance of Codex MRLs as the basis for international trade in foodstuffs. The very reason for the existence of this Committee is to elaborate standards, that prove to be acceptable in virtually all cases to the member nations of the Codex Alimentarius. Participation in the work of this Committee pre-supposes, as has often been emphasized, that countries are prepared to recognize the pest control needs of other countries, also if this results in higher levels of residues than necessary in the national situation. Countries should however also be prepared to explain and justify the practices that they approve nationally, especially if these practices lead to levels of residues that are different from those commonly necessary to accommodate agricultural needs in most other countries. In all this, of course, the safety and interests of the consumer should never be forgotten. It is a predominant factor in all of your work.

I briefly want to mention a few other subjects regarding this Committee that were discussed at the Conference.

- The need for a periodic review of old compounds and of MRLs established many years ago, was stressed. This may also necessitate a review of the procedures and criteria for prioritizing compounds by the CCPR and for their re-evaluation by the JMPR. For both old and new compounds, increased inputs especially from governments on what can be considered up-to-date information on Good Agricultural Practices world wide, including developing countries, is essential. Evaluations by the Joint Meeting on Pesticide residues are often hampered by the limited information on Good Agriculture Practice provided.
- The importance of intake estimates and of the generation of adequate data in this respect were highlighted.
- The Conference drew attention to the need to try to obtain better agreement between the evaluations from the JMPR and of other national and international bodies. I am confident, that FAO and WHO will do all that is within their capabilities to increase the support for the evaluations from their expert bodies.
- Increased participation from consumers in Codex work, at national level and in delegations to Codex Sessions, was encouraged.
- Acceleration of the procedures was discussed; omission of Steps 6 and 7, which is now limited to cases of full agreement in the earlier steps, could in future be recommended more often.
- The need for increasing the number of compounds considered by the JMPR and the CCPR, including periodical review, for quicker reviews, for more transparency in the evaluations, all pose the problems of resources. However, for these problems no concrete solutions have been proposed.

One of the requests of the 22nd Session of your Committee was that FAO develops guidelines explaining the principles of the evaluation of data on Good Agricultural Practices and on residues, which are used by the JMPR. It was very encouraging to hear, that this request has got an almost immediate positive reply, and that FAO has started to elaborate these guidelines on which comments from the Committee will be requested at an appropriate time.

It is interesting to note, that this very week, an FAO/Netherlands Conference on Agriculture and Environment is being held elsewhere in The Netherlands, in the city of 's Hertogenbosch. This Conference will essentially discuss the subject of sustainable agriculture in developing countries. It emphasizes the importance that nowadays is attached to an agriculture that is not only producing for today, but also keeps in mind the needs of future generations. It stresses the point, that

Good Agricultural Practice today is not necessarily the Good Agricultural Practice of yesterday and tomorrow, and that in itself is already reason for a regular review of MRLs. It also stresses the importance of generating and supplying adequate residues data reflecting the changing use patterns and including the data necessary to make realistic estimates of human intake of residues.

Ladies and Gentlemen, several months ago, your Chairman announced that he had decided to take up another position, in another government department, that is responsible for environmental protection. At the same time, our government was again under heavy pressure to reduce expenses and cut staff. For some time, the government therefore has wondered, whether after 25 years, time was not ripe to initiate a transfer of responsibility for this Committee to another country. I am however very glad to be able to say, that the outcome of the process of reflection has been, that The Netherlands will continue to accept responsibility for the CCPR as well as for the Codex Committee on Food Additives and Contaminants.

The Chief of the Dutch delegation here, Mr. Van Eck, will take over responsibility as Chairman of your Committee, when this meeting has finished. I know that your actual Chairman has served CCPR during many years, and in different positions. I am very grateful for his important contributions and wish him all the best in his new position.

Ladies and Gentlemen, I know that many of you like to come to The Netherlands at least once a year, especially for CCPR and also in this spring period. On behalf of the State Secretary and of myself, I wish you not only a very fruitful meeting but also a pleasant stay. Many of you know, that The Netherlands has more interesting things to offer besides discussions of pesticide matters. I hope, that you will find time to enjoy some of it in your free time. And I look forward with high expectations to the outcome of your discussions.

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Appendix III

AD HOC WORKING GROUP ON ACCEPTANCES
SUMMARY OF DISCUSSION

1. The *Ad Hoc* Working Group on Acceptances met under the Chairmanship of Mr. B. Murray (Canada) at the request of the 22nd Session of the CCPR to consider factors arising during the development of maximum residue limits (MRLs) that could lead to a lack of acceptance of Codex MRLs by governments. The following member countries and international organizations were represented: Australia, Canada, Egypt, Finland, Germany, Japan, the Netherlands, New Zealand Spain, Sweden, Thailand, United Kingdom, United States of America, EEC and GIFAP. Finding ways of increasing the level of acceptance of Codex standards had been a major theme of the recent FAO/WHO Conference on Food Standards (Rome, March 1991). The Conference discussed and developed recommendations on several of the issues before the Working Group.

2. The meeting had before it a draft discussion paper which identified issues that might be addressed in improving the acceptability of Codex MRLs. This paper was prepared based on the comments received from delegates and the JMPR in response to CL-1990/35 PR which contained the report of the Working Group on MRL Development (April 1990). The list of factors identified as adversely affecting acceptance of Codex MRLs, prepared by the Working Group on Regulatory Principles through their questionnaire on national regulatory practices, was also appended. The attention of the meeting was drawn to the initiatives of the 1990 JMPR to clarify the evaluation process. The proposed FAO Guidelines on all aspects of the submission and evaluation of GAP and residue data and the estimation of MRLs are expected to address a number of the concerns identified previously. A draft of these guidelines will be available to the 1991 JMPR and will be circulated prior to the next session of the CCPR. It was recognized that there is a need for increased participation in the activities of the CCPR by member countries and other interested parties.

3. There was extensive discussion of good agricultural practice (GAP) and the current Codex procedure of accepting nationally approved uses as GAP. The meeting considered that it may be appropriate to consider the development of criteria for referring GAP to an expert committee. The development of representative case studies might serve as one means to investigate ways of resolving disagreements about proposed MRLs related to differences in nationally approved uses (GAP). It was suggested that the completed case studies should be circulated to the JMPR prior to submission to an expert group on efficacy. It was also agreed that there was a need to further investigate national approaches to the development of registered uses with particular reference to the role of efficacy data.

4. The issue of enforcement practices was raised with respect to the interpretation of Codex MRLs. This was to be referred to the JMPR for comment.

5. The need for the withdrawal or modification of CXLs was raised. GIFAP expressed concern that there should first be an appraisal of the existing toxicology database. The WHO Secretariat supported this view. It was noted that a proposal for a structured procedure for the withdrawal or modification of CXLs had been prepared by the Australian delegation and would be considered in the Working Group on Priorities. Further discussion on this topic was deferred to the meeting of that Working Group.

6. It was agreed that there was need for increased transparency on the part of countries and groups of countries, such as the EEC, with respect to their evaluation of residue and toxicology data for pesticides. It was stated

that the evaluation procedures within the EEC were essentially the same as those employed by the JMPR.

7. A necessary step towards harmonization of MRLs relates to the adoption of the Codex Classification of Foods and Animal Feeds by national Governments. At least two participants in the Working Group indicated that they were in the process of incorporating this system of classification into their regulations.

8. There was discussion of the need for further clarification of approaches to the risk assessment of residues of substances in food in place within national governments and the WHO. It was agreed that the recommendation of the FAO/WHO Food Standards Conference (March, 1991) with respect to carcinogenicity was a valuable first step and that other toxicological endpoints should also be considered for future examination.

9. There was a need for the JMPR to consider strengthening the requirement that toxicology and residue data be developed according to appropriate Good Laboratory Practice (GLP) procedures. It was recognized that care must be taken in the application of these principles as many older, otherwise valid studies, might be declared unacceptable.

10. The Working Group expressed concern about the increasing demand on the resources available to the JMPR. Requests for reevaluations of older compounds as well as the GATT recognition of Codex Standards may overburden the JMPR capacity to submit timely reviews. It was noted that further expansion to accommodate occupational and environmental concerns would exacerbate this situation. An estimate of the future requirements to meet these responsibilities was requested from the Codex and JMPR Secretariats. This estimate should be available for the meeting of the Codex Alimentarius Commission in July 1991.

11. There was concern that the use of average food consumption data may not be appropriate for assessing risks associated with exposure to products with high acute toxicity or short term effects. It was suggested that this issue be revisited in the plenary session as part of the discussion on intake studies (Agenda Item 7) and the WHO asked to provide guidance in this area.

12. It was suggested that in the case of highly acutely toxic pesticides or those with short term effects it may be appropriate to analyze individual items in addition to composite samples. A brief paper that would provide clarification of this issue was to be prepared for further consideration.

13. It was proposed that the Working Group on Priorities reexamine criteria for entering chemicals/commodities into the Codex system.

14. The Working Group prepared a series of recommendations and requested the CCPR to consider forwarding them to the JMPR and the Codex Commission as appropriate.

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Appendix IV

REPORT OF THE AD-HOC WORKING GROUP ON METHODS OF ANALYSIS

The Working Group met under the Chairmanship of Mr. L.G.M.Th. Tuinstra and Mr. P. van Zoonen (Netherlands). The following countries and organizations attended: Australia, Belgium, Canada, China, People's Rep. of, Egypt, Finland, France, Germany, Hungary, Ireland, Japan, the Netherlands, Spain, Sweden, Switzerland, United Kingdom, United States of America, AOAC and ISO.

REVISION OF THE LIST OF RECOMMENDATIONS FOR METHODS OF ANALYSIS

1. A revised list of recommendations for methods of analysis was discussed by the Working Group. Updating of the recommendations on Methods of Analysis is a continuous and ongoing activity of the Working Group. Information was received on most of the compounds for which special attention was asked in last year's meeting. A new list will be prepared. No published information was available yet for a method of analysis of compound 156 (clofentezine). However, it is hoped that information will be available for next year's meeting. The new list of recommended methods will also contain appropriate cross-references to other Codex Recommendations on Sampling and Good Analytical Practice. A draft revised list of the recommendations for methods of analysis will be transmitted to the participants for comments early in the summer; a finalized version of the recommended list can then be made available to the Codex Secretariat at the end of September. The participants will be asked to give information on the following new compounds: bentazone, buprofezin, cadusafos, glufosinate-ammonium and hexathiazox.

GOOD PRACTICE IN PESTICIDE RESIDUE ANALYSIS

2. Again the Working Group discussed Good Laboratory Practice (GLP) and Analytical Quality Assurance (AQA) in pesticide residue analysis. It was concluded that the existing Part 7 of the Guide was, in principle, still valid. The general and global description of good analytical practice in this recommendation was appreciated, but certain paragraphs of the recommendation could be up-dated and in some cases give a more detailed description. The Working Group decided to abandon the abbreviation GAP standing for Good Analytical Practice, since it is often confused with Good Agricultural Practice. The new abbreviation GPRA (Good Practice in Residue Analysis) will be used in future. Several valuable comments were received for an up-date of the existing Part 7 of the Guide. These comments were discussed and a revised draft of the recommendations will be sent out to the participants. In the next session the Working Group will finalize the document.

"SIMPLE" METHODS

3. In last year's plenary session (ALINORM 91/24, para. 324) the need for "simple" or screening methods for the analysis of pesticide residues was discussed. It was recommended that the members of the Working Group should try to make an inventory of such methods. Comments were received from the Irish Delegation. The possibility of including screening methods in the existing Part 8 of the Guide was discussed.

Developments were noticed in the field of bioanalytical chemistry such as immunological techniques. These techniques are developed to be used for individual pesticides or pesticides with similar chemical structures and can be applied to specific problems such as samples with a known treatment history or for solving existing long-term contamination problems.

It is the view of the Working Group that "simplified methods" e.g. based on paper chromatography or colorimetry generally do not meet the basic requirements for the determination of residues for regulatory purposes. Therefore these methods, especially used for go/no go decisions, are outside the scope of the present Part 8 of the Guide.

The Working Group recognized the need for such simple screening methods for developing countries and advised that countries needing such methods should clearly indicate to the Working Group the pesticide/matrix combination(s) concerned. In these cases the group could advise on an *ad hoc* basis on how to proceed.

EXPRESSION OF RESIDUES

4. The consequences were discussed for the residue description when combining (96) carbofuran and (145) carbosulfan. At present the residue of compound 96 is described as the sum of carbofuran and 3-hydroxycarbofuran, while the residue of compound 145 (carbosulfan) is described as the sum of carbosulfan, carbofuran, 3-hydroxycarbofuran and 3-ketocarbofuran. From an analytical point of view, for regulatory purposes, as few as possible compounds should be included in the definition of the residue. The JMPR does indicate which compounds should be included from a toxicological or residue point of view. In the case of carbofuran and carbosulfan the relevance of the inclusion of 3-ketocarbofuran in the residue description should be checked.

VALIDATION OF METHODS

5. Last year (ALINORM 91/24, para. 322) the question was raised if validation of methods by means of international ring-studies should be included in the activities of the Working Group. The Working Group had discussed method validation already with respect to GPRA. It was concluded that several degrees of validation can be obtained for a particular analytical method, the highest degree being an international collaborative study. Recommendations will be made for the validation of methods to be incorporated in the future version of the recommendations on GPRA. There are several very recent documents on this subject, JAOAC, 72(1989) 487-490, Fres. J. Anal. Chem. 338(1990) 370-377 and a document used in the 17th Session of the Codex Committee on Methods of Analysis and Sampling (CX/MAS 91/7) also published in Pure and Appl. Chem. 62 (1990) 149-162.

The Working Group was aware that other national and international bodies, e.g. WHO, EC, AOAC, are equipped to carry out international collaborative studies.

MULTIRESIDUE METHODS

6. In last year's plenary session (ALINORM 91/24, para. 323) several delegations asked the Working Group to explore the possibilities of exchange of information on the extension of multiresidue methods to new substances and substrates. The Working Group recognized the problems of up-dating and extension of multi-residue methods within one laboratory or country, without knowledge about the activities of other laboratories or countries. Several examples were given of compounds which can be determined by established multi-residue methods, but not as such mentioned in the scope of the method as described. The Working Group stressed the importance of publication of these extensions of existing methods in the open literature.

EXPRESSION AND APPLICATION OF MRLS FOR FAT SOLUBLE PESTICIDES IN MEAT, ANIMAL FAT AND EDIBLE OFFAL

7. In CL 1990/20-PR comments were requested on Room Document 13 (ALINORM 91/24, para. 368). Comments were received from several delegations. It was

indicated that the proposal as stated in Room Document 13 included some principles beyond the scope of the Working Group. Though the Guide to Codex Maximum Limits For Pesticide Residues Part 2 (CX/PR 2-1991) for certain compounds indicates whether or not they are to be treated as fat-soluble it was unclear to the Working Group how these qualifications were estimated viz. what is meant by "fat-soluble". For certain pesticides (e.g. the chlorinated pesticides) there are few analytical problems with the approach as described; for certain other pesticides for which the distribution between the fatty and non-fatty compartments are less clear cut, complications will arise.

For the chlorinated compounds the analyst is instructed to analyse the fat, on which the MRL is set. When the compound is distributed more evenly over more compartments, the MRL is set on a whole commodity basis.

LIMITS OF DETERMINATION

8. With respect to questions raised by the Plenary Session limits of determinations for the following pesticides were discussed:

- Phorate (112):** The Working Group endorsed the JMPR's decision to differentiate MRLs for certain vegetable and plant products being 0.05 mg/kg and other products (animal or oil products) being 0.05 (*) mg/kg. The Working Group confirmed that 0.05 mg/kg is a practical limit of determination in animal or oil products.
- Triazophos (143):** The Working Group advises that for cereal grain, coffee bean, onion, potatoes and sugar beet the TMRLs could be set at 0.01 (*) instead of 0.05 (*).
- Benalaxyl (155):** This is an example of a compound which is covered by an existing multi-residue method, but not published yet. The German delegation will be asked to advise on a limit of determination.
- Clofentezine (156):** No published method was available yet, therefore the Working Group cannot advise on a limit of determination. It is hoped that a method will be available at the next meeting.
- Flusilazole (165):** A description of the method of analysis became available at a rather late stage. The delegation of the U.S.A. and the German delegation will provide more information on a practical limit of determination in the forthcoming meeting.
- Terbufos (167):** The MRL of 0.005 (*) mg/kg for wheat and barley is considered to be too low. In the view of the Working Group 0.01 (*) mg/kg would represent a more practical limit of determination. In last year's meeting the Working Group already stated that 0.01 mg/kg is a feasible limit of determination for all commodities.

The term "limit of determination" has to be seen in the light of the Codex definitions of "limits of determination" and of "lower practical level" (ALINORM 89/24, Appendix III, para. 60) and the concept of "at or about the limit of determination", denoted by (*) after an MRL.

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Appendix V

REPORT OF THE AD HOC WORKING GROUP
ON PESTICIDE RESIDUE PROBLEMS IN DEVELOPING COUNTRIES

The Working Group met under the Chairmanship of Ms. Salwa Dogheim (Egypt). The following countries and organizations participated in the deliberations: Argentina, Botswana, Brazil, Cuba, Chile, Czechoslovakia, Denmark, Egypt, Gabon, Germany, Iran, Malaysia, Mexico, Morocco, the Netherlands, Niger, Sweden, Thailand, United Kingdom, United States of America and GIFAP.

The Working Group was informed of the activities of different countries of the region in regard to pesticide residues as well as information concerning other items scheduled for discussion under the groups agenda.

The initial Working Group discussions focussed on the Working Group report arising from the previous CCPR session (Appendix IV, ALINORM 91/24), whereby several recommendations were presented to the Plenary session for consideration. The Working Group reiterated its support for these recommendations and agreed that its efforts should continue to emphasize these points.

In this regard, the Delegation of Mexico highlighted the establishment of a governmental Commission which is elaborating regulations for the use and registration of pesticides through collaboration between their ministries of commerce, health, ecological development and agriculture. It was also indicated that a seminar on pesticides will be held for Latin American and Caribbean countries in June 1991. The Delegation of Egypt informed the Group of their Committee on Pesticides, which addresses health, environmental and registration aspects of pesticides. The Delegation noted that an FAO sponsored seminar was scheduled for late 1991 to examine good agricultural practice (GAP) in the use of pesticides as well as good practice for residue analysis (GPRA) for pesticides.

The Delegation of Chile indicated that they have compiled a great deal of information concerning over 350 supervised trials in their country, which includes such data as product registration, tolerances, pre-harvest intervals and other information. The Delegation of Cuba also indicated that data compiled by their government included information on local dietary intake, national limits and product registration. The Delegation of Iran also presented an excellent summary of their activities related to the study and collection of data on dietary intake, and indicated that they had been a participant in GEMS/Food since 1988. The Delegation noted that this participation increased their confidence in following Codex standards and guidelines.

The Working Group re-emphasized the needs of developing countries with regard to pesticides, including assistance in establishing national infrastructures and means of coordination between different ministries, easing information transfer, the identification of inexpensive, reliable and accurate methods of analysis and general information on pesticide use in developing countries and regions.

The FAO representative informed the Working Group of the following international activities related to these concerns:

- workshops related to the implementation of the Code of Conduct on the distribution and Use of Pesticides, which are being organized by FAO;
- recent workshops concerning pesticide management held in Ghana (1989) and Benin (1991), and;
- workshops scheduled or planned regarding pesticide management in south (May 1991), east and north Africa.

The FAO representative also reminded the Working Group of other means of assistance provided through the technical cooperation (TCP) and technical cooperation between developing countries (TCDC) programs. The representative noted, however, that the success of these programs was dependent in part on the priority given to the issue by the recipient country as well as available funds.

The Working Group continued its discussions on the Questionnaire for Information on Pesticides in Current Use in Developing Countries, which was circulated for government comments in November 1990 (CL 1990/40-PR, Annex III). The Delegation of Mexico provided a brief account of action taken on the questionnaire, and noted that government responses were submitted by the governments of Chile and Cuba.

The Working Group noted and agreed with the remarks of the Delegation of Chile in that the collection of information in response to the questionnaire was difficult. These difficulties were felt to be related to a lack of coordination between government ministries and Codex contact points, problems related to the compilation of data concerning good agricultural practice, and a lack of contact with importing country authorities responsible for data related to pesticide residue violations and rejections. The Working Group Regional Chairman for the South-west Pacific (Australia) suggested that pesticide container labels were an excellent starting point for the collection of GAP data. However, the representative emphasized that the group should concentrate its efforts on the collection of data concerning pesticides used, types of products traded and an identification of international trading problems.

The Working Group was also presented with a statement prepared by Dr. Halliday (United Kingdom) of the National Resources Institute (NRI), which summarized aspects of pesticide residues in fresh and dried fish in response to matters forwarded by the Codex Coordinating Committee for Africa. The group was informed that residues in fresh fish largely arose through contamination by very persistent pesticides, such as chlorinated hydrocarbons, which through use on food crops contaminate the aquatic environment. It was also noted that insecticides were widely used by those drying and marketing dried fish to prevent damage by blowflies and dermestid beetles. The Working Group agreed that further data, especially on GAP, was required.

And finally, the Working Groups attention was drawn to activities undertaken by the Working Group on Acceptances in regard to developing countries, as well as to a GIFAP paper on the Definition, Certification, Use and Supply of Certified Reference Substances for Pesticide Active Ingredients. The Group also noted a booklet prepared by NRI entitled "A Guide to the Establishment and Maintenance of Pesticide Laboratories in Developing Countries".

The Working Group concluded and agreed that the questionnaire would be amended and revised by the Working Group members and the Secretariat for circulation and government comment prior to the next Session of the CCPR. It was also agreed that the previous recommendations of the Group would be repeated, in order to encourage continued input from Codex member governments.

The Group elected the following officers from among its members in order to continue its activities, with the understanding that consideration should be given at next years meeting to the rotation of the officers concerned:

Chairman:	Ms. Salwa Dogheim (Egypt)
Regional Chairman for Asia:	Dr. Eghbal Taheri (Iran)
Regional Chairman for Latin America and the Caribbean:	Dr. R. Gonzalez (Chile)
Regional Chairman for Africa:	M.F. Macklad (Egypt)
Regional Chairman for the South-west Pacific:	G.N. Hooper (Australia)

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Appendix VI

REPORT OF THE AD HOC WORKING GROUP ON PRIORITIES 1991

The following countries and organizations participated in the deliberations: Australia, Canada, Chile, Finland, France, Germany, Israel, the Netherlands, New Zealand, Norway, Spain, Sweden, Switzerland, United Kingdom, United States of America and GIFAP.

Consideration of the 1991 Proposals for the Priority List

1. The Joint Secretariat of the JMPR discussed the list of substances scheduled for evaluation by the 1991 and the 1992 JMPR (CL 1990/46-PR). In addition there was some discussion of the substances to be scheduled for 1993 and beyond. The list reflecting the changes and additions agreed to at the meeting is attached. (The updated list will be available later in the meeting.)

2. New proposals submitted to the Working Group are presented below. Due to the already heavy schedule of the JMPR for both 1991 and 1992, these new proposals will be scheduled for the 1993 JMPR. The schedule for data submission will therefore be June 1992 for toxicology data and February 1993 for residues and GAP data. The table below presents the dates by which the manufacturers could make the data available. Myclobutanil was scheduled last year for the 1992 meeting.

Common Name	Country	Manufacturer	Year Data are Available
tebuconazole	FRG	Bayer	1992
fenpropathrin	Spain	Sumitomo	tox June 1991 res Feb 1992
etofenprox	Spain	Mitsui Toatsu	tox June 1991 res Feb 1992
clethodim (1)	USA	Chevron	on request
tolclofos-methyl (2)	Sweden	Sumitomo Schering	To be determined
bupirimate (2)	Sweden	ICI	To be determined
fenpyroximate (3)		Nihon Nohyaku	Tox May '92 Res March '93
teflubenzuron (4)	Netherlands	Shell	on request

(1) Clethodim and Sethoxydim should be reviewed simultaneously by the JMPR due to the fact that the majority of metabolites measured by the analytical methods are identical.

GIFAP will contact the manufacturer of sethoxydim to determine if data could be submitted to the JMPR.

(2) Sweden has detected residues of these pesticides on imported food commodities. GIFAP agreed to contact the manufacturers to determine whether data can be submitted to the JMPR.

- (3) The manufacturer informed the Working Group that the data for this pesticide could be made available to the JMPR if there is a country interested in proposing it as a priority.
- (4) The Netherlands will propose this compound as a priority.

The manufacturer has already indicated that the data could be made available to the JMPR.

PROPOSED PROCEDURE FOR THE PERIODIC REVIEW OF PESTICIDES

3. A proposal for a procedure for the periodic review of pesticides was discussed, based on an initial draft presented by the Delegation of Australia. The proposed procedure is attached for consideration of the CCPR.

PESTICIDES FOR WHICH THE ADI WAS ESTABLISHED PRIOR TO 1976

4. The Working Group reviewed the status of the 43 pesticides having an ADI established prior to 1976. It was noted that, for 28 of those pesticides, commitments to supply substantial new toxicology data to the JMPR had been received. For some, GAP and residues data will also be available. The Group found this progress very encouraging. Appreciation was expressed for the efforts made by the manufacturers.

5. For two other compounds (aldrin/dieldrin and endrin), monitoring data have been requested in order to change CXLs to ERLs.

6. For the five following pesticides for which no new toxicology data will be provided, the WHO will engage a consultant to review the monographs and to identify the data gaps: bromophos (004), bromophos-ethyl (005), dioxathion (028), fenclorophos (036), pirimiphos-methyl (086).

7. For four pesticides, some new toxicological data may be available. Manufacturers will be requested to submit the studies they have and these pesticides will be scheduled for review by the 1994 JMPR. The pesticides are chlormequat (015), ethoxyquin (035), formothion (040) and pyrethrins (063).

8. If it appears that the review of an older toxicology data base, in general, leads to the confirmation of the ADI, consideration will have to be given to the possibility of including this step in the Procedure for the Periodic Review of Pesticides.

9. For crufomate (019) and diphenyl (029), it appears that there is no continued use as pesticides and there will be no new data. The Working Group therefore recommended deletion of the CXLs.

10. In view of the fact that the 2,4-D Industry Task Force will provide only summaries of the new data to the JMPR, the Working Group recommended that the CXLs for this pesticide be deleted.

11. For two of the pesticides, new commitments have now been received from manufacturers to provide complete residues and toxicology. These products are: mevinphos (053) Shell indicates possible completion of studies in 1994 for submission in time for the 1996 JMPR at the earliest. Dodine (084) Rhone-Poulenc indicates complete residue and toxicological data to be available within 4 years to maintain use on stone and pome fruit and tree nuts. Progress report to be prepared for the JMPR at the end of 1991.

12. Scheduling of mevinphos and dodine for the JMPR will take place when information on timing of availability of data is more definite.

13. For dichlorvos it was confirmed by the manufacturers that residues and toxicological data will be provided in time for the 1993 JMPR.

14. For parathion and parathion-methyl, the manufacturer, Cheminova could supply residues and toxicology data, at the earliest for the 1992 JMPR. The actual date for the review will be confirmed with the manufacturer.

15. For quintozene the manufacturer, Uniroyal, has indicated support for registrations worldwide with new toxicological and residues studies. Further contact with the manufacturer is necessary to confirm date of availability of data.

16. At this meeting the manufacturer, Merck, confirmed that data would be available for thiabendazole probably in time for the 1996 JMPR.

17. Bayer confirmed that efforts would be made to have the data on amitrole available for the 1993 JMPR.

PESTICIDES FOR WHICH THE ADI WAS ESTABLISHED BETWEEN 1977 AND 1980 (INCLUSIVE)

18. As requested by the 22nd CCPR (ALINORM 91/24, para. 362), the Working Group reviewed the list of 12 compounds for which the ADIs were established between 1977 and 1980 inclusive. The pesticides are: carbophenothion (011), chloro-benzilate (016), diquat (031), fenthion (039), trichlorfon (066), thiometon (076), thiophanate-methyl (077), dichloran (083), cartap (097), phosmet (103), guazatine (114), triforine (116)

19. The Working Group recommended that countries and manufacturers be asked, by circular letter, to provide information with respect to current use and registration status. GIFAP is also requested to contact the manufacturers about the availability toxicology data.

NATURALLY OCCURRING MICROORGANISMS

20. The Group was informed of an inquiry, made by Abbott Laboratories, regarding possible interest in having the JMPR review the data available with respect to the naturally occurring strains of *Bacillus thuringiensis* in products. Abbott would be willing to provide their data to the JMPR for such a review.

21. This matter was already under discussion within IPCS. It is likely that an Expert Group will be convened to consider the data requirements and criteria. As a next step this group could review the data on *Bacillus thuringiensis* products. It was emphasized that data on all products should be reviewed at the same time, especially the newer products which contain higher levels of endotoxin. Countries and groups of countries are requested to supply a copy of any existing guidelines to IPCS at the following address: Dr. M. Mercier, Manager, International Programme on Chemical Safety, World Health Organization, CH-1211 Geneva 27, Switzerland.

22. The delegation of the USA informed the meeting of problems with residue data supplied by Craven Laboratories of the USA. Residue data for a number of registered products have been supplied, at least partly, by this laboratory. The matter is currently under investigation.

PROPOSED PROCEDURE FOR THE PERIODIC REVIEW OF PESTICIDES AD HOC WORKING GROUP ON PRIORITIES, 1991

1. In recent years within the CCPR and also within the JMPR there has been concern with respect to maintaining CXLs that may be obsolete.

2. This applies to CXLs that could be obsolete for any one or more of the following reasons:

- the GAP could have changed and the CXL may no longer reflect current GAP;
- the residue data on which the original proposals were based may no longer be adequate due to changes in GAP, analytical methodology etc.;
- the toxicological data base supporting the ADI may have become obsolete, either because it is incomplete or because the studies themselves are no longer considered adequate to determine No Observable Adverse Effect Levels.

3. A more formal method for the periodic review of pesticides is needed to determine if CXLs are obsolete and to amend or delete those that are.

4. This method should provide:

- a clear definition of conditions for undertaking the periodic review;
- a step system which provides adequate opportunity for countries and manufacturers to:
 - i) indicate interest in the question
 - ii) schedule and complete data development
 - iii) search for alternatives
- a clear endpoint by which time, if no data or information are supplied or if the information supplied is inadequate, there is a recommendation made to cancel the CXLs.

CONDITIONS FOR UNDERTAKING PERIODIC REVIEW OF CXLs

5. The following will be scheduled for review:

- Any individual CXLs based on GAP which is older than 10 years or CXLs which have been established more than 10 years ago. (These are probably the same.);
- All CXLs for pesticides for which the ADI was established more than 10 years ago.

STEP SYSTEM

In the proposed procedure a CXL remains in place during the review process but with a footnote (in Part 2) to indicate that it is under review. A parallel MRL (of the same value as the CXL) is introduced into the Steps at 3 with a footnote to indicate that it is under review.

STEPS IN THE REVIEW PROCESS YEAR 1. APRIL (CCPR MEETING)

CXL(s) scheduled for review are listed. Kind of data required i.e. GAP and residues and/or toxicological data is identified.

RESIDUES AND GAP

CCPR requests countries and companies to:

- inform the JMPR Secretariat and CCPR Chairman, as soon as possible, whether such data are likely to be provided;

- to submit data, when available, directly to JMPR.

TOXICOLOGY DATA

Manufacturers should inform the JMPR secretariat, Chairman of CCPR and the chairman of the Working Group on Priorities of plans regarding data. If new data are being produced, schedule for completion and intentions regarding submission should be provided so that review can be scheduled by JMPR.

In CX/PR 2, Part 2, those CXLs affected will be noted i.e. under review for possible amendment or deletion. There will be a new entry made at step 3 of the same MRL with a note that this also appears as a CXL and that it is under review.

YEAR TWO. (APRIL CCPR MEETING)

A report will be provided to the meeting of progress made in receipt of data or intentions to provide data.

YEAR THREE. (APRIL CCPR MEETING)

- If (a) no information is received
(b) information suggests there are no uses
(c) information supplied to JMPR was inadequate and there is no evidence that useful information will be supplied,

then, CCPR recommends withdrawal of the CXL.

If information is received the MRL is held at Step 3 pending review.

Depending on the outcome of the review:

- (a) The CXL is confirmed and the MRL deleted from the Steps.
(b) The recommendation goes forward to delete the CXL.
(c) An amended MRL advances through the system in the normal way, with the possible eventual recommendation that it replace the CXL.

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Appendix VI
Annex I

Joint FAO/WHO Meeting on Pesticide Residues in Food
and the Environment (JMPR)

Following is the tentative list of compounds to be considered by JMPR from 1991 to 1996.

Compounds recommended for priority attention by the Twenty-third or earlier Sessions of the CCPR, which have not yet been evaluated, are marked with an asterisk (*). All other compounds are for reevaluation.

1991 Meeting:

Toxicological Evaluation:	Residue Evaluation:
Azinphos-methyl Azocyclotin *Bentazone Bioresmethrin *Buprofezin *Cadusafos Chlorpyrifos-methyl Cyhexatin Daminozide Disulfoton Fentin *Glufosinate-ammonium Heptachlor *Hexythiazox Imazalil Monocrotophos Triazophos	Azinphos-methyl Azocyclotin *Bentazone Bioresmethrin Bitertanol *Buprofezin *Cadusafos Carbosulfan Chlorpyrifos-methyl Cyhexatin Cypermethrin Disulfoton Fentin Flusilazole *Glufosinate-ammonium Glyphosate Heptachlor Hexaconazole *Hexythiazox Methomyl Monocrotophos Parathion Parathion-methyl Permethrin Phorate Prochloraz Propiconazole Propoxur Triadimefon Triadimenol Triazophos

1992 Meeting:

Toxicological evaluation:	Residue evaluation:
<ul style="list-style-type: none">*AbamectinAldicarb*Bifenthrin*CycloxydimDicofol*DithianonFenbutatin oxideIprodioneMethidathion*Myclobutanil*PenconazolePiperonyl butoxide*ProphamPyrazophosThiramVinclozolin	<ul style="list-style-type: none">*AbamectinAldrin/DieldrinAnilazineBenalaxylBenomyl*BifenthrinBromopropylateCaptanCarbendazimChlorothalonil*CycloxydimCyfluthrinDemeton compoundsDeltamethrinDicofolDimethoateDinocap*DithianonEndrinEtrimphosFenbutatin oxideFlucythrinateFolpetInorganic bromideMetalaxylMethacrifosMethyl bromideMethidathion*MyclobutanilOmethoate*PenconazolePiperonyl butoxideProcymedoneProfenofos*ProphamPyrazophosTriazophosVamidathionVinclozolin

1993 Meeting:

Toxicological evaluation:	Residue evaluation
Amitrole Captan Carbaryl *Chlorpropham Diazinon Dichlorvos Diquat Ethephon Ethylene thiourea (ETU) *Etofenprox *Fenprothrin Folpet Mancozeb Maneb *Metiram Phosalone Propineb Propylene thiourea (PTU) Quintozene Zineb	Acephate Amitrole Bendiocarb Carbaryl *Chlorpropham DDT Diazinon Dichlorvos Endosulfan Ethephon Ethion Ethylene thiourea (ETU) *Etofenprox *Fenprothrin Ferbam Hexaconazole Mancozeb Maneb Methamidophos *Metiram Phosalone Propineb Propylene thiourea (PTU) Quintozene Thiram Zineb Ziram

1994 Meeting:

Toxicological evaluation:	Residue evaluation:
Bromopropylate Chlorfenvinphos Chlormequat *Clethodim Dicloran Ethoxyquin Formothion Parathion Parathion-methyl Phosmet Pyrethrins *Sethoxydim *Tebuconazole Tecnazene *Teflubenzuron	Chlorfenvinphos Chlormequat *Clethodim Dicloran Ethoxyquin Formothion Parathion Parathion-methyl o-Phenylphenol Pirimiphos-methyl Pyrethrins *Sethoxydim *Tebuconazole Tecnazene *Teflubenzuron

1995 Meeting:

Toxicological evaluation:	Residue evaluation:
Coumaphos Malathion Quintozene	Malathion Quintozene

1996 Meeting:

Toxicological evaluation:	Residue evaluation:
Dodine Mevinphos Thiabendazole	Dodine Mevinphos Thiabendazole

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Appendix VII

PROPOSED PROCEDURE FOR THE PERIODIC REVIEW OF PESTICIDES
AD HOC WORKING GROUP ON PRIORITIES, 1991

1. In recent years within the CCPR and also within the JMPR there has been concern with respect to maintaining CXLs that may be obsolete.

2. This applies to CXLs that could be obsolete for any one or more of the following reasons:

- the GAP could have changed and the CXL may no longer reflect current GAP;
- the residue data on which the original proposals were based may no longer be adequate due to changes in GAP, analytical methodology etc.;
- the toxicological data base supporting the ADI may have become obsolete, either because it is incomplete or because the studies themselves are no longer considered adequate to determine No Observable Adverse Effect Levels.

3. A more formal method for the periodic review of pesticides is needed to determine if CXLs are obsolete and to amend or delete those that are.

4. This method should provide:

- a clear definition of conditions for undertaking the periodic review
- a step system which provides adequate opportunity for countries and manufacturers to:
 - i) indicate interest in the question
 - ii) schedule and complete data development
 - iii) search for alternatives
- a clear endpoint by which time, if no data or information are supplied or if the information supplied is inadequate, there is a recommendation made to cancel the CXLs.

CONDITIONS FOR UNDERTAKING PERIODIC REVIEW OF CXLs

5. The following will be scheduled for review:

Any individual CXLs based on GAP which is older than 10 years or CXLs which have been established more than 10 years ago. (These are probably the same.)

All CXLs for pesticides for which the ADI was established more than 10 years ago.

STEP SYSTEM

In the proposed procedure a CXL remains in place during the review process but with a footnote (in Part 2) to indicate that it is under review. A parallel MRL (of the same value as the CXL) is introduced into the Steps at 3 with a footnote to indicate that it is under review.

STEPS IN THE REVIEW PROCESS

YEAR 1, APRIL (CCPR MEETING)

CXL(s) scheduled for review are listed with kind of data needed i.e. GAP and residues and/or toxicology. As a first step, the GAP information is requested from countries and manufacturers. If no data are obtained, this may be taken as an indication that there is no use of the pesticide and the CXLs are recommended for deletion.

When GAP information is received it may give an indication of the extent of use and provide a means for prioritizing the pesticides for further review.

YEAR 2, (APRIL CCPR MEETING)

Kind of data required i.e. further GAP and residues and/or toxicological data is identified.

RESIDUES AND GAP

CCPR requests countries and companies to:

- inform the JMPR Secretariat and CCPR Chairman, as soon as possible, whether such data are likely to be provided.
- to submit data, when available, directly to JMPR.

TOXICOLOGY DATA

Manufacturers should inform the JMPR Secretariat, Chairman of CCPR and the Chairman of the Working Group on Priorities of plans regarding data. If new data are being produced, schedule for completion and intentions regarding submission should be provided so that review can be scheduled by JMPR.

In CX/PR-2, Part 2, those CXLs affected will be noted i.e. under review for possible amendment or deletion. There will be a new entry made at step 3 of the same MRL with a note that this also appears as a CXL and that it is under review.

YEAR THREE (APRIL CCPR MEETING)

A report will be provided to the meeting of progress made in receipt of data or intentions to provide data.

YEAR FOUR (APRIL CCPR MEETING)

- If
- (a) no information is received
 - (b) information suggests there are no uses
 - (c) information supplied to JMPR was inadequate and there is no evidence that useful information will be supplied,

then, CCPR recommends withdrawal of the CXL.

If information is received the MRL is held at Step 3 pending review.

Depending on the outcome of the review:

- (a) The CXL is confirmed and the MRL deleted from the Steps.
- (b) The recommendation goes forward to delete the CXL.
- (c) An amended MRL advances through the system in the normal way, with the possible eventual recommendation that it replace the CXL.

The above procedure could take three years of elapsed time before a recommendation goes forward to delete CXLs before or the amended MRL begins to advance through the system.

DRAFT METHOD OF SAMPLING FOR THE DETERMINATION OF PESTICIDE RESIDUES
IN MEAT AND POULTRY PRODUCTS FOR CONTROL PURPOSES
(Advanced to Step 8 of the Codex Procedure)

The Codex Committee on Pesticide Residues decided to advance to Step 8 the "Draft Method of Sampling for the Determination of Pesticide Residues in Meat and Poultry Products for Control Purposes" as published in Appendix II of ALINORM 89/24A with the following modifications:

(i) Section 2

Compatibility with National Residue Control Programmes

Insert this statement following the title:

It is important to emphasize that for effective residue control in meat and poultry products intended for export, sampling should occur at the time of slaughter before the product is packaged or further processed for commerce. Only at slaughter are fresh target tissues routinely available for determining the presence of residues. There is also a greater likelihood of sampling animals which have been raised under uniform conditions, and thus with more uniform exposure to a pesticide which allows findings to be extrapolated to the larger population. Sampling at point of entry of packaged meat products should be designed for quality assurance purposes in monitoring the effectiveness of a member country's domestic residue control programme, but should not be viewed as the most effective means of controlling pesticide residues.

(ii) Modify the VI Group 38 of the table as following:

<u>VI Group 038</u> (Poultry Edible Offal)		
A. Liver	Take 6 whole livers or portion sufficient to meet laboratory sample size requirement.	0.25-0.5 kg