codex alimentarius commission

FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS

WORLD HEALTH ORGANIZATION

JOINT OFFICE: Via delle Terme di Caracalla 00100 ROME Tel.: 52251 Telex: 625825-625853 FAO I Cables: Foodagri Rome Facsimile: (6)5225.4593

ALINORM 97/24A

JOINT FAO/WHO FOOD STANDARDS PROGRAMME

CODEX ALIMENTARIUS COMMISSION
Twenty-second Session
Geneva, 23 - 28 June 1997

REPORT OF THE 29TH SESSION OF THE CODEX COMMITTEE ON PESTICIDE RESIDUES
The Hague, 7 - 12 April 1997

Note: This report incorporates Codex Circular Letter CL 1997/8-PR.

W5229/E

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CX 4/40.2

CL 1997/8-PR
May 1997

TO:
- Codex Contact Points
- Participants at the Twenty-ninth 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: DISTRIBUTION OF THE REPORT OF THE TWENTY-NINTH SESSION OF THE CODEX COMMITTEE ON PESTICIDE RESIDUES (ALINORM 97/24A)

The report of the Twenty-ninth Session of the Codex Committee on Pesticide Residues (CCPR) is attached. It will be considered by the Twenty-second Session of the Codex Alimentarius Commission to be held in Geneva from 23 - 28 June 1997.

PART A: MATTERS FOR ADOPTION BY THE 22ND SESSION OF THE CODEX ALIMENTARIUS COMMISSION

The following matters will be brought to the attention of the 22nd Session of the Codex Alimentarius Commission for adoption (ALINORM 97/24A, Annex II):

1. DRAFT MAXIMUM RESIDUE LIMITS AT STEP 8; AND
2. PROPOSED DRAFT MAXIMUM RESIDUE LIMITS AT STEP 5/8

Governments wishing to propose amendments or to comment on the Draft MRLs and Proposed Draft MRLs, including revised ones, should do so in writing in conformity with the Guide to the Consideration of Standards at Step 8 of the Procedure for the Elaboration of Codex Standards Including Consideration of Any Statements Relating to Economic Impact (*Codex Alimentarius Procedural Manual*, Ninth Edition, pp. 33-35) to the Chief, Joint FAO/WHO Food Standards Programme, FAO, Via delle Terme di Caracalla, 00100 Rome, Italy (fax, +39 6 52254593; e-mail, codex@fao.org), not later than 31 May 1997.

3. PROPOSED DRAFT MAXIMUM RESIDUE LIMITS AT STEP 5

Governments wishing to propose amendments or to submit comments regarding the implications which the Proposed Draft Maximum Residue Limits may have for their economic interest should do so in writing in conformity with the Procedures for the Elaboration of Codex Standards and Related Texts (at Step 5) (*Codex Alimentarius Procedural manual*, Ninth Edition, pp. 28-29) to the Chief, Joint FAO/WHO Food Standards Programme, FAO, Via delle Terme di Caracalla, 00100 Rome, Italy (fax, +39 6 52254593; e-mail, codex@fao.org), not later than 31 May 1997.

4. DELETION OF CODEX MRLS

Governments wishing to comment on proposed deletion (not including that of Codex MRLs replaced by the revised MRLs) should do so in writing to the Chief, Joint FAO/WHO Food Standards Programme, FAO, Via delle Terme di Caracalla, 00100 Rome, Italy (fax, +39 6 52254593; e-mail, codex@fao.org), not later than 31 May 1997.

PART B: REQUEST FOR INFORMATION AND DATA TO BE SENT TO JOINT FAO/WHO MEETING ON PESTICIDE RESIDUES

RESIDUES AND TOXICOLOGICAL DATA REQUIRED BY JMPR FOR PESTICIDES SCHEDULED FOR EVALUATION OR PERIODIC RE-EVALUATION

Governments and interested international organizations are invited to send inventory of data for pesticides on the agenda of the JMPR. Inventories of information on use patterns or good agricultural practices, residue data, national MRLs, etc. should be sent to FAO Joint Secretary of the JMPR, Plant protection Service, AGP, FAO, Via delle Terme di Caracalla, 00100 Rome, Italy, well before 30 November of a year before a JMPR meeting where a pesticide of concern is scheduled to be evaluated and, submission of residue data should be well before the end of February of the same year as the JMPR meeting. Toxicological data should be sent to Dr. J.L. Herrman, International Programme on Chemical Safety, WHO, CH-1211 Geneva 27, Switzerland not later than one year before the JMPR meeting (see Appendix III).

Those countries specified under individual compounds concerning matters related to the FAO Panel of the JMPR (GAP, residue evaluation, etc.) on specific pesticide/commodity(ies) or concerning toxicological matters are invited to send information of data availability and/or toxicological data (for deadlines see the paragraph above).

SUMMARY AND CONCLUSIONS

The Twenty-ninth Session of the Codex Committee on Pesticide Residues reached the following conclusions:

MATTERS FOR CONSIDERATION BY THE COMMISSION

The Committee recommended to the Commission:

- Draft MRLs for adoption at Step 8, Proposed Draft MRLs at Step 5/8 and Proposed Draft MRLs at Step 5 (Annex II);
- Proposed Draft Revised Recommended Methods of Sampling for the Determination of Pesticide Residues for Compliance with MRLs for adoption at Step 5 (Appendix II);
- Priority List of Pesticides for new and periodic evaluations by he JMPR for endorsement (Appendix III);
- deletion of certain existing Codex MRLs (Annex II); and
- initiation of work on "national regulatory practices to facilitate the Use of Codex Maximum Residue Limits for Pesticides" which would replace "Recommended National Regulatory Practices to Facilitate Acceptances and Use of Codex Maximum Limits for Pesticide Residues in Foods (CAC/PR 9-1985)" (para. 102).

MATTERS OF INTEREST TO THE COMMISSION

The Committee:

- agreed that at present there was no need to establish MRLs/EMRLs for fish (paras. 5-7);
- requested the Codex Committee on Nutrition and Foods for Special Dietary Uses to clarify their concerns about the pesticide residue provision of the Proposed Draft Revised Standard for Processed Cereal-Based Foods for Infants and Young Children and to provide the exact wording it wished to include in the standard for consideration by this Committee (para. 8);
- recognized the need for further coordination between the JMPR and JECFA, and the CCPR and CCRVDF, as well as at the national level, for elaborating MRLs for compounds used both as pesticides and veterinary drugs (paras. 9-12);
- agreed not to pursue the elaboration of harmonized guidelines for the establishment of temporary tolerances at the national level, or any of the other recommendations or proposals outlined in the document on residue management initiatives in Codex (paras. 13-16);
- noted the brief oral summaries of the Joint FAO/WHO Consultations on Risk Management and on Food Consumption and Exposure Assessment of Chemicals and agreed to discuss the final report of the latter at its next session (paras. 17-18, 32-33);
- noted the report on general considerations by the 1996 JMPR and recommended that FAO and WHO give a high priority to the work of the JMPR and publish reports and evaluations in a timely manner (paras. 19-22);
- welcomed the publication of the Revised Guidelines for Predicting Dietary Intake of Pesticide Residues, supported the general principles of the Guidelines and agreed that the revised Guidelines should be reviewed in the future in the light of experience from operating them and developments in the area of exposure assessment (paras. 23-28);
- encouraged the JMPR and governments to perform IEDI and NEDI calculations respectively on a routine basis (para. 31);

- agreed that if best possible dietary intake estimates of a pesticide using 5 regional diets do not exceed the ADI, the Committee should advance MRLs for this pesticide; and if they exceed the ADI, hold the MRLs and request additional information needed to refine dietary intake estimates to enable the Committee to decide what actions should be taken (para. 40);
- agreed that a discussion paper for consideration at the next session, which should examine the need for criteria for setting EMRLs and what need to be considered if criteria were to be established (paras. 80-81);
- agreed to bring to the attention of the CCMAS and CCRVDF the Proposed Draft Revised Recommended Methods of Sampling for the Determination of Pesticide Residues for Compliance with MRLs as amended by the Committee (para. 84);
- agreed to maintain MRLs for abamectin set at or about the limit of determination at 0.01 mg/kg (para. 87);
- supported the proposal of the CCRVDF that the Commission request FAO and WHO to give consideration to convening an expert consultation on method validation for food control purposes (para. 88); and
- endorsed several recommendations regarding problems relative to pesticide residues in food in developing countries (paras. 96-99)

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LIST OF ABBREVIATIONS
(used in this Report)

CCFAC	Codex Committee on Food Additives and Contaminants
CCFICS	Codex Committee on Food Import and Export Inspection and Certification Systems
CCGP	Codex Committee on General Principles
CCMAS	Codex Committee on Methods of Analysis and Sampling
CCNFSDU	Codex Committee on Nutrition and Foods for Special Dietary Uses
CCPR	Codex Committee on Pesticide Residues
CCRVDF	Codex Committee on Residues of Veterinary Drugs in Foods
FAO	Food and Agriculture Organization of the United Nations
JECFA	Joint FAO/WHO Expert Committee on Food Additives
JMPR	Joint FAO/WHO Meeting on Pesticide Residues
WHO	World Health Organization
ADI	Acceptable Daily Intake
CXL	Codex Maximum Residue Limit for Pesticide
GAP	Good agricultural practice
EMRL	Extraneous Maximum Residue Limit
IEDI	International Estimated Daily Intake
MRL	Maximum Residue Limit
NEDI	National Estimated Daily Intake
STMR	Supervised Trials Median Residue
TMDI	Theoretical Maximum Daily Intake
SPS Agreement	Agreement on the Application of Sanitary and Phytosanitary Measures
TBT Agreement	Agreement on Technical Barriers to Trade

REPORT OF THE TWENTY-NINTH SESSION OF THE CODEX COMMITTEE ON PESTICIDE RESIDUES

INTRODUCTION

1. The Codex Committee on Pesticide Residues (CCPR) held its 29th Session in The Hague, The Netherlands, from 7-12 April 1997. Dr. W.H. van Eck of the Netherlands Ministry of Health, Welfare and Sport chaired the Session. The Session was attended by 44 Member countries, 1 Observer country and 16 international organizations. The list of participants is attached as Appendix I to this Report.

OPENING OF THE SESSION (Agenda Item 1)

2. The Session was opened by Mr. R.B.J.C. van Noort, Director-General, National Institute of Public Health and the Environment. He welcomed the Committee to The Hague and gave an overview of the various Expert Consultations held over the last few years on the role of risk analysis in establishing Codex standards. He mentioned in particular the progress made in estimating dietary intake of pesticide residues and its consequences for the JMPR and CCPR.

ADOPTION OF THE AGENDA (Agenda Item 2)

3. The Committee adopted the Provisional Agenda[1] with the understanding that it would consider whether to retain "Recommended National Regulatory Practice to Facilitate Acceptance and Use of Codex Maximum Limits for Pesticide Residues in Foods" under Agenda Item 13, Other Business and Future Work.

APPOINTMENT OF RAPPORTEURS (Agenda Item 3)

4. Mr. C.W. Cooper (USA) and Mr. J.R. Mascall (UK) were appointed as rapporteurs.

MATTERS REFERRED TO THE COMMITTEE[2] (Agenda Item 4)

- MAXIMUM RESIDUE LIMITS OF PESTICIDES IN FISH

5. The Committee recalled that the 21st Session of the Codex Alimentarius Commission had referred to it a proposal to elaborate MRLs in fish. The Committee at its last Session had discussed this proposal briefly and agreed to send a circular letter[3] requesting information on the need for MRLs in fish.

6. The establishment of MRLs for chemicals used as pesticides in feed or aquaculture, and EMRLs for chemicals previously registered as pesticides is the responsibility of this Committee, while that for MRLs for chemicals used as veterinary drugs in aquaculture is the responsibility of the CCRVDF.

7. Several delegations and WHO reported that surveys demonstrated that the estimated intakes of pesticide residues, especially certain organochlorine compounds, were low. Some delegations expressed the view that there might be a need to elaborate EMRLs for persistent organochlorine compounds in fish in the future; however, the limited data availability was pointed out. The Committee **agreed** that at present there was no need to establish MRLs/EMRLs for fish as there were neither significant problems in trade of fish nor apparent health concerns arising from uses of

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1 CX/PR 97/1.

2 CX/PR 97/2 (including comments from Australia, Canada, Denmark, France, South Africa, Spain and USA in response to CL 1996/37-PR on the need to establish MRLs for fish), CX/PR 97/2-Add.1 (CRD 4; comments from Norway), CX/PR 97/2- Add.2 (CRD 6; comments from Germany).

3 CL 1996/37-PR.

pesticides in aquaculture, or from environmental contamination. The Committee also **agreed** that it might consider this issue in the future.

- PESTICIDE RESIDUE PROVISION OF THE PROPOSED DRAFT REVISED STANDARD FOR PROCESSED CEREAL-BASED FOODS FOR INFANTS AND YOUNG CHILDREN

8. The Committee noted that a proposal was made at the 20th Session of the CCNFSDU to include specific requirements for pesticide residues in the above standard[4]. The Committee **decided** to request the CCNFSDU to clarify their concerns and to provide the exact wording it wished to include in the standard for consideration by this Committee.

- MAXIMUM RESIDUE LIMITS FOR VETERINARY DRUGS

9. The Committee noted that the CCRVDF at its Tenth Session advanced a number of MRLs for abamectin, cypermethrin and α-cypermethrin in animal products to Step 5[5].

10. It was pointed out that the way in which the CCRVDF established MRLs included some differences compared with the CCPR, e.g., fat solubility of compounds was not taken into consideration; and the tissue "muscle" was not defined in relation to fat. The separate residue definitions for cypermethrin and α-cypermethrin, as opposed to the consolidated definition for cypermethrin (sum of isomers) agreed by the CCPR, would not be practical in control laboratories.

11. It was **recognized** that further coordination would be needed between the JMPR and JECFA, and the CCPR and CCRVDF, as well as at the national level, for elaborating MRLs for compounds used both as pesticides and veterinary drugs. It was stressed that general information exchange between the JMPR and JECFA was necessary, e.g., when one body reviews a compound, another body's evaluation, where available, should be included in the data package.

12. The Chairperson offered to suggest better coordination between the JECFA and JMPR, including possible informal joint meeting, when reporting on CCPR activities at the forthcoming Commission Session. The Committee **encouraged** Member countries to comment on the above MRLs at Step 5.

RESIDUE MANAGEMENT INITIATIVES IN CODEX[6] (Agenda Item 5)

13. The document was prepared by Australia on the basis of discussions held at the 43rd Session of the Executive Committee[7]. Since the Executive Committee Session, the 10th Session of the CCRVDF and the 5th Session of the CCFICS had examined an original and a revised document respectively and decided not to pursue the recommendations further[8].

14. The Delegation of Australia stated that the paper explored various options for further facilitating international trade by elaborating appropriate guidelines which, while not compromising the level of public health protection, could be applied in situations when either Codex MRLs were non existent or importing countries apply default tolerances (frequently zero or near to zero) which were not science-based.

15. Several delegations expressed serious concerns as to the general direction of the document. It was suggested that those issues raised in the document, which concentrated on bilateral arrangements between countries, were outside the mandate of Codex. Moreover, the proposals seemed to transfer the burden of proof of the safety of food from the producer and exporter to the importer, and would undermine the role of Codex in developing comprehensive MRLs to protect the consumer and to facilitate trade.

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4 ALINORM 97/26, para. 84 and Appendix VIII.
5 ALINORM 97/31A, Appendix V.
6 CX/PR 97/3.
7 ALINORM 97/3, paras. 34 - 38.
8 ALINORM 97/31A, paras. 67-69 and ALINORM 97/30A, paras. 46-50.

16. The Committee **agreed** not to pursue the elaboration of harmonized guidelines for the establishment of temporary tolerances at the national level, or any of the other recommendations or proposals contained in the document.

SUMMARY REPORT OF THE JOINT FAO/WHO EXPERT CONSULTATION ON RISK MANAGEMENT (Agenda Item 6)

17. The Chairperson noted that the Joint FAO/WHO Expert Consultation on the Application of Risk Management to Food Safety Matters was held at the FAO Headquarters from 28-31 January 1997. The Consultation considered the application of risk management to food safety matters. It considered risks arising from both chemical and biological agents, and developed and reconfirmed definitions of a number of key terms, identified elements of risk management and developed general principles of food safety risk management.

18. The Consultation stressed the need for interaction between risk assessment and risk management while keeping these two elements of the risk analysis process structurally separate. It was necessary for risk managers, such as those represented by the CCPR, to pose clear and concise questions to risk assessors in order to allow risk assessors to respond effectively to their needs.

REPORT ON GENERAL CONSIDERATIONS BY THE 1996 JOINT FAO/WHO MEETING ON PESTICIDE RESIDUES[9] (Agenda item 7)

19. The 1996 JMPR had considered: the prediction of dietary intake of pesticide residues; the relationship between Codex MRLs for pesticide, good agricultural practice (GAP) and food safety; estimation of extraneous residue limits; estimation of group maximum residue levels; use by the WHO Core Assessment Group of national evaluations of studies; and the interaction of pesticides.

20. Delegations and organizations welcomed the comments of JMPR on the potential interactions of pesticides, and encouraged the JMPR to give more attention to this area and to follow relevant research work so that advances in knowledge on such interaction could be used in evaluating pesticides. One delegation welcomed the use by the WHO Core Assessment Group of national evaluations of studies, and encouraged the FAO Panel to follow this approach.

21. Concern was expressed about the continuing problem of the late publication of JMPR reports and evaluations, which impedes the work of the Committee. The Committee **recommended** that FAO and WHO give a high priority to the work of the JMPR and publish reports and evaluations in a timely manner.

22. The Committee was informed that the FAO Manual on Submission and Evaluation of Residue Data had been completed and would be submitted for publication soon. The Manual contains all consolidated general principles that are currently being applied by the FAO Panel. It gives full information required for the estimation of residue levels of new compounds as well as those considered within the periodic review programme or re-evaluated for some specific reason. The Manual will improve the transparency of the work of the JMPR and promote consistency in submission of comprehensive data packages and in their evaluation.

CONSIDERATION OF INTAKE OF PESTICIDE RESIDUES (Agenda Item 8)

(a) DRAFT REVISED GUIDELINES FOR PREDICTING DIETARY INTAKE OF PESTICIDE RESIDUES[10]

23. It was noted that the draft revised Guidelines were before the Committee for comment, but that no action was necessary by the Committee as WHO would publish the Guidelines under the auspices of GEMS/Food. Nonetheless, because the procedures described in the revised Guidelines

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9 Pesticide residues in food - 1996. FAO Plant Production and Protection Paper 140.

10 CL 1996/33-PR, CX/PR 97/5 (comments from Australia, Japan, New Zealand, Slovak Republic, Spain and Consumers International), CX/PR 97/5-Add.1 (comments from France and the UK), CX/PR 97/5-Add.2 (comments from the UK), and CX/PR 97/5-Add. 3 (comments from Germany).

were being implemented by the JMPR for the purpose of international exposure assessment, the Committee was invited to comment on the risk assessment policies embodied in the Guidelines.

24. There was broad support in principle for the improvement in the estimation of residues by the use of the STMR levels in predicting dietary intake of pesticides. However, some delegations expressed reservations about whether the STMR levels would provide a sufficient margin of safety for consumers and especially for subgroups such as infants, children and farmers. It was explained that for a number of reasons, including actual measurement of residues in food as consumed, the STMR should still be considered an overestimate of residue levels.

25. Some delegations were concerned that the use of the TMDI at the international and national levels in the Guidelines might be misconstrued by some governments and consumers. One delegation raised questions about resource implications needed to implement the Guidelines at the international and national levels, though other delegations were already using the Guidelines. The WHO Representative noted that the Guidelines place emphasis on the use of the best available information, but that further clarification would be provided to communicate the screening function of the TMDI. The TMDI was described as a cost-effective means for focusing resources on pesticides of greatest concern. The presentation of models from complex to simple would help convey the concept that estimating exposure is a continuum of increasing accuracy, but would probably not promote understanding of the underlying principles of dietary exposure assessment.

26. The Observer from the EC stated that the use of average consumption in calculating the National TMDI (NTMDI) was not acceptable and that it was prerogative of countries or a group of countries to choose a model for own assessments. The WHO Representative noted that "average" referred to the national food balance sheet data, known to overestimate food consumption, and which was therefore believed to be protective of sensitive sub-groups. Countries were encouraged to undertake total diet studies to validate their exposure assessment models, and reassure consumers that levels of pesticide residues in food do not exceed established safe limits. This would include using individual food consumption information, where available, in order to protect infants, children and other sub-groups of interest. However, special studies, such as biomonitoring, would be needed for farmers because their exposure patterns are not easily modelled. In response to the concern on the body weight used in exposure assessment at the international level, the WHO representative noted that necessary measures would be taken to reflect different body weights in regions.

27. Consumers International also supported the Guidelines as an improvement in the dietary exposure assessment of pesticide residues, but expressed concerns that overall risk to the consumer from pesticide residues was underestimated, since exposure through drinking water and non-dietary exposures were not given sufficient emphasis, and since a number of issues related to hazard characterization of pesticide residues were not adequately addressed in their view. It was noted that many of the issues raised would be addressed by the JMPR, which included explicit consideration of multimedia exposures.

28. The Committee **extended** its appreciation to WHO and all that cooperated in the preparation of the revised Guidelines and looked forward to its publication. The Committee **requested** that WHO take both written and oral comments into consideration in addition to most of the editorial suggestions that the WHO Representative noted would be incorporated. Delegations were invited to provide their comments within the next few months to WHO if they had not already done so. The Committee **agreed** that the Guideline should be reviewed in the future in the light of experience from operating them and also from further developments in the area of exposure assessment, such as methods for estimating acute hazards in food.

(b) WORKED EXAMPLE OF INTAKE ESTIMATE ACCORDING TO THE REVISED GUIDELINES[11]

29. Mr. D. Hamilton (Australia) presented the paper and noted that the worked example illustrated practical methodology on best chronic exposure estimations following the recommendations of the Joint FAO/WHO Consultation on Revision of the Guidelines for Predicting Dietary Intake of Pesticide Residues (1995) and the JMPR FAO Panel Workshop (1996) using residue data on parathion-methyl. He stated that using real data required certain decision making, and highlighted the following points:

- Concept of STMR;
- Different residue definitions for enforcement and dietary intake purposes;
- How to deal with residue trial data which include levels below the limit of determination;
- How to estimate STMRs in various cases;
- Edible portion levels and processing factors; and
- Results of IEDI calculations.

30. The Committee welcomed the paper as useful guidance and reference material in performing IEDI/NEDI estimations. Some delegations indicated that they had already implemented the recommendations of the above Consultation and Workshop. The Committee noted that the 1996 JMPR had fully endorsed the methodology contained in the paper.

31. The JMPR and governments were **encouraged** to perform IEDI and NEDI calculations respectively on a routine basis. It was **agreed** that, if necessary, the Committee might revisit this issue in the future. Noting that the methodology was applicable for chronic exposure assessment, the Committee felt that there would be a need to address a methodology for acute exposure assessment pending the report of the Joint FAO/WHO Consultation on Food Consumption and Exposure Assessment of Chemicals (para. 32).

(c) SUMMARY REPORT OF THE JOINT FAO/WHO CONSULTATION ON FOOD CONSUMPTION AND EXPOSURE ASSESSMENT OF CHEMICALS

32. The Joint FAO/WHO Consultation on Food Consumption and Exposure Assessment of Chemicals was held in Geneva from 10-14 February 1997. Mr. C. Warfield (Canada), co-rapporteur of the Consultation, noted that it reviewed and recommended the revision of regional diets used by GEMS/Food for dietary exposure assessments; recommended a procedure for performing acute dietary exposure assessments for adoption by Codex committees; promoted a consistent approach to national and international dietary exposure assessment for all food chemicals and Codex committees; promoted a consistent and transparent approach in conducting dietary exposure assessments, which required good communication between the exposure assessor and the risk manager; and gave special consideration to the needs of developing countries by recognizing the special requirements of such countries.

33. The Committee **agreed** to discuss the final report of the Consultation at its next Session, with the understanding that a discussion as to the possible elaboration of guidelines for acute dietary exposure assessment could be held at that time.

(d) REPORT ON PESTICIDE RESIDUE INTAKE STUDIES AT INTERNATIONAL AND NATIONAL LEVEL

- Progress Report by WHO on Prediction of Dietary Intake of Pesticide Residues[12]

34. The Representative of WHO presented the referenced papers. The TMDI and, when STMR levels and processing factors were available, the IEDI were evaluated based on the procedures described in the draft Guidelines (CL 1996/33-PR)(paras. 23-31).

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11 CX/PR 97/6 (prepared at the request of the Codex Secretariat).

12 CX/PR 97/8, CRD 1 (detailed calculations for predicting intakes) and CRD 10 (intake calculations for diquat and ethion).

35. Calculations were performed for pesticides evaluated by the 1996 JMPR, except for those for which all MRLs had been proposed for withdrawal or no MRLs had been proposed. Of the 23 pesticides considered, 14 had TMDIs and/or IEDIs none of which exceeded the ADI for all regional diets: acephate, aldicarb, bifenthrin, 2,4-D, diazinon, DDT[13], fenarimol, flumethrin, haloxyfop, maleic hydrazide, methamidophos, propoxur, tebufenozide, and teflubenzuron.

36. The TMDI and, in some cases, the IEDI, based on incomplete information, exceeded the ADI for the following, and further information on STMRs and processing factors needed to be reviewed before full IEDIs could be calculated: carbaryl, carbofuran, dimethoate, disulfoton, mevinphos, phorate, thiram and ziram.

37. In the case of thiram and ziram, the prediction of dietary intake was based on an approach which recognizes a common mechanism of toxicity for the dithiocarbamates (105) as a group that included mancozeb, maneb, metiram, propineb, thiram, zineb and ziram. A toxic equivalence correction factor was used to accommodate the different ADIs established by the JMPR for individual dithiocarbamates. In addition, another correction factor was applied to account for differences in molecular weight of the various dithiocarbamates. The Committee **agreed**, in principle, with the approach, but some delegations requested more time to consider it further. WHO would prepare an improved exposure assessment for dithiocarbamates for the next Session with a more detailed explanation of the procedure and rationale behind the decision steps. (para. 62)

- **Report from National Governments**[14]

38. The Delegation of the United Kingdom introduced preliminary results of national research into variability of residues. He stated that random occurrence of high level residues had been detected but that even the highest residues were unlikely to lead to adverse health effects. The Delegation invited international cooperation as the problem was likely to be global in scope. He stated that the issue was of concern for registration of pesticides, as opposed to enforcement of MRLs.

39. The Delegation of Australia reported on their national market basket study, conducted for 86 pesticides/contaminants.

CONSIDERATION OF MAXIMUM RESIDUE LIMITS AND EXTRANEOUS MAXIMUM RESIDUE LIMITS IN FOOD AND ANIMAL FEEDS (Agenda Item 9)

- **MRLs Kept at Step 7 Due to Dietary Intake Issues**[15]

40. With the assistance of the *ad hoc* Working Group on Acceptances, chaired by Dr. D. Lunn (New Zealand), the Committee examined the referenced documents. Following the endorsement of CX/PR 97/10 by the Working Group, the Committee welcomed the principles outlined in this paper as they addressed both consumer protection and trade facilitation in a well balanced manner. It was recognized that a clear distinction was made in the paper between international and national responsibilities and between chronic and acute exposure. The Committee **agreed** to implement the following proposals immediately with the understanding that it would review their operation in three years time allowing experience to be gained both at the CCPR and national level:

1. (a) when considering draft MRLs, the JMPR/CCPR should concentrate on international dietary intake assessments (using the regional diets) based on the best use of available data;

   (b) when this estimate of dietary intake does not exceed the ADI in any of the regional diets, the draft MRLs should advance through the Step Procedure. Member countries

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13 Based on the provisional tolerable daily intake (PTDI) and EMRLs.

14 CRD 2 (UK report on unit to unit variation of pesticide residues in fruits and vegetables).

15 CX/PR 97/10, CX/PR 97/10-Add.1, CX/PR 97/10-Add.2 (containing comments from Australia, Canada, Denmark, New Zealand, South Africa, UK and USA in response to CL 1996/36-PR), CX/PR 97/10-Add.2 (comments from Germany) and CRD 9 (report of the Working Group on Acceptances).

which cannot accept a particular MRL for national dietary intake reasons, can use the Codex Acceptance Procedure to indicate their non-acceptance of the Codex MRL;

(c) if this "best estimate" of dietary intake for one or more regional diets exceeds the ADI, and further refinement of the intake estimation at the international level is not possible, the CCPR should not recommend advancement of the draft MRL but should, instead, reflect on possible risk management measures;

2. Recognizing that there was a need to make a clear distinction between chronic and acute exposure, and that there were ongoing initiatives to develop methodology for acute exposure assessments, the CCPR should consider elaborating procedures in this area once the report of the Joint FAO/WHO Consultation on Food Consumption and Exposure Assessment of Chemicals became available;

3. With respect to the compounds MRLs for which were held at Step 7C, and recognizing the need to avoid imposing an excessive workload on the JMPR, the CCPR should review these compounds on a case by case basis, taking account of the following principles:

(a) reviews should utilize the new IEDI methodology recommended by the Joint FAO/WHO Consultation on Revision of the Guidelines for Predicting Dietary Intake of Pesticide Residues;

(b) STMRs should normally be estimated on the basis of existing data available to the FAO Panel of the JMPR;

(c) requests by the CCPR to the JMPR to re-examine these MRLs should be subject to confirmation that manufacturers can re-submit the data;

(d) STMR estimations may only need to be conducted for those commodities which contribute significantly to dietary intake concern;

(e) where a periodic review is already scheduled for the near future, the CCPR should normally await the outcome of that review, rather than asking the JMPR to conduct a specific assessment;

4. For future evaluations, the CCPR should advise manufacturers that data submissions to the JMPR should routinely include best estimates of dietary intake for the regional diets; and

5 Whilst recognizing that WHO can provide details of the regional diets, the CCPR should invite FAO/WHO to provide further guidance on estimating dietary intake and estimating STMRs, to manufacturers and other interested parties.

41. After thanking the members of the Working Group for their efforts in completing the assigned tasks the Committee **agreed** that no further meeting would be necessary.

MAXIMUM RESIDUE LIMITS[16]

42. Based on the above decision, the Committee **agreed** to either advance or hold the draft MRLs for the pesticides stated below, which had been held at Step 7C:

Pesticide	MRLs at Step 7	Note
Azinphos-methyl (002), Diazinone (022) and Triazophos (143)	Advanced to Step 8	According to Point 1(b) of para. 40.

16 CX/PR 97/9, CX/PR 97/9-Add.1-1 (comments from Canada, Denmark, Egypt, France, Germany, The Netherlands, South Africa, Spain, EC), CX/PR 97/9-Add.1-2 (comments from UK and USA), CX/PR 97/9-Add.1-3 (comments from Indonesia), and CX/PR 97/9-Add.3 (comments from France).
The status of the MRLs discussed is contained in Annex II along with government comments/reservations. For review schedule of the individual compounds, refer Appendix III of this report.

Pesticide	MRLs at Step 7	Note
Dicofol (026), Diquat[17] (031), Methidathion (051), Chlorpyriphos-methyl (090) and Phorate (172)	Held at Step 7C[18]; IEDI or best possible estimates requested from manufacturers; if the ADI is exceeded only slightly, governments to consider this fact in relation to the IEDI concept	According to Point 1(c) & 3 of para. 40.
Disulfoton (074)	Held at Step 7B	Pending the 1998 JMPR evaluation, including STMR and processing data
Methacriphos (125)	Deleted	No longer supported

AZINPHOS-METHYL (002)

43. The Committee **advanced** all MRLs at Step 7C to Step 8 not awaiting new data (para. 42).

CHLORFENVINPHOS (014)

44. The Committee noted the recommendation of the 1996 JMPR to delete all CXLs and future availability of data on several commodities. The manufacturer was requested to advise the Joint Secretaries in writing when and what data would be available to the JMPR. The Committee **agreed** to full discussion at its next session.

CHLORPYRIFOS (017)

45. The Committee **agreed** to consider at its next Session an MRL for citrus fruits at 1 mg/kg proposed by the Delegations of USA and Spain.

DIAZINONE (022) (Annex II & para. 42)

DICOFOL (026)

46. The Committee noted that dicofol should be scheduled for JMPR residue evaluation. Information from the manufacturer, including refined intake estimations, was **requested** for a full discussion at the next session of the Committee (para. 42).

DIMETHOATE (027)

47. The Committee noted that residue data for all commodities specified in the footnote in CX/PR 97/9 would be available for periodic review by the 1998 JMPR.

DIQUAT (031)

48. Since the TMDI exceeded the ADI for 3 out of 5 regional diets the Committee **returned** the MRLs to Step 6 (para. 42).

ETHION (034) (Annex II)

ETHOXYQUIN (035)

49. The Committee **postponed** the deletion of the CXL for pear pending the JMPR evaluation as it was informed by the United States that new toxicology and residue data on pear would be provided.

FENTHION (039)

50. The Committee **decided** to retain the CXLs for meat and milk for 4 years according to the Periodic Review Procedure awaiting data on animal feeding studies.

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17 The draft MRLs had been adopted at Step 5 and advanced to Step 6 by the Executive Committee at its 43rd Session.

18 The draft MRLs for diquat were returned to Step 6.

METHIDATHION (051)

51. The TMDI ranged from 30% to 170% of the ADI (para. 42). Delegations were **requested** to consider the relatively small excess of the ADI in relation to the new Guidelines and the underlying principles of the IEDI-concept, noting in particular that apple, grape, pear, tomato and olive oil, virgin were the main contributors to dietary intake.

PARATHION (058)

52. The Committee **kept** the MRL for apple at Step 7B pending the 1997 JMPR evaluation of studies on apples.

PARATHION-METHYL (059)

53. The IEDI did not exceed the ADI for any regional diets (paras. 29-31). The Committee **agreed** to consider MRLs for feedingstuffs and associated commodities next year taking into account the relevant sections (animal transfer studies) of the FAO Manual and previous JMPR Reports.

QUINTOZENE (064)

54. The Committee **recommended** the CXL for banana for deletion as the use for banana was not supported, and **retained** the other CXLs for 4 years according to the Periodic Review Procedure. The Committee noted that data on lettuce, head and potato would be submitted for evaluation by the 1998 JMPR.

BROMOPROPYLATE (070)

55. The JMPR, in establishing a MRL for citrus fruits, had followed the general policy for group MRLs outlined in the report of the 1996 JMPR. Recognizing that the database was limited, the Committee **advanced** the MRL to Step 8.

56. The Committee was informed by the Observer from the EC that minimum data requirements for MRL setting were being elaborated in cooperation with the OECD and would be available for the 1998 JMPR.

DISULFOTON (074)

57. The Committee was informed that additional data would be available (para. 42).

DICHLOFLUANID (082)

58. The Committee noted that this compound would not be supported beyond 2000 but an alternative compound tolylfluanid (162) would be instead. It was proposed that the current CXLs be retained until the registration of dichlorfluanid expires.

DICLORAN (083)

59. The Committee **retained** the CXLs carrot, lettuce, head, onion, bulb, peach, plums (including prunes), strawberry and tomato as supporting data for these commodities would be available for the 1998 JMPR. The Delegations of the Netherlands and Spain stated that data on strawberry would be available. For grapes, written confirmation on information availability was **requested** from the manufacturer. The Committee **recommended** to delete other CXLs.

CHLORPYRIFOS-METHYL (090)

60. The Committee **requested** the manufacturer to review all residue and processing studies available on cereal commodities and to estimate IEDI (para. 42). The Committee **postponed** the decision on cereal commodities pending this review.

CARTAP (097) (Annex II)

METHAMIDOPHOS (100)

61. The Committee **maintained** the MRL for pome fruits at Step 7 pending the 1997 JMPR evaluation of new trial data.

DITHIOCARBAMATES (105)

62. The Committee **requested** the JMPR to examine whether it was appropriate to use the toxicological correction factor for all dithiocarbamates for the purpose of exposure assessment, since some of them are ETU (or PTU)-formers and others are not (para. 37).

63. As the IEDI in 3 out of the 5 regional diets exceeded the ADI (up to 360%) the manufacturers were **asked** to send detailed STMR information to WHO, so that they could be taken into account in re-calculation of the intake.

64. Noting that metiram was no longer supported for common beans, the Committee **agreed** to consider all MRLs at Step 6 and the withdrawal of the MRL for common beans at its next Session.

ETHEPHON (106)

65. The Committee noted that data on pepper, cantaloupe and grapes would be available to the 1997 JMPR, and that data on pineapple would become available in 1999. The Observer from the EC informed the Committee that data on tomato would be provided to the 1997 JMPR. The Committee **kept** the MRLs for cantaloupe, pepper and pineapple at Step 7B and **amended** last years decision on grape, pending the JMPR evaluation.

66. The Committee **requested** the Delegation of the USA to forward their comments on a higher MRL for pineapple to the 1997 JMPR.

FENBUTATIN OXIDE (109)

67. Since insufficient data had been available to the JMPR on mandarins, the Committee **retained** the group MRL for citrus fruits and withdrew the separate MRLs (para. 55).

IPRODIONE (111)

68. The Committee **retained** the CXL for tomato for one more year as new data from indoor trials would become available in 1999 and the TMDI did not exceed the lowered ADI.

PHORATE (112) (Annex II, para. 42)

TECNAZENE (115); METHACRIFOS (125) (Annex II)

PHENOTHRIN (127)

69. The Committee **agreed** to consider deletion of the existing CXLs at the next session as the use of the compound might not be supported.

ISOFENPHOS (131); TRIADIMEFON (133); METALAXYL (138) (Annex II)

TRIAZOPHOS (143) (Annex II, para. 42)

OXYDEMETON-METHYL (166)

70. The Committee **postponed** discussion pending the 1998 JMPR periodic review of the compound and the related compound, demeton-S-methyl (073).

TRIADIMENOL (168); PROFENOFOS (171) (Annex II)

BENTAZONE (172)

71. The Committee **requested** the JMPR to consider revising the residue definition for plant commodities.

BUPROFEZIN (173)

72. The Committee **postponed** discussion on the MRL for oranges to the next Session as new trial data on oranges would be available to the 1999 JMPR

ABAMECTIN (177)

73. The Committee **postponed** discussion awaiting the 1997 JMPR evaluation (paras. 9 - 12).

BIFENTHRIN (178)

74. The Committee **postponed** discussion pending review by the 1997 JMPR of questions raised at its 28th session concerning residues in cereals and its impact on animal products.

DITHIANON (180)

75. The Committee noted that no new data on cherries were expected.

PENCONAZOLE (182) (Annex II)

CLETHODIM (187)

76. The Committee **postponed** discussions pending the 1997 JMPR re-evaluation.

FENPROPIMORPH (188)

77. The Committee noted that animal transfer studies were being developed.

TEBUCONAZOLE (189)

78. The Committee **kept** the MRL for grapes at Step 7B awaiting the 1997 JMPR review of residue data on grapes and oat.

FENARIMOL (192) (Annex II)

FENPYROXIMATE (193)

79. The Committee noted that additional data would be submitted to the 1999 JMPR.

EXTRANEOUS MAXIMUM RESIDUE LIMITS[19]

80. The Committee considered whether there was a need to elaborate criteria for setting EMRLs, or to accept the EMRL setting policy of the JMPR stated in the 1995 and 1996 JMPR Reports. The Committee had a brief discussion on acceptable rates of violation and how to treat outlier data points.

81. The Committee **accepted** the offer of the Delegation of the USA to prepare a discussion paper in collaboration with Australia, Egypt, Netherlands, New Zealand, South Africa, UK and the EC for consideration by the Committee at its next Session. The paper should examine the need for such criteria and what need to be considered if criteria are to be established, e.g., approach taken by the CCFAC. The Reports of the 1995 and 1996 JMPR should also be taken into consideration in the paper.

RECOMMENDATIONS FOR METHODS OF ANALYSIS AND SAMPLING (Agenda Item 10)

(a) REVISION OF RECOMMENDED METHODS OF SAMPLING FOR THE DETERMINATION OF PESTICIDE RESIDUES[20]

82. The Committee considered the referenced documents with the assistance of the *ad hoc* Working Group on Methods of Analysis, which had considered the Proposed Draft Recommended Methods extensively during this Session and had made a number of proposals for amendments.

83. The Committee exchanged views on sampling of low fat meat for determination of residues of fat-soluble pesticides; and the portion of stone fruits on which MRLs were established and which should be taken into account when calculating residue levels. After some discussion, the Committee **accepted** all the proposed amendments contained in CX/PR 97/12, and those recommended by the Group, except the deletion of Sections 2.3 and 5.2 in Table 3 on sampling of meat parts without adhering fats. The Committee also **agreed** to add notes in Sections 1 and 4 of Table 3 referring to

19 CX/PR 97/9-Add.2 (comments from USA).

20 CX/PR 97/12 and CRD 11 (report of the ad hoc Working Group on Methods of Analysis).

Sections 2 and 5, respectively. The Committee **decided** to advance the Proposed Draft Recommended Methods of Sampling as amended[21] to Step 5 for adoption by the Commission with the understanding that at its next session the Committee would consider only fundamental issues.

84. To promote coordination within Codex, the Committee **agreed** to bring the amended document to the attention of the CCMAS and CCRVDF.

(b) REVISION OF THE LIST OF RECOMMENDED METHODS OF ANALYSIS FOR PESTICIDE RESIDUES AND OTHER MATTERS RELATED TO METHODS OF ANALYSIS FOR PESTICIDE RESIDUES[22]

- **Revision of the List of [Recommended] Methods of Analysis for Pesticide Residues**

85. The Committee was informed by the Chairperson of the *ad hoc* Working Group, Dr. van Zoonen (The Netherlands) that an updated list had not been prepared. He offered to screen validated methods from the current list and to prepare a less complicated document. The Committee noted that the Working Group had considered the merits of recommending generic methods or criteria with which methods should comply but no conclusion had been reached.

86. Member Governments were again invited to provide methods for cycloxidim (179), etofenprox (184), clethodim (187), teflubenzuron (190), fenarimol (192), fenpyroximate (193) and haloxyfop (193).

- **MRLs Set at or about the Limit of Determination (LOD)**

87. The Committee **agreed** to maintain MRLs for abamectin set at or about the LOD at 0.01 mg/kg.

- **Others**

88. In relation to the lack of validation data for methods of analysis for veterinary drug residues[23] and, to an extent, pesticide residues, the Committee **supported** the proposal of the CCRVDF that the Commission request FAO and WHO to give consideration to convening an expert consultation on method validation for food control purposes.

89. The Committee **agreed** to convene a new ad hoc Working Group under the Chairship of Dr. van Zoonen (The Netherlands) at its next session.

PRIORITY LIST OF PESTICIDES[24] (Agenda item 11)

90. The Committee **agreed** to add two new compounds to the priority list, imidacloprid (Canada) and kresoxim-methyl (Germany). The JMPR Secretariat had tentatively scheduled kresoxim-methyl for toxicological and residue evaluation in 1998 and imidacloprid for toxicological evaluation in 2000 and for residue evaluation in 2001.

91. Based on a good response to a letter from the Global Crop Protection Federation to manufacturers of pesticides eligible for periodic review, many pesticides had been tentatively scheduled for periodic review[25]. Several compounds eligible for periodic review had not yet been scheduled, including three substances that had become eligible for periodic review this year on the basis of the selection criteria previously agreed by the Committee.

92. Cyhalothrin, fenvalerate, and metalaxyl were not supported for periodic reevaluation. However, as there was support for MRLs based on the use of specific enantiomers/isomers, it would

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21 Attached to this report as Appendix II.
22 CX/PR 97/14, and CX/PR 97/14-Add.1.
23 CX/PR 97/14-Add.1.
24 CL 1996/35-PR; CX/PR 97/15; CX/PR 97/15-Add.1 (CRD 3); CRD 12 (report of the as hoc Working Group on priorities).
25 Appendix III.

be appropriate to maintain the CXLs for these pesticides until such time as MRLs for the new products reach Step 8.

93. It was noted that, in line with the goal of reviewing EMRLs every five years, contaminants with EMRLs should be scheduled for review by the JMPR at the next Session.

94. The Committee's attention was drawn to the fact that, according to the current schedule, the FAO Panel had a large number of compounds to review over the next few meetings which would present a very heavy workload. The Committee noted that, without additional resources, FAO and WHO would not even be able to complete the work in the current schedules.

95. The Committee thanked the informal group on priorities, under the chairship of Dr. R. Eichner (Australia), for preparing the priority lists. The Committee **requested** the Delegation of Australia to prepare a paper on priority lists well in advance of the next Session, with assistance provided by other interested delegations and international organizations.

PROBLEMS RELATIVE TO PESTICIDE RESIDUES IN FOOD IN DEVELOPING COUNTRIES[26] (Agenda Item 12)

96. The Report of the *ad hoc* Working Group on Problems Relative to Pesticide Residues in Food In Developing Countries was presented by its Chairperson, Dr. Cheah Uan Boh (Malaysia).

97. Dr. Cheah highlighted some key points in the discussion paper[27]: GEMS/Food Programme monitoring data had identified pesticide/commodity combinations by region, illustrating where MRLs had been exceeded; Codex MRLs were commonly used by developing countries as reference standards to facilitate trade and for domestic food safety purposes; and noting that limited resources and expertise in many developing countries were major factors hindering the generation of residue data and the establishment of national MRLs, it was suggested that regional cooperation might help address a number of these issues.

98. Responses[28] to the Questionnaire for Information on Pesticides in Current Use in Developing Countries[29] indicated that although pesticide registration schemes were established in all responding countries, systems for establishing MRLs and for generating residue data to support submission to the JMPR were at various stages of development. A number of commodity/pesticide combinations were identified for which Codex MRLs needed urgently to be established.

99. With minor amendments, the Committee endorsed the following recommendations of the Working Group:

1. International organizations and developing countries should be invited to consider cooperative programmes at the regional level for the generation of residue and GAP data to support the establishment of MRLs for commodities of importance in developing countries, including some of those combinations identified in CX/PR 97/16 Appendix 1 and CX/PR 97/17 Appendix 1, question 4a.
2. The CCPR should encourage the activities of developing countries in promoting regional cooperation as a means of addressing issues related to pesticide residues, food safety and trade facilitation, and consider ways in which these initiatives can be supported.
3. The JMPR should be requested to give particular consideration to the concerns of developing countries when elaborating criteria for extrapolating residue data for minor crops in the proposed revision of the FAO Manual on Submission and Evaluation of

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26 CX/PR 97/16, CX/PR 97/17 (responses to the Questionnaire (CL 1996/15-PR)), and CRD 13 (report of the *Ad Hoc* Working Group on Problems Relative to Pesticide Residues in Food in Developing Countries.

27 CX/PR 97/16.

28 CX/PR 97/17.

29 CL 1996/15-PR.

Residue Data with particular attention to the commodities identified in CX/PR 97/16 Appendix 1 and CX/PR 97/17 Appendix 1, question 4a.

4. Importing countries should be encouraged to make available information on pesticide residue-related trade problems, particularly with respect to minor crops in developing countries, and to provide this information to national authorities and/or the Codex Contact Point in the relevant exporting country.

5. Participating countries should be encouraged to provide updates on national/regional initiatives in resolving pesticide residue-related problems at Working Group meetings, in order to assist other members of the Group in addressing common problems with respect to food safety and trade facilitation.

6. The Questionnaire, with necessary amendments, should continue to be utilized as a useful tool for information collection.

7. An update paper should be prepared by Malaysia for consideration by the Plenary and the Working Group at the next Session. The paper should include the status of the implementation of the recommendations.

8. Attention should be paid to preventive measures to reduce residues, including Integrated Pest Management (IPM), availability of quality pesticides, and training in safe and efficient use as part of IPM. IPM should be taken into account when developing GAP information for JMPR.

100. The Committee noted that the 1997 JMPR would consider extrapolation specifically in relation to the recommendation 3 above. The Committee **agreed** that a Working Group should convene at its next Session under the chairship of Dr. Cheah.

OTHER BUSINESS AND FUTURE WORK (Agenda Item 13)

- **Recommended National Regulatory Practices to Facilitate Acceptances and Use of Codex Maximum Limits for Pesticide Residues in Foods (CAC/PR 9-1985)**

101. The Committee noted that Codex acceptance procedures had been discussed at the 12th Session of the CCGP, where it was stated that such procedures "were no longer appropriate in the light of the SPS and TBT Agreements". The CCGP decided to consider revised proposals for a procedure to replace the current acceptance procedures at its next session. It was therefore suggested that CAC/PR 9-1985 might now be irrelevant.

102. Several delegations stressed the usefulness of the document in the work of the CCPR, both for information and for transparency, and the Committee unanimously **supported** the update of the document. The Committee **agreed** to seek approval of the Commission to initiate work on "National Regulatory Practices to Facilitate the Use of Codex Maximum Residue Limits for Pesticide" with the understanding that sections concerning acceptances should not be included, as acceptance matters should be horizontally addressed by the Commission and/or CCGP. Once this work was completed, CAC/PR 9-1985 should be recommended for deletion. The Committee **accepted** the offer of the International Toxicology Information Center to perform the necessary work.

DATE AND PLACE OF NEXT SESSION (Agenda Item 14)

103. The Thirtieth Session of the Committee was tentatively scheduled to be held in the Hague from 20-25 April 1998, subject to confirmation by the Netherlands and Codex Secretariats.

ANNEX I

SUMMARY STATUS OF WORK

Subject	Step	Action by	Document Reference (ALINORM 97/24A)
Draft MRLs	8	22nd CAC	Annex II
Proposed Draft MRLs	5/8	22nd CAC	Annex II
Draft MRLs	7	Governments 30th CCPR JMPR	Annex II, CX/PR 97/9
Draft MRLs	6	Governments Secretariat 30th CCPR	Annex II, CX/PR 97/9
Proposed Draft MRLs	5	22nd CAC	Annex II
Proposed Draft MRLs	3	Governments Secretariat 30th CCPR	Annex II, CX/PR 97/9
Proposed Draft Revised Methods of Sampling for the Determination of Pesticide Residues	5	22nd CAC Governments 30th CAC	Appendix II, paras. 82-84
Priority List of Pesticide (new pesticides and pesticides under periodic review)	1	22nd CAC JMPR CCPR Governments International organizations Secretariat Australia	Appendix III, paras. 90-95
Methods of Analysis	-	Secretariat Governments The Netherlands 30th CCPR	paras. 85-89
Identification of pesticide/commodity combinations of interest to developing countries	-	Secretariat Malaysia 30th CCPR	paras. 96-100
National Regulatory Practices to Facilitate the Use of Codex Maximum Residue Limits for Pesticide	1	22nd CAC Secretariat	paras. 101-102

ANNEX II

STATUS OF MRLS CONSIDERED

Code	Commodity	MRL (mg/kg)		Step[1]	Remarks/Reservations[2]
2	**AZINPHOS-METHYL**				
AM 660	Almond hulls	5		5/8	EC (R): insufficient time to study
TN 660	Almonds	0.2		CXL-D	
TN 660	Almonds	0.05		8(a)	
FP 226	Apple	2		8	
GC 80	Cereal grains	0.2		CXL-D	
FS 13	Cherries	2		8	
FS 245	Nectarine	2		8	
FS 247	Peach	4		CXL-D	
FS 247	Peach	2		8(a)	
FP 230	Pear	2		8	
FS 14	Plums (including prunes)	2		8	
VO 448	Tomato	1		8(a)	
GC 654	Wheat	0.2		WD	
17	**CHLORPYRIFOS**				
FC 1	Citrus fruits	2		5(a)	USA, Spain: new GAP supports a lower MRL of 1 mg/kg.
22	**DIAZINON**				
AO2 2	Fruits (except as otherwise listed)	0.5		CXL-D	
FP 9	Pome fruits	2		8	
26	**DICOFOL**				
ML 106	Milks	0.1	F	7C	
FP 9	Pome fruits	5		7C	
31	**DIQUAT**				
AL 1020	Alfalfa fodder	100		6	Spain: too high in relation to ingestion by cattle
VD 71	Beans (dry)	0.2		6	
AL 1023	Clover	50		6	Egypt: prefers lower MRL; Spain: too high in relation to ingestion by cattle
VD 533	Lentil (dry)	0.2		6	
GC 645	Maize	0.05	(*)	6(a)	Egypt: prefers lower MRL
GC 647	Oats	2		6	
VD 72	Peas (dry)	0.2		6	
VR 589	Potato	0.05		6(a)	
PM 110	Poultry meat	0.05	(*)	6	
PO 111	Poultry, Edible offal of	0.05	(*)	6	
GC 649	Rice	10		6(a)	Egypt: prefers lower MRL
CM 649	Rice, Husked	1		6(a)	
VD 541	Soya bean (dry)	0.2		6	
SO 702	Sunflower seed	1		6(a)	
OC 172	Vegetable oils, Crude	0.05	(*)	6(a)	

[1] CXL-D, recommendation to the Codex Alimentarius Commission to delete the Codex MRL; WD, deletion of the MRL under elaboration at certain Step of the Codex Procedure.

[2] (R), reservation

Code	Commodity	MRL (mg/kg)		Step[1]	Remarks/Reservations[2]
CF 1211	Wheat flour	0.5		6(a)	
EC (R): Data overly summarized & database not satisfactorily represented.					
34	ETHION				
FC 1	Citrus fruits	5		8(a)	Egypt, Spain: prefer lower MRL
35	ETHOXYQUIN				
FP 226	Apple	3	Po	CXL-D	
FP 230	Pear	3	Po	CXL	
39	FENTHION				
FP 226	Apple	2		CXL-D	
FI 327	Banana	1		CXL-D	
VB 41	Cabbages, Head	1		CXL-D	
VB 404	Cauliflower	1		CXL-D	
JF 1	Citrus juice	0.2		CXL-D	
VP 526	Common bean (pods and/or immature seeds)	0.1		CXL-D	
FB 269	Grapes	0.5		CXL-D	
VL 482	Lettuce, Head	2		CXL-D	
FC 3	Mandarins	0.5		5 (a)	Spain: prefers to maintain the MRL for citrus fruits; EC: database insufficient
MM 95	Meat (from mammals other than marine mammals)	2	(fat) V	CXL	
ML 106	Milks	0.05	F V	CXL	
OC 305	Olive oil, Virgin	3		5 (a)	France, Spain, EC: acute dietary intake concern
VA 385	Onion, Bulb	0.1		CXL-D	
FC 4	Oranges, Sweet, Sour	0.5		5 (a)	Spain: prefers to maintain the MRL for citrus fruits; EC: database insufficient
FS 247	Peach	2		CXL-D	
FP 230	Pear	2		CXL-D	
VP 63	Peas (pods and succulent= immature seeds)	0.5		CXL-D	
FS 14	Plums (including prunes)	1		CXL-D	
VR 589	Potato	0.05	(*)	CXL-D	
GC 649	Rice	0.1		CXL-D	
CM 649	Rice, Husked	0.05		5/8	EC (R): insufficient time to study
VC 431	Squash, Summer	0.2		CXL-D	
FB 275	Strawberry	2		CXL-D	
VR 508	Sweet potato	0.1		CXL-D	
VO 448	Tomato	0.5		CXL-D	
GC 654	Wheat	0.1		CXL-D	
VC 433	Winter squash	0.2		CXL-D	
Finland: concerns about acute exposure in respect to cherries.					
51	METHIDATHION				
FB 269	Grapes	1		7C(a)	
FP 230	Pear	1		7C(a)	
Chile, France: concerns about acute dietary intake; Germany (R): concerns about the quality of monograph.					
58	PARATHION				
FP 226	Apple	0.05	(*)	7B	
SO 691	Cotton seed	1		8	

Code	Commodity	MRL (mg/kg)		Step[1]	Remarks/Reservations[2]
AO2 2	Fruits (except as otherwise listed)	0.5		CXL-D	
GC 645	Maize	0.1		8	
GC 651	Sorghum	5		8	Finland: concerns about acute dietary exposure as sorghum is used in weaning food; Spain (R): too high from technological reasons of use
VD 541	Soya bean (dry)	0.05	(*)	8	
SO 702	Sunflower seed	0.05	(*)	8	
59	PARATHION-METHYL				
VS 620	Artichoke globe	2		5/8	
AL 1030	Bean forage (green)	1		5	EC: animal transfer studies needed
VD 71	Beans (dry)	0.05	(*)	5/8	
VB 400	Broccoli	0.2		5(a)	EC: disagrees with residue evaluation
VB 41	Cabbages, Head	0.2		5(a)	Germany, EC: disagree with residue evaluation
VR 577	Carrot	1		5/8	Spain: intake concern for children
VS 624	Celery	5		5/8	
AL 1023	Clover	10		5	EC: animal transfer studies needed
VP 526	Common bean (pods and/or immature seeds)	0.05	(*)	5/8	
VP 528	Garden pea (young pods)	1		5/8	
AS 162	Hay or fodder (dry) of grasses	5		5	EC: animal transfer studies needed
DH 1100	Hops, Dry	0.05	(*)	CXL-D	
DH 1100	Hops, Dry	1		5/8 (a)	
VL 482	Lettuce, Head	0.05	(*)	5/8	
VL 483	Lettuce, Leaf	0.5		5/8	
VP 534	Lima bean (young pods and/or immature beans)	0.05	(*)	5/8	
VL 485	Mustard greens	0.5		5/8	
VD 72	Peas (dry)	0.2		5/8	
VR 589	Potato	0.05	(*)	5/8	
GC 649	Rice	3		5	
AS 649	Rice straw and fodder, Dry	10		5	EC: animal transfer studies needed
CM 649	Rice, Husked	1		5	EC: animal transfer studies needed
VL 502	Spinach	0.5		5/8	
AV 596	Sugar beet leaves or tops	0.05	(*)	5	EC: animal transfer studies needed
VL 506	Turnip greens	2		5/8	
VR 506	Turnip, Garden	0.05	(*)	5/8	
GC 654	Wheat	5		5	EC: animal transfer studies needed, disagrees with residue evaluation
CM 654	Wheat bran, Unprocessed	10		5	EC: animal transfer studies needed
AS 654	Wheat straw and fodder, Dry	10		5	EC: animal transfer studies needed
64	QUINTOZENE				
FI 327	Banana	1		CXL-D	
VB 400	Broccoli	0.02		CXL	
VB 41	Cabbages, Head	0.02		CXL	
VD 526	Common bean (dry)	0.2		CXL	
VP 526	Common bean (pods and/or immature seeds)	0.01		CXL	
SO 691	Cotton seed	0.03		CXL	
VL 482	Lettuce, Head	3		CXL	
SO 697	Peanut	2		CXL	
SO 703	Peanut, Whole	5		CXL	
VO 445	Peppers, Sweet	0.01		CXL	

Code	Commodity	MRL (mg/kg)		Step[1]	Remarks/Reservations[2]
VR 589	Potato	0.2		CXL	
VO 448	Tomato	0.1		CXL	
70	**BROMOPROPYLATE**				
FC 1	Citrus fruits	5		CXL-D	
FC 1	Citrus fruits	2		8(a)	EC (R): data insufficient
74	**DISULFOTON**				
GC 640	Barley	0.2		7B(a)	
VD 71	Beans (dry)	0.05		7B	
VB 400	Broccoli	0.1		7B	
VB 41	Cabbages, Head	0.2		7B	
VB 404	Cauliflower	0.05		7B	
VP 526	Common bean (pods and/or immature seeds)	0.2		7B	
SO 691	Cotton seed	0.1		7B	
VP 528	Garden pea (young pods)	0.1		7B	
VL 482	Lettuce, Head	1		7B	
VL 483	Lettuce, Leaf	1		7B	
AF 647	Oat forage (green)	0.5		7B(a)	
AS 647	Oat straw and fodder, Dry	0.05		7B	
GC 651	Sorghum	1		7B(a)	
AF 651	Sorghum forage (green)	5		7B(a)	
GC 654	Wheat	0.2		7B(a)	
AF 654	Wheat forage (whole plant)	1		7B(a)	
AS 654	Wheat straw and fodder, Dry	5		7B	
083	**DICLORAN**				
FS 240	Apricot	10	Po	CXL-D	
FB 264	Blackberries	5		CXL-D	
VR 577	Carrot	10	Po	CXL	
FS 013	Cherries	15	Po	CXL-D	
VP 526	Common bean (pods and/or immature seeds)	2		CXL-D	
FB 021	Currants, Black, Red, White	5		CXL-D	
VC 425	Gherkin	0.5		CXL-D	
FB 269	Grapes	10	Po	CXL	
VL 482	Lettuce, Head	10		CXL	
FS 245	Nectarine	10	Po	CXL-D	
VA 385	Onion, Bulb	10	Po	CXL	
FS 247	Peach	15	Po	CXL	
FS 014	Plums (including prunes)	10	Po	CXL	
FB 272	Raspberries, Red, Black	10		CXL-D	
FB 275	Strawberry	10		CXL	
VO 448	Tomato	0.5		CXL	
VS 469	Witloof chicory (sprouts)	1		CXL-D	
90	**CHLORPYRIFOS-METHYL**				
GC 640	Barley	10	Po	7C	
GC 647	Oats	10	Po	7C	
GC 649	Rice	10	Po	6(a)	Egypt: prefers lower MRL; Spain: too high
97	**CARTAP**				
VB 41	Cabbages, Head	0.2		CXL-D	

Code	Commodity	MRL (mg/kg)	Step[1]	Remarks/Reservations[2]
TN 664	Chestnuts	0.1	CXL-D	
VL 467	Chinese cabbage (type pe-tsai)	2	CXL-D	
HS 784	Ginger, root	0.1	CXL-D	
FB 269	Grapes	1	CXL-D	
DH 1100	Hops, Dry	5	CXL-D	
FT 307	Persimmon, Japanese	1	CXL-D	
VR 589	Potato	0.1	CXL-D	
VR 494	Radish	1	CXL-D	
CM 649	Rice, Husked	0.1	CXL-D	
VO 447	Sweet corn (corn-on-the-cob)	0.1	CXL-D	
DT 1114	Tea, Green, Black	20	CXL-D	
100	**METHAMIDOPHOS**			
FP 9	Pome fruits	0.5	7B	Spain: intake concern; EC: data base insufficient
105	**DITHIOCARBAMATES**			
VS 624	Celery	5	CXL-D	
VP 526	Common bean (pods and/or immature seeds)	1	5	
VL 476	Endive	1	CXL-D	
DH 1100	Hops, Dry	30	5	EC: processing studies desirable to enable risk assessment concerning ETU in beer
FI 345	Mango	2	5	EC: data base insufficient; unacceptable that banana and mango data are mutually supportive
Denmark: intake concern relating to propineb and thiram; UK: intake concern especially concerning pome fruits and tomato				
106	**ETHEPHON**			
FP 226	Apple	5	8	
GC 640	Barley	1	8	
AS 640	Barley straw and fodder, Dry	5	8	
FB 20	Blueberries	20	8	Egypt: proposes lower MRL; EC: PHI missing
VC 4199	Cantaloupe	1	7B	EC (R): PHI missing and disagreement with residue evaluation
DF 297	Figs, Dried or dried and candied	10	8	Egypt: proposes lower MRL; EC (R): PHI missing
FB 269	Grapes	1	5	
VO 51	Peppers	30	7B	Egypt: proposes lower MRL; Spain: data base too old
FI 353	Pineapple	1	7B	USA (R): proposes higher MRL; EC: PHI missing
GC 650	Rye	1	8	
AS 650	Rye straw and fodder, Dry	5	8	
VO 448	Tomato	2	7B	Egypt proposes lower MRL; Spain: database too old; EC: difference indoor/outdoor trials not clear
109	**FENBUTATIN OXIDE**			
FC 1	Citrus fruits	5	CXL	
FC 203	Grapefruit	5	WD	
FC 206	Mandarin	5	WD	EC: database insufficient
FC 208	Orange, Sweet	5	WD	

Code	Commodity	MRL (mg/kg)		Step[1]	Remarks/Reservations[2]
111	**IPRODIONE**				
FB 264	Blackberries	30		8	Egypt: proposes lower MRL
VR 577	Carrot	10	Po	8	Egypt: proposes lower MRL; EC: database insufficient
FS 13	Cherries	10		8	Egypt: proposes lower MRL; EC: database insufficient; disagrees residue evaluation
VP 526	Common bean (pods and/or immature seeds)	2		8	EC: disagrees residue evaluation
CM 649	Rice, Husked	3		CXL-D	
CM 649	Rice, Husked	10		8 (a)	Egypt: proposes lower MRL; EC: disagrees residue evaluation
VO 448	Tomato	5		CXL	
112	**PHORATE**				
VR 577	Carrot	0.2		7C	
VR 589	Potato	0.2		7C	
115	**TECNAZENE**				
VL 482	Lettuce, Head	2		CXL-D	
VL 4	Witloof chicory (sprouts)	0.2		CXL-D	
125	**METHACRIFOS**				
MM 812	Cattle meat	0.01	(*) (fat)	CXL-D	
MO 812	Cattle, Edible offal of	0.01	(*)	CXL-D	
GC 80	Cereal grains	10	Po	WD	
PE 112	Eggs	0.01	(*)	CXL-D	
ML 106	Milks	0.01	(*)	CXL-D	
PM 110	Poultry meat	0.01	(*) (fat)	CXL-D	
CM 654	Wheat bran, Unprocessed	20	PoP	WD	
CF 1211	Wheat flour	2	PoP	WD	
CF 1212	Wheat wholemeal	10	PoP	WD	
131	**ISOFENPHOS**				
FI 327	Banana	0.02	(*)	CXL-D	
VB 40	Brassica vegetables	0.1		CXL-D	
VR 578	Celeriac	0.02	(*)	CXL-D	
VS 624	Celery	0.02	(*)	CXL-D	
FC 1	Citrus fruits	2		CXL-D	
MO 105	Edible offal (mammalian)	0.02	(*)	CXL-D	
GC 645	Maize	0.02	(*)	CXL-D	
AS 645	Maize fodder	0.5	dry wt	CXL-D	
MF 100	Mammalian fats (except milk fats)	0.02	(*)	CXL-D	
MM 95	Meat (from mammals other than marine mammals)	0.02	(*) (fat)	CXL-D	
ML 106	Milks	0.01	(*)	CXL-D	
VA 385	Onion, Bulb	0.1		CXL-D	
VR 589	Potato	0.1		CXL-D	
PF 111	Poultry fats	0.02	(*)	CXL-D	
PM 110	Poultry meat	0.02	(*) (fat)	CXL-D	
PO 111	Poultry, Edible offal of	0.02	(*)	CXL-D	
SO 495	Rape seed	0.02	(*)	CXL-D	
VR 497	Swede	0.02	(*)	CXL-D	

Code	Commodity	MRL (mg/kg)		Step[1]	Remarks/Reservations[2]
VO 447	Sweet corn (corn-on-the-cob)	0.02	(*)	CXL-D	
AS 447	Sweet corn fodder	0.5		CXL-D	
VR 506	Turnip, Garden	0.02	(*)	CXL-D	
133	**TRIADIMEFON**				
FI 353	Pineapple	3	Po	CXL-D	
FI 353	Pineapple	2	Po	8(a)	
USA, EC: disagree with residue definition					
138	**METALAXYL**				
FB 275	Strawberry	0.2		WD	Spain: proposes higher MRL
143	**TRIAZOPHOS**				
VR 577	Carrot	0.5		8	
168	**TRIADIMENOL**				
FI 353	Pineapple	1	Po TF	8	EC: insufficient data base
USA, EC: disagree with residue definition					
171	**PROFENOFOS**				
SO 691	Cotton seed	2		8	France, Spain: prefer lower MRL
VO 445	Peppers, Sweet	0.5		5/8	France, EC: data base insufficient; EC (R): insufficient time to study
DT 171	Teas (tea and herb teas)	0.5		WD	
172	**BENTAZONE**				
PE 112	Eggs	0.05	(*)	8	
MM 95	Meat (from mammals other than marine mammals)	0.05	(*)	8	
ML 106	Milks	0.05	(*)	8	
Germany: disagrees with residue definition for plant products.					
173	**BUPROFEZIN**				
VC 424	Cucumber	1		8	France: disagrees with the residue evaluation
FC 4	Oranges, Sweet, Sour	0.3	T	6	
VO 448	Tomato	1		8	France: disagrees with the residue evaluation
178	**BIFENTHRIN**				
GC 640	Barley	0.05	(*)	7B	
MF 812	Cattle fat	0.5		7B	
ML 812	Cattle milk	0.05	(*)	7B	
DH 1100	Hops, Dry	10		8	
GC 645	Maize	0.05	(*)	7B	
180	**DITHIANON**				
FS 13	Cherries	5		8	France (R): concerns about analytical method used in old trials. Netherlands (R): disagrees residue evaluation

Code	Commodity	MRL (mg/kg)		Step[1]	Remarks/Reservations[2]
182	**PENCONAZOLE**				
DF 269	Dried grapes (=currants, raisins and sultanas)	0.5		5/8	EC (R): insufficient time to study
FB 269	Grapes	0.2		8	
FP 9	Pome fruits	0.2		8	
188	**FENPROPIMORPH**				
GC 640	Barley	0.5		5	
AS 640	Barley straw and fodder, Dry	5		5	
AV 1051	Fodder beet leaves or tops	1		5	
AS 647	Oat straw and fodder, Dry	5		5	
GC 647	Oats	0.5		5	
GC 650	Rye	0.5		5	
AS 650	Rye straw and fodder, Dry	5		5	
VR 596	Sugar beet	0.05	(*)	5	
AV 596	Sugar beet leaves or tops	1		5	
GC 654	Wheat	0.5		5	
As 654	Wheat straw and fodder, Dry	5		5	
Germany, EC: Animal feeding studies and analytical method for metabolites in products of animal origin required					
189	**TEBUCONAZOLE**				
FB 269	Grapes	2		7B	
Germany: Possible to extrapolate an MRL for oat from barley data					
192	**FENARIMOL**				
AB 226	Apple pomace, Dry	5		5	EC: processing data insufficient
VS 620	Artichoke globe	0.1		5/8	EC(R): insufficient time to study
FI 327	Banana	0.2		5/8	EC (R): insufficient time to study
MO 1280	Cattle kidney	0.02	(*)	5	EC: insufficient data on apple pomace, dry
MO 1281	Cattle liver	0.05		5	EC: insufficient data on apple pomace, dry
MM 812	Cattle meat	0.02	(*)	5	EC: insufficient data on apple pomace, dry
FS 13	Cherries	1		5/8	EC (R): insufficient time to study
DF 269	Dried grapes (=currants, raisins and sultanas)	0.2		5	EC: processing data insufficient
FB 269	Grapes	0.3		5	
VC 46	Melons, except watermelon	0.05		5/8	EC: insufficient time to study
FS 247	Peach	0.5		5	EC: data base insufficient
TN 672	Pecan	0.02	(*)	5/8	EC (R): insufficient time to study
VO 445	Peppers, Sweet	0.5		5	EC: data base insufficient
FP 9	Pome fruits	0.3		5	
FB 275	Strawberry	1		5/8	EC (R): insufficient time to study

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APPENDIX I

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PROPOSED DRAFT REVISED RECOMMENDED METHODS OF SAMPLING FOR THE DETERMINATION OF PESTICIDE RESIDUES FOR COMPLIANCE WITH MRLS

(advanced to Step 5 of the Codex Procedure)

CONTENTS

PROPOSED DRAFT REVISED RECOMMENDED METHODS OF SAMPLING FOR THE DETERMINATION OF PESTICIDE RESIDUES FOR COMPLIANCE WITH MRLS

1. OBJECTIVE

The objective of these sampling procedures is to enable a representative sample to be obtained from a lot, for analysis to determine compliance with Codex Maximum Residue Limits (MRLs).

2. PRINCIPLES

2.1 Codex MRLs are intended to ensure good agricultural practices in the use of pesticides and are set at the appropriate levels required to minimize exposure of consumers and animals and to protect crops, food or feeding stuffs.

2.2 A Codex MRL for a plant, egg or dairy product takes into account the maximum level expected to occur in a composite sample, which has been derived from multiple units of the treated product and which is intended to represent the average residue level in a lot. A Codex MRL for meat and other poultry products takes into account the maximum level expected to occur in the tissues of individual treated animals or birds.

2.3 In consequence, MRLs for meat and poultry products apply to a bulk sample derived from a single primary sample, whereas MRLs for plant products, eggs and dairy products apply to a composite bulk sample derived from 1-10 primary samples.

3. SAMPLING PROCEDURES

Notes. (a) The terms used are defined in Annex I and the procedures are shown schematically in Annex II.

(b) ISO recommendations for sampling of grain[1], or other commodities shipped in bulk may be adopted, if required.

3.1 Precautions to be taken

Contamination and deterioration of samples must be prevented at all stages, because they may affect the analytical results. Each lot to be checked for compliance must be sampled separately.

3.2 Collection of primary samples

The minimum number of primary samples to be taken from a lot is determined from Table 1. Each primary sample should be taken from a randomly chosen position in the lot, as far as practicable. The primary samples must consist of sufficient material to provide the laboratory sample(s) required from the lot.

Notes. (a) Sampling devices required for grain[1], pulses[2] and tea[3] are described in ISO recommendations and those required for dairy products[4] are described by the IDF.

3.3 Preparation of the bulk sample

3.3.1 Procedure for meat and poultry products (Table 3)

Each primary sample is considered to be a separate bulk sample and it should be mixed well, if practicable.

3.3.2 Procedure for plant products, eggs or dairy products (Tables 4 and 5)

The primary samples should be combined and mixed well, if practicable, to form the bulk sample.

3.3.3 Alternative procedure where mixing to form the bulk sample is inappropriate or impractical

Where units may be damaged (and thus residues may be affected) by the processes of mixing or sub-division of the bulk sample, or where large units cannot be mixed to produce a more uniform residue distribution, the units should be allocated randomly to replicate laboratory samples at the time of taking the primary samples. In this case, the bulk sample is considered to be the sum of the laboratory samples analyzed.

3.4 Preparation of the laboratory sample

Where the bulk sample is larger than is required for a laboratory sample, it should be divided to provide a representative portion. A sampling device, quartering, or other appropriate size reduction process may be used but units of fresh plant products or whole eggs should not be cut or broken. Where required, replicate laboratory samples should be withdrawn at this stage or they may be prepared as in 3.3.3, above. The minimum sizes required for laboratory samples are given in Tables 3 and 4.

3.5 Sampling record

The sampling officer must record the nature and origin of the lot; the owner, supplier or carrier of it; the date and place of sampling; and any other relevant information. Any

departure from the recommended method of sampling must be recorded. A signed copy of the record must accompany each replicate laboratory sample and a copy should be retained by the sampling officer.

3.6 **Packaging and transmission of the laboratory sample**

The laboratory sample must be placed in a clean, inert container which provides secure protection from contamination, damage and leakage. The container should be sealed, the sampling record must be attached and the sample delivered to the laboratory as soon as practicable. Spoilage in transit must be avoided, e.g. fresh samples should be kept cool and frozen samples must remain frozen. Samples of meat and poultry products should be frozen prior to despatch, unless transported to the laboratory before spoilage can occur.

3.7 **Preparation of the analytical sample**

The laboratory sample should be given a unique identifier which, together with the date of receipt and the sample size, should be added to the sample record. The part of the commodity to be analysed[5,6], i.e. the analytical sample, should be separated as soon as practicable. Where the residue level must be calculated to include parts which are not analysed, the weights of the separated parts must be recorded.

3.8 **Preparation and storage of the analytical portion**

The analytical sample should be comminuted, if appropriate, and mixed well, to enable representative analytical portions to be withdrawn. The size of the analytical portion should be determined by the analytical method and the efficiency of mixing. The methods for comminution and mixing should not affect the residues present in the analytical sample. Where appropriate, the analytical sample should be processed under special conditions, e.g. at sub-zero temperature, to minimize adverse effects. Where processing could affect residues and where practical alternative procedures are not available, the analytical portion may consist of whole units, or segments removed from whole units. If the analytical portion thus consists of few units or segments, it is unlikely to be representative of the analytical sample and sufficient replicate portions must be analysed, to indicate the uncertainty of the mean value. If analytical portions are to be stored before analysis, the method and length of time of storage should be such that they do not affect the level of residues present. Additional portions must be withdrawn for replicate and confirmatory analyses, as required.

4. CRITERIA FOR DETERMINING COMPLIANCE

4.1 Analytical results must be derived from samples which were in a fit state for analysis and they must be supported by acceptable quality control data (e.g. for instrument calibration and pesticide recovery - refer to Codex Alimentarius, Volume 2, Section 4.2, "Guidelines on good laboratory practice in pesticide residue analysis"). Results should not be corrected for recovery. Where a residue is found to exceed an MRL, its identity should be confirmed and its concentration must be verified by analysis of one or more additional analytical portions.

4.2 The Codex MRL applies to the bulk sample.

4.3 The lot complies with a Codex MRL where the MRL is not exceeded by the analytical result(s).

4.4 Where results for the bulk sample exceed the MRL, a decision that the lot is non-compliant must take into account: (i) the range of results obtained from replicate laboratory samples and/or replicate analytical portions, as applicable; and (ii) the accuracy and precision of analysis, as indicated by the supporting quality control data.

Table 1. Minimum number of primary samples to be taken from a lot

	Minimum number of primary samples to be taken from the lot	
(a) Meat and poultry products		
a non-suspect lot	1	
a suspect lot	approximately 6-30	(see note(i) , below)
(b) Plant products, eggs and dairy products		
(i) Products, packaged or in bulk, which can be assumed to be mixed or homogeneous	1	see note (d) under definition of a lot, Annex 1
(ii) Products, packaged or in bulk, which may not be mixed or homogeneous		see note (ii), below
either:		
Weight of lot, kg		
<50	3	
50-500	5	
>500	10	
or		
Number of cans, cartons or other containers in the lot		
1-25	1	
26-100	5	
>100	10	

Notes. *(i) If the location of contaminated units within a lot of a meat, dairy or poultry product cannot be determined by visual inspection, the number of samples to be taken from a suspect lot will depend on the degree of confidence required (see Table 2).*

(ii) For products comprised of large units, in class A only, the minimum number of primary samples should comply with the minimum number of units required for the laboratory sample (see Table 4).

Table 2. **Number of randomly selected primary samples required for a given probability of detecting at least one non-compliance in a lot of meat or poultry product**

Incidence of violative residues in the lot	Minimum number of samples (n_o) required to detect a violative residue with a probability of:		
%	90%	95%	99%
90	1	-	2
80	-	2	3
70	2	3	4
60	3	4	5
50	4	5	7
40	5	6	9
35	6	7	11
30	7	9	13
25	9	11	17
20	11	14	21
15	15	19	29
10	22	29	44
5	45	59	90
1	231	299	459
0.5	460	598	919
0.1	2302	2995	4603

Notes. *(a) The Table assumes random sampling.*

(b) Where number of primary samples indicated in Table 2 is more than about 10% of units in the total lot, the number of primary samples taken may be fewer and should be calculated as follows:

$$n = \frac{n_0}{1 + (n_0 - 1) / N}$$

where n = *minimum number of primary samples to be taken*
n_o = *number of primary samples given in Table 2*
N = *number units, capable of yielding a primary sample, in the lot.*

(c) Where a single primary sample is taken, the probability of detecting a violation is similar to the incidence of violative residues.

(d) This Table should not be used to determine the probability of detecting a violation in a lot of a plant product. As composite samples are prepared for plant products, the statistical distribution of residues in the lot must be known, to determine the probability.

Table 3. Meat and poultry products: description of primary samples and minimum size of laboratory samples

	Commodity classification	Examples	Nature of primary sample to be taken	Minimum size of each laboratory sample
Class B, primary food commodities of animal origin				
1.	**Mammalian meats**, type 06, group 030 Note: for enforcement of MRLs for fat soluble pesticides samples must be taken according to section 2 below.			
1.1	**Large mammals,** whole or half carcass, usually 10 kg or more	cattle sheep pigs	whole or part of diaphragm, supplemented by cervical muscle, if necessary	0.5 kg
1.2	**Small mammals** whole carcass	rabbits	whole carcass or hind quarters	0.5 kg, after removal of skin and bone
1.3	**Mammal meat parts, loose fresh/chilled/frozen** packaged or otherwise	quarters chops steaks shoulders	whole unit(s), or a portion of a large unit	0.5 kg, after removal of bone
1.4	**Mammal meat parts, bulk frozen**	quarters chops	either a frozen cross-section of a container or the whole (or portions) of individual meat parts	0.5 kg, after removal of bone
2.	**Mammalian fats, including carcass fat**, type 06, group 031 Note: samples of fat taken as described in 2.1, 2.2 and 2.3 may be used to determine compliance of the fat or the whole product, with the corresponding MRLs			
2.1	**Large mammals, at slaughter, whole or half carcass** usually 10 kg or more	cattle sheep pigs	kidney, abdominal or subcutaneous fat cut from one animal	0.5 kg
2.2	**Small mammals, at slaughter, whole or half carcass** < 10 kg		abdominal or subcutaneous fat from one or more animals	0.5 kg
2.3	**Mammal meat parts**	legs chops steaks	either visible fat, trimmed from unit(s)	0.5 kg
			or whole unit(s) or portions of whole unit(s), where fat is not trimmable	2 kg
2.4	**Mammal bulk fat tissue**	-	units taken with a sampling device from at least 3 positions	0.5 kg
Class B, primary food commodities of animal origin				
3.	**Mammalian offals**, type 06, group 032			
3.1	Mammal liver, fresh/chilled/frozen	-	whole liver(s), or part of liver	0.4 kg

Commodities are classified according to the Codex Alimentarius[5]
Refer to Table 1 to determine the number of primary samples required.

	Commodity classification	Examples	Nature of primary sample to be taken	Minimum size of each laboratory sample
3.2	**Mammal kidney,** fresh/chilled/frozen	-	1 or both kidneys from 1 or more animal	0.2 kg
3.3	**Mammal heart,** fresh/chilled/frozen	-	Whole heart(s), or ventricle portion only, if large	0.4 kg
3.4	**Other mammal offal,** fresh/chilled/frozen	intestines brains	Part or whole unit from 1 or more animals, or a cross-section taken from bulk frozen product	0.5 kg
4.	**Poultry meats,** type 07, group 036 Note: for enforcement of MRLs for fat soluble pesticides samples must be taken according to section 5 below.			
4.1	**Bird, large-sized carcass** >2 kg	turkey goose mature chicken	thighs, legs and other dark meat	0.5 kg after removal of skin and bone
4.2	**Birds, medium-sized carcass** 500 g-2 kg	duckling guinea fowl young chicken	thighs, legs or other dark meat from at least 3 birds	0.5 kg after removal of skin and bone
4.3	**Birds, small-sized carcass** <500 g carcass	quail pigeon	carcasses from at least 6 birds	0.2 kg of muscle tissue
4.4	**Bird parts** fresh/chilled/frozen, retail or wholesale packaged	legs quarters	packaged units, or individual parts	0.5 kg (after removal of skin and bone)
Class B, primary food commodities of animal origin				
5.	**Poultry fats,** including carcass fat, type 07, group 037 Note: samples of fat taken as described in 5.1 and 5.2 may be used to determine compliance of the fat or the whole product, with the corresponding MRLs			
5.1	**Birds, at slaughter, whole or part-carcass**	chickens turkeys	units of abdominal fat from at least 3 birds	0.5 kg
5.2	**Bird meat parts**	legs breast muscle	either visible fat, trimmed from unit(s)	0.5 kg
			or whole unit(s) or portions of whole unit(s), where fat is not trimmable	2 kg
5.3	**Bird fat tissue in bulk**	-	units taken with a sampling device from at least 3 positions	0.5 kg
6.	**Poultry offals,** type 07, group 038			
6.1	**Edible bird offal, except goose and duck fat liver and similar high value products**		units from at least 6 birds, or a cross-section from a container	0.2 kg
6.2	Goose and duck fat liver and similar high value products		unit from 1 birds or container	0.05 kg

Commodities are classified according to the Codex Alimentarius[5]
Refer to Table 1 to determine the number of primary samples required.

	Commodity classification	Examples	Nature of primary sample to be taken	Minimum size of each laboratory sample
Class E, processed foods of animal origin				
7.	**Secondary food commodities of animal origin**, type 16, group 080 dried meats **Derived edible products of animal origin**, type 17, group 085 processed animal fats **Manufactured food (single ingredient) of animal origin**, type 18 **Manufactured food (multi-ingredient) of animal origin**, type 19			
7.1	**Mammal or bird, comminuted, cooked canned, dried, rendered, or otherwise processed products,** including multi-ingredient products	ham sausage minced beef chicken paste	packaged units, or a representative cross-section from a container, or units (including juices, if any) taken with a sampling device	**0.5 kg** or **2 kg** if fat content $<5\%$

Commodities are classified according to the Codex Alimentarius[5]
Refer to Table 1 to determine the number of primary samples required.

Table 4. Plant products: description of primary samples and minimum size of laboratory samples

	Commodity classification	Examples	Nature of primary samples to be taken	Minimum size of each laboratory sample
Class A, primary food commodities of plant origin				
1.	**All fresh fruits**, type 1, groups 001-008 **All fresh vegetables**, type 2, groups 009-019, except group 015 (dry pulses)			
1.1	**small sized fresh products** units generally < 25 g	berries peas olives	whole units, or packages, or units taken with a sampling device	**1 kg**
1.2	**medium sized fresh products** units generally 25-250 g	apples oranges	whole units,	**1 kg** **(at least 10 units)**
1.3	**large sized fresh products** units generally > 250 g	cabbages cucumbers grapes(bunches)	whole units	**2 kg** **(at least 5 units)**
2.	**Pulses**, type 2, group 015 **Cereal grains**, type 3, group 020 **Tree nuts**, type 4, group 022 **Oilseeds**, type 4, group 023 **Seeds for beverages and sweets**, type 4, group 024	soya beans rice, wheat except coconuts coconuts peanuts coffee beans		**1 kg** **1 kg** **1 kg** **5 units** **500 g** **500 g**
3.	**Herbs**, type 5, group 027 *(for dried herbs see: Class D, type 12, in section 5 of this Table)* **Spices**, type 5, group 028	fresh parsley others, fresh dried	whole units whole units or taken with a sampling device	**0.5 kg** **0.2 kg** **0.1 kg**
Class C, primary animal feed commodities				
4.	**Primary feed commodities of plant origin**, type 11			
4.1	**Legume animal feeds, and other forages and fodders**		whole units, or units taken with a sampling device	**1 kg** **(at least 10 units)**
4.2	**Straw, hay and other dried products**		units taken with a sampling device	**0.5 kg** **(at least 10 units)**
Class D, processed foods of plant origin				
5.	**Secondary food commodities of plant origin**, type 12, dried fruits, vegetables, herbs, milled cereal products **Derived products of plant origin**, type 13, teas, vegetable oils, juices, by-products for animal feed and miscellaneous products **Manufactured foods (single ingredient) of plant origin**, type 14 **Manufactured foods (multi-ingredient) of plant origin**, type 15, including products with ingredients of animal origin where the ingredient(s) of plant origin predominate(s), and group 078, breads			

Commodities are classified according to the Codex Alimentarius[5]
Refer to Table 1 to determine the number of primary samples required.

	Commodity classification	Examples	Nature of primary samples to be taken	Minimum size of each laboratory sample
5.1	**Products of high unit value**		packages or units taken with a sampling device	0.1 kg*
5.2	**Solid products of low bulk density**	hops tea	packaged units, or units taken with a sampling device	0.2 kg
5.3	**Other solid products**	bread flour apple pomace dried fruit	packages or other whole units, or units taken with a sampling device	0.5 kg
5.4	**Liquid products**	vegetable oils juices	packaged units, or units taken with a sampling device	0.5 l or 0.5 kg

* A smaller laboratory sample may be taken from a product of exceptionally high value but the reason for doing so should be noted in the sampling record.

Commodities are classified according to the Codex Alimentarius[5]
Refer to Table 1 to determine the number of primary samples required.

Table 5. **Egg and dairy products: description of primary samples and minimum size of laboratory samples**

	Commodity classification	Examples	Nature of primary samples to be taken	Minimum size of each laboratory sample
Class B, primary food commodities of animal origin				
1.	**Poultry eggs**, type 7, group 039			
1.1	**Eggs, except quail and similar, whole or otherwise**		whole eggs, or units taken with a sampling device	**12 whole chicken eggs, 6 whole goose or duck eggs**
1.2	**Eggs, quail and similar**		whole eggs	**24 whole eggs**
Class E, processed foods of animal origin				
2.	**Secondary food commodities of animal origin**, type 16, group 082 skimmed milks, evaporated milks and milk powders **Derived edible products of animal origin**, type 17, group 086 milkfats, group 087 butters, butteroils, creams, cream powders, caseins, etc. **Manufactured food (single ingredient) of animal origin**, type 18, group 090 **Manufactured food (multi-ingredient) of animal origin**, type 19, group 092 (including products with ingredients of plant origin where the ingredient(s) of animal origin predominates(s))			
2.1	**Liquid milks, milk powders, evaporated milks and creams, creams, dairy ice creams, yoghurts**		packaged units, or units taken with a sampling device	**0.5 l** (liquid) or **0.5 kg** (solid)
Notes.	*(i) Evaporated milks and evaporated creams in bulk must be mixed thoroughly before sampling, scraping adhering material from the sides and bottom of containers and stirring well. About 2-3 l should be removed and again stirred well before removing the laboratory sample.* *(ii) Milk powders in bulk should be sampled by passing a dry borer tube through the powder at an even rate.* *(iii) Creams in bulk should be mixed thoroughly with a plunger before sampling but foaming, whipping and churning must be avoided.*			
2.2	**Butter and butteroils**	butter, whey butter, low fat spreads containing butter fat, anhydrous butteroil, anhydrous milkfat	whole or parts of packaged units, or units taken with a sampling device	**0.2 kg or 0.2 l**
Note.	*Butter in bulk should be sampled with a minimum of 2 cores. Pats or rolls > 250g should be quartered and opposite quarters taken as units.*			
2.3	**Cheeses, including processed cheeses**			
	units 0.3 kg or greater		whole units, or units cut with a sampling device	**0.5 kg**
	units < 0.3 kg		whole units, or units cut with a sampling device	**0.3 kg**
Note.	*Cheeses with a circular base should be sampled by making two cuts radiating from the centre. Cheeses with a rectangular base should be sampled by making two cuts parallel to the sides.*			

Commodities are classified according to the Codex Alimentarius[5]
Refer to Table 1 to determine the number of primary samples required.

	Commodity classification	Examples	Nature of primary samples to be taken	Minimum size of each laboratory sample
2.4	**Liquid, frozen or dried egg products**		units taken aseptically with a sampling device	**0.5 kg**

Commodities are classified according to the Codex Alimentarius[5]
Refer to Table 1 to determine the number of primary samples required.

Annex I. DEFINITION OF TERMS

Analytical portion

A representative quantity of material removed from the analytical sample, of proper size for measurement of the residue concentration.

Note. A sampling device may be used to withdraw the analytical portion.

Analytical sample

The material prepared for analysis from the laboratory sample, by separation of the portion of the product to be analysed[5,6] and then by mixing, grinding, fine chopping, etc., for the removal of analytical portions with minimal sampling error.

Note. Preparation of the analytical sample must reflect the procedure used in setting Codex MRLs and thus the portion of the product to be analysed may include parts that are not normally consumed.

Bulk sample

For plant products, the combined and well mixed aggregate of the primary samples taken from a lot. For meat, dairy and poultry products, the well mixed primary sample.

Notes. (a) The primary samples must contribute sufficient material to enable all laboratory samples to be withdrawn from the bulk sample.
(b) Where separate laboratory samples are prepared during collection of the primary sample(s), the bulk sample is the conceptual sum of the laboratory samples, at the time of taking the samples from the lot.

Laboratory sample

The sample sent to, or received by, the laboratory. A representative quantity of material removed from the bulk sample.

Notes. (a) The laboratory sample may be the whole or a part of the bulk sample.
(b) Units should not be cut or broken to produce the laboratory sample(s), except where sub-division of units is specified in Table 3.
(c) Replicate laboratory samples may be prepared.

Lot

A quantity of a food material delivered at one time and known, or presumed, by the sampling officer to have uniform characteristics such as origin, producer, variety, packer, type of packing, markings, consignor, etc. A suspect lot is one which, for any reason, is suspected to contain an excessive residue. A non-suspect lot is one for which there is no reason to suspect that it may contain an excessive residue.

Notes. (a) Where a consignment is comprised of lots which can be identified as originating from different growers, etc., each lot should be considered separately.
(b) A consignment may consist of one or more lots.
(c) Where the size or boundary of each lot in a large consignment is not readily established, each one of a series of wagons, lorries, ship's bays, etc., may be considered to be a separate lot.

(d) A lot may be mixed by grading or manufacturing processes, for example.

Primary sample

One or more units taken from one position in a lot.

Notes. *(a) The position from which a primary sample is taken in the lot should preferably be chosen randomly but, where this is physically impractical, it should be a random position in the accessible parts of the lot.*

(b) The number of units required for a primary sample should be determined by the number of primary samples to be taken from the lot and by the minimum size and number of laboratory samples required.

(c) For plant, egg and dairy products, where more than one primary sample is taken from a lot, each should contribute an approximately similar proportion to the bulk sample.

(d) Units may be allocated randomly to replicate laboratory samples at the time of collecting the primary sample(s), in cases where the units are of medium or large size and mixing the bulk sample would not make the laboratory sample(s) more representative, or where the units (e.g. eggs, soft fruit) could be damaged by mixing.

(e) Where primary samples are taken at intervals during loading or unloading of a lot, the sampling "position" is a point in time.

(f) Units should not be cut or broken to produce the primary sample(s), except where sub-division of units is specified in Table 3.

Sample

One or more units selected from a population of units, or a portion of material selected from a larger quantity of material.

Sampling

The procedure used to draw and constitute a sample.

Sampling device

(i) A tool such as a scoop, dipper, borer, knife or spear, used to remove a unit from bulk material, from packages (such as drums, large cheeses) or from units of meat or poultry products which are too large to be taken as primary samples. (ii) A tool such as a riffle box, used to prepare a laboratory sample from a bulk sample, or to prepare an analytical portion from an analytical sample.

Notes. *(a) Specific sampling devices are described by ISO[1,2,3] and IDF[4] standards.*

(b) For materials such as loose straw or leaves, the hand of the sampling officer may be considered to be a sampling device.

Sampling officer

A person trained in sampling procedures and, where required, authorised by the appropriate authorities to take samples.

Note. *The sampling officer is responsible for all procedures leading to and including preparation, packing and shipping of the laboratory sample(s). The officer must understand that consistent adherence to the specified sampling procedures is necessary, must provide complete documentation for samples, and should collaborate closely with the laboratory.*

Sample size

The number of units, or quantity of material, constituting the sample.

Unit

The smallest discrete portion in a lot, which should be withdrawn to form the whole or part of a primary sample.

Note. *Units should be identified as follows.*

(a) ***Fresh fruit and vegetables.*** *Each whole fruit, vegetable or natural bunch of them (e.g. grapes) should form a unit, except where these are small. Units of packaged small products may be identified as in (d), below. Where a sampling device may be used without damaging the material, units may be created by this means. Individual fresh fruit or vegetables must not be cut or broken to produce units.*

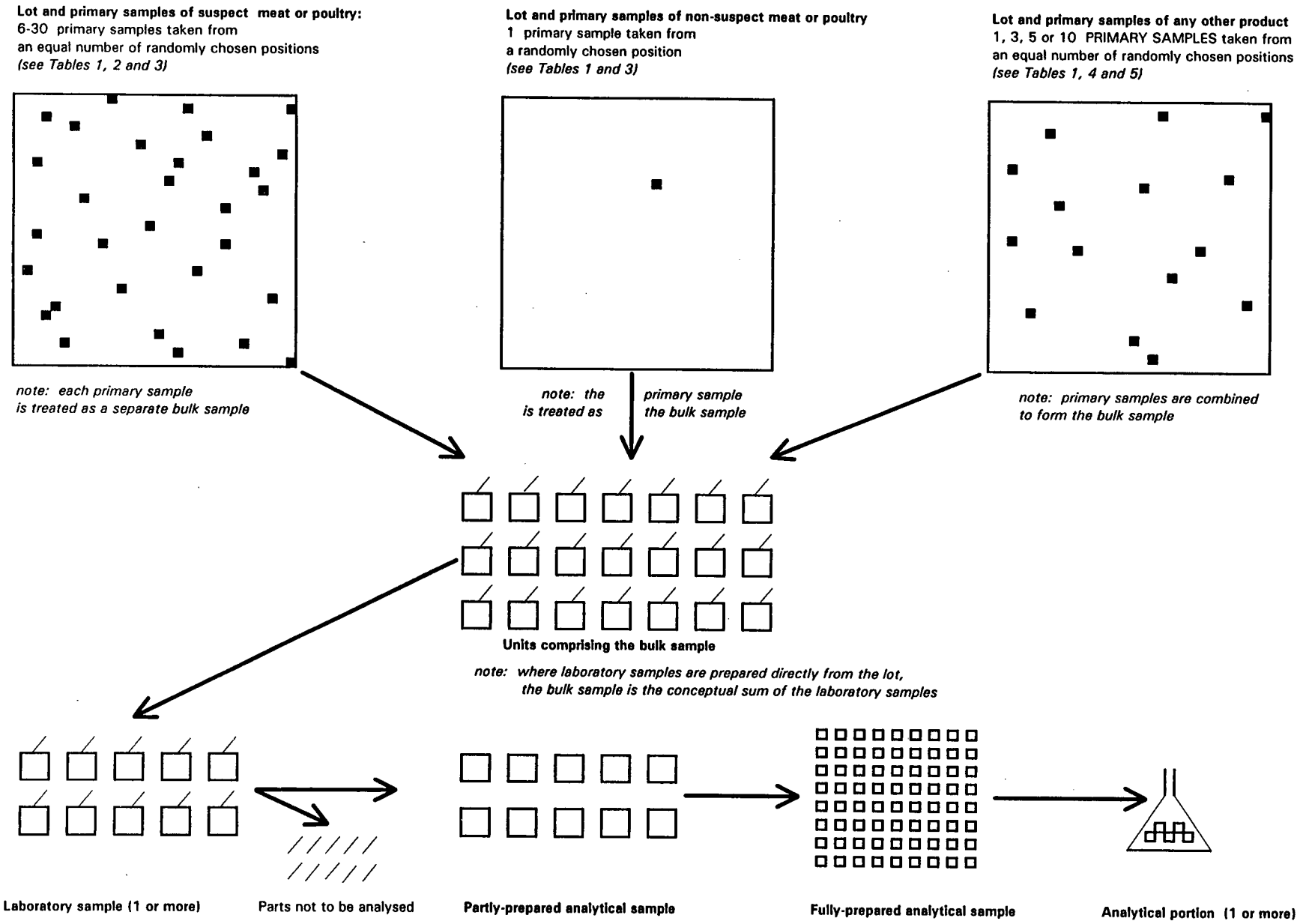
(b) ***Large animals or parts or organs of them.*** *A portion, or the whole, of a specified part or organ should form a unit. Parts or organs may be cut to form units.*

(c) ***Small animals or parts or organs of them.*** *Each whole animal or complete animal part or organ present may form a unit. Where packaged, units may be identified as in (d), below. Where a sampling device may be used without affecting residues, units may be created by this means.*

(d) ***Packaged materials.*** *The smallest discrete packages should be taken as units. Where the smallest packages are very large, they should be sampled as bulk, as in (e), below. Where the smallest packages are very small, a pack of packages may form the unit.*

(e) ***Bulk materials and large packages*** *(such as drums, cheeses, etc.) which are individually too large to be taken as primary samples. The units are created with a sampling device.*

Annex II. SCHEMATIC REPRESENTATION OF SAMPLING



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PRIORITY LIST OF COMPOUNDS SCHEDULED FOR EVALUATION OR REEVALUATION BY JMPR

The following is the final or tentative lists of compounds to be considered by the FAO/WHO Joint Meeting of Pesticide Residues (JMPR) from 1997 to 2004.

AGENDA OF THE 1997 JMPR

Toxicological evaluations	Residue evaluations
NEW COMPOUNDS	NEW COMPOUNDS
fenbuconazole fipronil	fenbuconazole
PERIODIC REEVALUATIONS	PERIODIC REEVALUATIONS
	carbofuran (096) carbosulfan (145)
fenamiphos (085) guazatine (114) malathion (049)	guazatine (114)
	mevinphos (053) phosmet (103) thiabendazole (065)
triforine (116)	
EVALUATIONS	EVALUATIONS
abamectin (177) amitrole (079)	abamectin (177)
	bifenthrin (178) captan (007)/folpet (041)
chlormequat (015)	
	chlorothalonil (081) clethodim (187)
ethephon (106) AMPA (metabolite of glyphosate (158)) lindane (048)	ethephon (106) glyphosate (158)
	methamidophos (100) myclobutanil (181) parathion (58)
phosalone (060)	
	tebuconazole (189) tebufenozide (196)

10 April 1997

TENTATIVE AGENDA OF THE 1998 JMPR

Toxicological evaluations	Residue evaluations
NEW COMPOUNDS	NEW COMPOUNDS
kresoxim-methyl	kresoxim-methyl
PERIODIC REEVALUATIONS	PERIODIC REEVALUATIONS
amitraz (122)	amitrole (079) benomyl (069) / carbendazim (072) / thiophanate-methyl (077)
bitertanol (144)	captan (007) carbaryl (008) 2,4-D (020) demeton-S-methyl (073) / oxydemeton-methyl (166)
dicloran (083)	dicloran (083) dimethoate (027) / omethoate (055) / formothion (042)
diphenylamine (030) endosulfan (032) ethoxyquin (035)	
	folpet (41) maleic hydrazide (102)
methiocarb (132) pyrethrins (063) thiometon (076)	
EVALUATIONS	EVALUATIONS
bentazone (172) dinocap (87)	bentazone (172) dinocap (087) disulfoton (074) glufosinate-ammonium (175) hexythiazox (176)
phosmet (103)	procymidone (136) quintozene (064)
thiophanate-methyl (77)	

10 April 1997

TENTATIVE AGENDA OF THE 1999 JMPR

Toxicological evaluations	Residue evaluations
NEW COMPOUNDS	NEW COMPOUNDS
pyrifenox pyriproxyfen	pyrifenox pyriproxyfen
PERIODIC REEVALUATIONS	PERIODIC REEVALUATIONS
chlorpyrifos (017)	bitertanol (144)
dimethipin (151) ethoprophos (149)	diflubenzuron (130)
imazalil (110)	ethoxyquin (035) fenamiphos (085)
permethrin (120)	malathion (049) methiocarb (132) ortho-phenylphenol (056)
propargite (113)	piperonyl butoxide (062) pirimiphos-methyl (086)
EVALUATIONS	pyrethrins (069)
PTU (150)	EVALUATIONS buprofezin (173) clethodim (187) ethion (34) fenproxymate (193) phosalone (060)

10 April 1997

TENTATIVE AGENDA OF THE 2000 JMPR

Toxicological evaluations	Residue evaluations
NEW COMPOUNDS	NEW COMPOUNDS
imidacloprid	
PERIODIC REEVALUATIONS	PERIODIC REEVALUATIONS
acephate (95)	amitraz (122)
	chlorpyriphos (017)
	cypermethrin (118)
deltamethrin (135)	diphenylamine (030)
dodine (084)	endosulfan (032)
fenitrothion (37)	
methamidophos (100)	methomyl (094) / thiodicarb (154)
	parathion (058)
	parathion-methyl (059)
thiodicarb (154)	thiometon (076)
vamidothion (78)	
EVALUATIONS	EVALUATIONS
	aldicarb (117)

10 April 1997

TENTATIVE AGENDA OF THE 2001 JMPR

Toxicological evaluations	Residue evaluations
NEW COMPOUNDS	NEW COMPOUNDS
	imidacloprid
PERIODIC REEVALUATIONS	PERIODIC REEVALUATIONS
	dimethipin (151) dodine (084) ethoprophos (149) fenitrothion (37) imazalil (110)
oxamyl (126)	
prochloraz (142)	permethrin (120)
triazophos(143)	propargite (113)

10 April 1997

TENTATIVE AGENDA OF THE 2002 JMPR

Toxicological evaluation	Residue evaluation
NEW COMPOUNDS	NEW COMPOUNDS
PERIODIC REEVALUATIONS	PERIODIC REEVALUATIONS
	acephate (95) deltamethrin (135) methamidophos (100) oxamyl (126) prochloraz (142)
propamocarb (148)	triazophos (143) vamidothion (78)

10 April 1997

TENTATIVE AGENDA OF THE 2003 JMPR

Toxicological evaluation	Residue evaluation
NEW COMPOUNDS	NEW COMPOUNDS
PERIODIC REEVALUATIONS	PERIODIC REEVALUATIONS
bendiocarb (137)	propamocarb (148)

10 April 1997

TENTATIVE AGENDA OF THE 2004 JMPR

Toxicological evaluations	Residue evaluations
NEW COMPOUNDS	NEW COMPOUNDS
PERIODIC REEVALUATIONS	PERIODIC REEVALUATIONS
	bendiocarb (137)

10 April 1997

ANNEX

CANDIDATE COMPOUNDS FOR PERIODIC REVIEW NOT YET SCHEDULED

Azocyclotin[1]
Clofentazine[2]
Cyhexatin[1]
Cyhalothrin[3]
Fenvalerate[3]
Flucythrinate[4]
Glyphosate[2]
Mecarbam
Metalaxyl[3]
Methoprene
Phenthoate
Phorate
Phoxim
Pirimicarb[4]
Phosphamidon[2]
Triadimefon[5]
Triforine (residues)[4]

1 Availability of adequate data package to be confirmed.
2 New candidate compound for periodic review.
3 Not supported for periodic reevaluation. However, there is support for MRLs based on the use of specific enantiomers/isomers.
4 Awaiting scheduling date for review in the European Community.
5 Support fro the periodic review to be confirmed at the 30th Session of the CCPR.