



JOINT FAO/WHO FOOD STANDARDS PROGRAMME

CODEX COMMITTEE ON FOOD ADDITIVES

Forty-fifth Session

Beijing, China, 18-22 March 2013

MATTERS OF INTEREST ARISING FROM FAO AND WHO AND FROM THE 76TH MEETING OF THE JOINT FAO/WHO EXPERT COMMITTEE ON FOOD ADDITIVES (JECFA)

1. This document provides information on FAO and WHO activities in the area of provision of scientific advice to Codex and Member countries, as well as other activities, which are of interest for CCFA.

Matters for information from the 76th meeting of the Joint FAO/WHO Expert Committee on Food Additives (JECFA)

2. The results of the 76th meeting of JECFA on food additives are now available¹. The meeting report (WHO Technical Report Series No 974, 2012) and the toxicological monographs (WHO Food Additive Series No 67, 2012) are accessible through the WHO JECFA publications website: <http://www.who.int/foodsafety/chem/jecfa/publications/en/index.html>. The specifications monographs (FAO JECFA Monographs 13, 2012) is available at the FAO JECFA website at http://www.fao.org/fileadmin/user_upload/agns/pdf/JECFA_Monograph_13.pdf. All specifications monographs for food additives are available in the updated on-line edition of the database at the FAO JECFA website: <http://www.fao.org/ag/agn/jecfa-additives/search.html>. The specifications for flavouring agents will be uploaded in due course to the database available at <http://www.fao.org/ag/agn/jecfa-flav/search.html>.

Publications and Other Provision of Scientific Advice from FAO and WHO

3. The GEMS/Food cluster diets are based on FAO food supply data and correspond to average per capita consumption. The WHO commissioned an update of the clustering based on a more accurate statistical technique as well as on the latest available FAO data (from 2002 to 2007). The new analysis has resulted in 17 cluster diets which are available on the WHO website to be used when appropriate for dietary exposure assessment. <http://www.who.int/foodsafety/chem/gems/en/index1.html>

4. FAO and WHO have published jointly during the course of 2012 three key documents intended to strengthen prevention and response to food safety emergencies:

a) FAO/WHO framework for developing national food safety emergency response plans, 2010,

English: http://www.who.int/entity/foodsafety/publications/fs_management/ERb1_E_L_101012.pdf

French: <http://www.fao.org/docrep/014/i1686f/i1686f00.pdf>

Spanish: http://www.who.int/entity/foodsafety/publications/fs_management/Er1_S_101018_L.pdf

b) FAO/WHO guide for application of risk analysis principles and procedures during food safety emergencies, 2011, ISBN: 978 92 4 150247 4

English: http://whqlibdoc.who.int/publications/2011/9789241502474_eng.pdf

French: http://www.who.int/iris/bitstream/10665/78041/1/9789242502473_fre.pdf

Spanish, http://www.who.int/iris/bitstream/10665/78042/1/9789243502472_spa.pdf

c) FAO/WHO guide for the development and improving national food recall system, 2012, ISBN: 978 92 4 150479 9

English. http://www.who.int/iris/bitstream/10665/77746/1/9789241504799_eng.pdf

French, http://www.who.int/iris/bitstream/10665/78040/1/9789242504798_fre.pdf

Spanish, http://www.who.int/iris/bitstream/10665/78039/1/9789243504797_spa.pdf

¹ See the Report of the 76th Meeting of the Joint FAO/WHO Expert Committee on Food Additives can be found at: http://www.who.int/iris/bitstream/10665/77752/1/WHO_trs_eng.pdf

Actions required as a result of changes in acceptable daily intake (ADI) status and other toxicological recommendations from JECFA

4. At its 76th meeting, JECFA evaluated the safety of Magnesium dihydrogen diphosphate, Mineral oil (medium and low viscosity) classes II and III, and three enzymes: 3-Phytase from *Aspergillus niger* expressed in *Aspergillus niger*, Serine protease (chymotrypsin) from *Nocardiaopsis prasina* expressed in *Bacillus licheniformis*, Serine protease (trypsin) from *Fusarium oxysporum* expressed in *Fusarium venenatum*. Toxicological recommendations or other scientific advice for these food additives are provided in the attached Table 1. The CCFA should decide and agree on any action which might be required following the evaluations of these food additives.

Table 1. Food additives evaluated toxicologically at the 76th JECFA meeting

INS Number	Food additive	Acceptable daily intake (ADI) or other toxicological recommendations	Recommended action by CCFA
450 (ix)	Magnesium dihydrogen diphosphate	<p>The Committee evaluated magnesium dihydrogen diphosphate for use as an acidifier, stabilizer and raising agent. It is proposed for use as an alternative to sodium-based acidifiers and raising agents, primarily in self-raising flour, noodles (oriental style), batters and processed cereals.</p> <p>The Committee concluded that the proposed use levels and food categories result in an estimated dietary exposure to magnesium dihydrogen diphosphate that is of potential concern.</p> <p>The Committee emphasized that in evaluating individual phosphate-containing food additives, there is a need for assessment of total dietary exposure to phosphorus.</p> <p>The Committee recommended that total dietary exposure to magnesium from food additives and other sources in the diet should be assessed.</p> <p>[...] the Committee recommended that the toxicological basis of the MTDI for phosphate salts expressed as phosphorus be reviewed.</p>	<p>Intake is of potential concern</p> <p>Consider whether to-</p> <ul style="list-style-type: none"> - Critically review proposed use levels and food categories for this food additive - Ask JECFA to provide further guidance on total intake of magnesium and phosphorus from food additive use.
905a	Mineral oil (medium and low viscosity) classes II and III	<p>The Committee noted that the temporary group ADI for mineral oil (medium and low viscosity) classes II and III had been established in 1995 and extended on a number of occasions. As data supporting the establishment of a full ADI had not been made available, the previously established temporary group ADI was withdrawn.</p>	<p>Temporary ADI withdrawn.</p> <p>No action required if there are no pending GSFA entries</p>
	3-Phytase from <i>Aspergillus niger</i> expressed in <i>Aspergillus niger</i>	<p>The Committee evaluated a 3-phytase enzyme preparation (3-phytase: <i>myo</i>-inositol hexakisphosphate 3-phosphohydrolase; Enzyme Commission number 3.1.3.8), which is used as a food additive, in the processing of phytate-rich food, such as cereal grains and legumes, and as a dietary supplement, for co-consumption with phytate-rich foods.</p> <p>The Committee allocated an ADI “not specified” for 3-phytase enzyme preparation from <i>A. niger</i> expressed in <i>A. niger</i>, used in the applications specified and in accordance with good manufacturing practice.</p>	<p>ADI not specified.</p> <p>Consider whether to:</p> <ul style="list-style-type: none"> - Add to the inventory of processing aids
	Serine protease (chymotrypsin) from <i>Nocardiosis prasina</i> expressed in <i>Bacillus licheniformis</i>	<p>The Committee evaluated a serine protease enzyme preparation (chymotrypsin: Enzyme Commission number 3.4.21.1), which is used as a food additive to produce partially or extensively hydrolysed proteins of vegetable and animal origin. Such protein hydrolysates may be used for various applications as ingredients in food and/or beverages.</p> <p>The Committee allocated an ADI “not specified” for serine protease (chymotrypsin) enzyme preparation from <i>N. prasina</i> expressed in the production strain <i>B. licheniformis</i>, used in the applications specified and in accordance with good manufacturing practice.</p>	<p>ADI not specified.</p> <p>Consider whether to:</p> <ul style="list-style-type: none"> - Add to the inventory of processing aids

INS Number	Food additive	Acceptable daily intake (ADI) or other toxicological recommendations	Recommended action by CCFA
	Serine protease (trypsin) from <i>Fusarium oxysporum</i> expressed in <i>Fusarium venenatum</i>	<p>The Committee evaluated a serine protease enzyme preparation (trypsin: Enzyme Commission number 3.4.21.4), which is used as a food additive in the manufacture of partially or extensively hydrolysed proteins for applications in food and beverages, for protein fortification and for emulsification or flavour enhancement.</p> <p>The Committee allocated an ADI “not specified” for serine protease (trypsin) enzyme preparation from <i>F. oxysporum</i> expressed in the production strain <i>F. venenatum</i>, used in the applications specified and in accordance with good manufacturing practice.</p>	<p>ADI not specified.</p> <p>Consider whether to:</p> <ul style="list-style-type: none"> - Add to the inventory of processing aids

^a ADI “not specified” is used to refer to a food substance of very low toxicity that, on the basis of the available data (chemical, biochemical, toxicological and other) and the total dietary exposure to the substance arising from its use at the levels necessary to achieve the desired effects and from its acceptable background levels in food, does not, in the opinion of the Committee, represent a hazard to health. For that reason, and for the reasons stated in the individual evaluations, the establishment of an ADI expressed in numerical form is not deemed necessary. An additive meeting this criterion must be used within the bounds of good manufacturing practice, i.e. it should be technologically efficacious and should be used at the lowest level necessary to achieve this effect, it should not conceal food of inferior quality or adulterated food, and it should not create a nutritional imbalance.