

# codex alimentarius commission



FOOD AND AGRICULTURE  
ORGANIZATION  
OF THE UNITED NATIONS

WORLD  
HEALTH  
ORGANIZATION



JOINT OFFICE: Viale delle Terme di Caracalla 00100 ROME Tel: 39 06 57051 www.codexalimentarius.net Email: codex@fao.org Facsimile: 39 06 5705 4593

**Agenda Item 6**

**CX/PR 03/4**

## **JOINT FAO/WHO FOOD STANDARDS PROGRAMME**

### **CODEX COMMITTEE ON PESTICIDE RESIDUES**

**Thirty-fifth Session**

**Rotterdam, The Netherlands, 31 March -5 April 2003**

#### **GEMS/FOOD PROGRESS REPORT OF DIETARY INTAKES<sup>1</sup>**

##### **Revision of GEMS/Food Regional Diets**

1. At the Thirty-first session of the Committee, WHO presented its efforts to expanded the five GEMS/Food Regional Diets<sup>2</sup> to develop more representative diets as recommended by an earlier FAO/WHO expert consultation.<sup>3</sup> Using a cluster analysis approach, 13 Consumption Cluster Diets were produced.<sup>4</sup> At the Thirty-second session, the Committee considered government responses to Circular Letter CL1999/30-PR, which were largely supportive of the 13 Consumption Cluster Diets. However, several technical questions were raised, including a request to GEMS/Food to develop some examples of the possible impact the Consumption Cluster Diets may have on exposure assessment of pesticide residues if the new diets were adopted. In addition, the Committee requested GEMS/Food to provide an estimate of the total consumption of food in order to assess potential differences among the clusters.<sup>5</sup> At the Thirty-third session, after considering the clarifications provided, the Committee supported the development of the 13 cluster diets and noted that further refinement of the diets would be required, including examples of calculation MRLs for fruits and vegetables, before recommending their use for the purposes of JMPR.<sup>6</sup> The Committee agreed that it should be informed about significant further progress made in the framework of GEMS/Food on the finalization of the regional diets.

2. GEMS/Food has now entered into an Agreement for the Performance of Work with Exponent, Inc. to finalize the 13 Consumption Cluster Diets, which will require: (1) evaluating and incorporating country comments, as applicable, (2) preparing preliminary estimates of consumption for each of the Consumption Cluster Diets, (3) identifying major data gaps where default values or

<sup>1</sup> Paper prepared by Food Safety Department, World Health Organization, Geneva, Switzerland

<sup>2</sup> GEMS/Food Regional Diets, Regional per capita consumption of raw and semi-processed agricultural commodities, GEMS/Food Programme, WHO/FSF/FOS/98.3, WHO, Geneva (1998)

<sup>3</sup> Food consumption and exposure assessment of chemicals. Report of a FAO/WHO consultation, 10-14 February 1997, Geneva, Unpublished Document WHO/FSF/FOS97.5, WHO, Geneva (1997)

<sup>4</sup> Progress report by WHO on the revision of GEMS/Food Regional Diets, CX/PR 99/3, February 1999

<sup>5</sup> ALINORM 01/24, para 38

<sup>6</sup> ALINORM 01/24A, para 56

surrogate values may be used, and (4) communicating with countries to reconcile inconsistencies and fill major data gaps. Missing values for certain food commodities as well as values for a large number of semi-processed and processed foods will require Member countries to be contacted to ascertain the availability of such data. This includes important processed foods such as juices of apples, sour cherries, citrus fruit, black currants, grapes, and pineapple and for barley beer, maize meal, and bran of rye and wheat for which processing studies are often received by JMPR. Member countries are encouraged to collaborate in this effort in order to develop more representative diets for use in international risk assessments by all FAO/WHO scientific advisory bodies, including JMPR.

### **Information on Large Portion Size**

3. In order to assess the International Estimated Short-term Intake (IESTI) of relevant pesticides, the JMPR uses the highest 97.5th percentile consumption (eaters only) by the general population and children ages 6 from among the data submitted by various countries to GEMS/Food. The database on large portion size is available at

[http://www.who.int/fsf/Chemicalcontaminants/Haz\\_Exp\\_Ass\\_Alldata.pdf](http://www.who.int/fsf/Chemicalcontaminants/Haz_Exp_Ass_Alldata.pdf)

and is based on submissions from Australia, France, The Netherlands, Japan, United Kingdom and United States of America. The database has recently been revised to include data from South Africa. All countries are encouraged to review the current database to assure that these highest reported intakes used in IESTI calculations are sufficient to protection their populations.

### **Information on Typical Unit Weight and Edible Portion**

4. In calculating the IESTI for certain commodities where three or less commodities units comprise the large portion consumption (e.g., Case 2), the typical unit weight and edible portion are needed. GEMS/Food has compiled a database of such information which is available at [http://www.who.int/fsf/Chemicalcontaminants/unit\\_weight\\_edible.pdf](http://www.who.int/fsf/Chemicalcontaminants/unit_weight_edible.pdf). The database has been updated based on new data received from Sweden and a number of inconsistencies have been corrected. The new database with annotated changes is available on the above Web site. Countries are encouraged to consider the current database and to provide data on typical unit weight and edible portion for their countries, if available. In this regard, further information is being sought regarding the typical unit weight for the following commodities: bunch of celery and head of leaf lettuce.