CODEX ALIMENTARIUS COMMISSION E

Food and Agriculture Organization of the United Nations

World Health Organization

Viale delle Terme di Caracalla, 00153 Rome, Italy - Tel: (+39) 06 57051 - Fax: (+39) 06 5705 4593 - E-mail: codex@fao.org - www.codexalimentarius.net

Agenda Item 4 **CX/NFSDU 10/32/4**
June 2010

JOINT FAO/WHO FOOD STANDARDS PROGRAMME

CODEX COMMITTEE ON NUTRITION AND FOODS FOR SPECIAL DIETARY USES
32nd Session

Santiago, Chile
1 – 6 November 2010

PROPOSED DRAFT ADDITIONAL OR REVISED NUTRIENT REFERENCE VALUES FOR LABELLING PURPOSES IN THE CODEX GUIDELINES ON NUTRITION LABELLING

- *Comments at Step 3 of the Procedure* -

Comments from:

ARGENTINA
COSTA RICA
EGYPT
UNITED STATES OF AMERICA

ARGENTINA

Argentina is grateful for the opportunity to comment as follows:

References

Text in bold: Text commented on in the document

Text in italics: *Comment*

3.4 PRESENTATION OF THE CONTENT OF NUTRIENTS

3.4.4 Numeric information on vitamins and minerals must be expressed in metric units and/or as a percentage of the nutrient reference values for every 100 g or 100 ml of the product ready for consumption, or per package in the case of single-portion packages. Moreover, this information may be offered for every helping in compliance with the mode of quantification on the label, or by portion, provided the number of portions contained in the package is stated.

Likewise, the protein information may be expressed as percentages of the nutrient reference value.

Argentina agrees with the Document in general, but wishes to comment as follows:

We feel that it was by mistake that the protein reference value is not cited in the document, but ought to be stated because the last paragraph of section 3.4 states that **"…the information *on proteins can be expressed as percentages of the nutrient reference value."***

Quotation 3 With the aim of taking future scientific developments into consideration, the future recommendations of FAO/OMS **and of other experts**, as well as other pertinent information, the list of nutrients and the list of nutrient reference values will be subjected to continuous reviews.

*Argentina deems it convenient to eliminate or replace in the above paragraph the wording "**and of other experts"**, mindful of the fact that only data from internationally recognised scientific entities should be taken.*

Quotation 4 ~~**Proposed addition to section 3.2.7 (Calculation of nutrients) of the Codex Guidelines on Nutrition Labelling: "The following conversion factor must be used to declare β-carotene (pro-vitamin A)**~~**: RE = retinol equivalents: 1 µg of retinol = 1 µg RE; 1 µg of β-carotene = 0.167 µg RE: 1 µg of other carotenoids of pro-vitamin A =0.084 µg RE.**

In the case of vitamin A, conversion factors were taken (IOM-NRC 1989 and FAO 2004) of mcg of ER of 6 mg for the beta-carotenes, which has changed in the new NAS report. Even if the discussion persists, the document in which conversion values of 12 and 24 are used for beta-carotenes and other pro-vitamin A activity, respectively, must be taken into account. ***Dietary Reference Intakes. Standing Committee on the Scientific Evaluation of Dietary Reference Intakes, Foods and Nutrition Board and Institute of Medicine, National Academy of Sciences, Washington DC, 2001.***

COSTA RICA

Costa Rica is grateful for the opportunity to send the following comments on this document.

In cases of vitamins A and C, they are particularly worrying because the values proposed are around 30% less than those of the Directives. While reviewing the la Consultation of FAO/OMS experts for the vitamin and mineral requirements in human nutrition, we note that they used 1988 data for vitamin A and, consequently, we are not sure of the reason why the NRV was fixed at 550 µg RE/day for option 2 instead of the current value of 800 µg RE/day.

The same consultation of experts mentions that there is even a high prevalence of vitamin A deficiency in the region of the Americas, which would also support the need to establish a higher NRV for this nutrient.

Equally, for vitamin C, the consultation establishes a value of 45 mg/day instead of the current value of 60 mg/day, and we do not understand the change because literature reviews indicate that this value could be increased in the near future.

As a developing country, we believe that the new NRVs must be harmonised as far as possible with the aim of saving costs for local industries that have to use different labels to comply with the requirements of the target markets for their exports. For this reason, regarding the NRV for zinc and iron, we are inclined to select Option 1, which refers to the NRV with mineral bioavailability representing the bioavailability of the mineral better in the world dietary regimen, without including regulations permitting countries to calculate their own NRV to then be able to represent the probable bioavailability in the national dietary regimen better.

EGYPT

1. The estimated requirements for these elements (Copper, Fluoride, manganese, Chromium and Molybdenum) as for the Egyptian population according to age , sex structure the recommended intake for individual give lower values than suggested ones. The following are the obtained estimates:

- Copper 768 (µg)
- Fluoride 2.7 (mg)
- Manganese 1.85 (mg)
- Chromium 24 (µg)
- Molybdenum 38 (µg)

* Most of this values referred to FAO,WHO and Institute of Medicine the National Academies of Science in the United States.

2. From the above mentioned in Article (1) we recommends that the NRV values of these elements to be in a range status (Min. – Max.) this will give a chance for most countries according to their general population requirement.

UNITED STATES OF AMERICA

The United States thanks the Delegation of Korea for facilitating progress on this agenda item. We offer the following preliminary comments on the draft Codex provisions at Step 3 in Appendix IV of ALINORM 10/33/26. At the next Committee meeting, we anticipate offering additional comments on these provisions and on the draft general principles at Step 5 in Appendix III. Our preliminary comments address:

- Scope of nutrients for establishing vitamin and mineral NRVs and application of the draft general principles
- Introductory text to and presentation of the NRVs in the Guidelines on Nutrition Labelling (hereafter referred to as "the Guidelines")
- Footnotes to the vitamin and mineral NRV list

Scope of Nutrients for Vitamin and Mineral NRVs

The United States continues to support the establishment of vitamin and mineral NRVs based on the draft principles in Appendix IV, including the principle that "relevant and recent daily nutrient intake values provided by FAO/WHO should be taken into consideration as primary sources in establishing NRVs."

We note, however, that the 2004 WHO/FAO report on Vitamin and Mineral Requirements in Human Nutrition did not include Recommended Nutrient Intakes for all essential nutrients, and the general principle, which states that "Relevant and recent values that reflect independent review of the science, from recognized authoritative scientific bodies other than FAO/WHO could also be taken into consideration." Consequently, the chair of the electronic working group (eWG) last year included preliminary proposals for NRVs for seven additional minerals in the eWG report based on calculations according to the general principles and using the recommended intake values from the Institute of Medicine (IOM) of the National Academies of science in the United States.

The United States supports the Committee's further consideration of whether to establish NRVs for each of these seven nutrients, taking into consideration the following:

1) the interest among Codex member countries in having NRVs for these nutrients;

2) the strength and nature of the scientific evidence from recognized authoritative scientific bodies for recommended daily nutrient intake values for these nutrients; and

3) whether the Committee can reach agreement on an appropriate approach to establishing NRVs for these nutrients in the absence of INL_{98} values from FAO/WHO.

In addition, the Committee may consider if the text to the preamble for the general principles should explicitly state that countries may establish *additional* NRVs to those that will be provided in the Guidelines through this work.

With regard to the *strength and nature* of the evidence for recommended daily intake values for these nutrients, a general principle states that in cases where there is not an established INL_{98} for a nutrient, other reference values or ranges from recognized authoritative scientific bodies may be considered, with the derivation of these values reviewed on a case-by-case basis. In this regard, "Recommended Dietary Allowance" values (which are equivalent to INL_{98} values) were established by the IOM for phosphorus, copper and molybdenum. There was insufficient evidence to calculate an estimated average requirement (which is needed to establish an INL_{98}) for chloride, fluoride, manganese, and chromium. Thus, "Adequate Intake" values (AIs) were estimated for these nutrients in other ways (i.e., from estimated median and average intakes in the U.S. in the case of manganese and chromium, respectively[1]; from estimated intakes that reduce the occurrence of dental caries maximally in a population without unwanted side effects in the case of fluoride[2]; and based on a level equivalent on a molar basis to that of the sodium AI in the case of chloride, since almost all dietary chloride comes from sodium added during processing or consumption of foods[3].) The sodium AI for adults was set "to ensure that the overall diet provides an adequate intake of other important nutrients and to cover sodium sweat losses in unacclimatized individuals who are exposed to high temperatures or who become physically active…" .

The United States proposes that the Committee consider establishing an NRV for potassium. We believe it is more appropriate, however, to consider an NRV with the new work on NRVs for nutrients associated with risk of diet-related noncommunicable disease. For example, the data were inadequate for the IOM to determine an Estimated Average Requirement for potassium. Instead, AIs were established based on a level of dietary intake shown in clinical trials to reduce adverse effects of sodium chloride intake on blood pressure, reduce risk of kidney stones, and in observational studies to possibly decrease bone loss.[3]

Introductory Text and Presentation of NRVs in the Guidelines.

Introductory Text

The United States suggests the following edits to the introductory text to Section 3.4.4 as presented in Appendix IV:

3.4.4 Numerical information on **nutrients** ~~vitamins and minerals~~ should be expressed in metric units and/or as a percentage of the Nutrient Reference Value **(NRV)** per 100 g or per 100 ml on the ready to use product or per package if the package contains only a single portion. In addition, this information may be given per serving as quantified on the label or per portion provided that the number of portions contained in the package is stated.

~~In addition, information on protein may also be expressed as percentages of the Nutrient Reference Value.[3]~~

The following ~~Nutrient Reference Values for labelling purposes (~~NRVs~~)~~ are for the general population identified as individuals older than 36 months.

[1] IOM (Institute of Medicine) (2001). *Dietary Reference Intakes for Vitamin A, Vitamin K, Arsenic, Boron, Chromium, Copper, Iodine, Iron, Manganese, Molybdenum, Nickel, Silicon, Vanadium, and Zinc.* Washington DC, National Academy Press.

[2] IOM (Institute of Medicine) (1997). *Dietary Reference Intakes for Calcium, Phosphorus, Magnesium, Vitamin D, and Fluoride.* Washington DC, National Academy Press.

[3] IOM (Institute of Medicine) (2005). *Dietary Reference Intakes for Water, Potassium, Sodium, Chloride, and Sulfate.* Washington DC, National Academy Press.

U.S. Comments: Recommend:

- Refer to "nutrients" in lieu of "vitamins and minerals" to encompass protein and NRVs for nutrients associated with risk of diet-related non-communicable disease (NRVs-NCD).
- Introduce acronym for "Nutrient Reference Value" in first line rather than fourth line. Note: The reference to "for labelling purposes" in the fourth line no longer appears to be needed with anticipated new work by CCFL to include a definition of "Nutrient Reference Values" in these guidelines.
- Delete the third line. It does not appear necessary because of the the edit to refer to nutrients in the first line.

Presentation of NRVs and Subheadings

In addition, as the Committee establishes NRVs for vitamins and minerals and NRVs-NCD, it could begin discussing the presentation of this information in the Guidelines, including the addition of subheadings and footnotes as needed for clarification. Below is one possible presentation of the NRVs for the Committee's consideration, with proposed new text identified by bolded text.

3.4 PRESENTATION OF NUTRIENT CONTENT

3.4.4. Numerical information on….

……

(new subheading) **3.4.4.1 NRVs Based on Nutrient Requirements (Refer to Annex #_ for General Principles)**

Protein NRV

(List vitamin NRVs)

(List mineral NRVs)

Also consider footnote(s) to identify FAO/WHO data source and any additional data source(s) for these values.

(new subheading) **3.4.4.2 NRVs Based on Reduction of Risk of Diet-Related Noncommunicable Diseases (Refer to Annex # _ for General Principles)**

(*List NRVs-NCD)*

Footnotes for Vitamin and Mineral NRVs

The United States offers the following preliminary comments on two footnotes at this time. We anticipate having additional comments on the values and other footnotes at the next Committee session.

Footnote 3 in the introductory text to Section 3.4.4. indicates that "the list of nutrients and the list of nutrient reference values should be kept under review". It may not be necessary, however, to state this explicitly as the need for periodic review would appear implicit for all Codex provisions.

In addition, footnote 5 states that the NRVs for Vitamin D and iodine may not be applicable to certain countries. Given that this may be true for other nutrients as well and the preamble, which acknowledges that governments may establish their own nutrient reference values that take into account country or region specific factors, the Committee may wish to consider either removing this footnote or revising it to encompass additional nutrients.