



JOINT FAO/WHO FOOD STANDARDS PROGRAMME  
CODEX COMMITTEE ON FOOD ADDITIVES  
Forty-eighth Session

Xi'an, China, 14-18 March 2016

PROPOSED DRAFT PROVISION FOR QUILLAIA EXTRACTS (INS 999 (I), (II))  
IN FOOD CATEGORY 14.1.4

Comments at Step 3 (replies to CL 2015/9-FA Part B, point 7) of Brazil, Chile, Colombia and Mexico

**BRAZIL**

Brazil supports the use of food additives quillaia extract type 1 (INS 999(i)) and quillaia extract type 2 (INS 999(ii)) in food category 14.1.4 Water-based flavoured drinks, including "sport," "energy," or "electrolyte" drinks and particulated drinks at a maximum level of 50 mg/kg with the notes 132 "except for use in semi-frozen beverages at 130 mg/kg on a dried basis" and 293 "on the saponin basis".

Therefore, the actual note 168 "quillaia extract type 1 (INS 999(i)) only" should be deleted.

**CHILE**

The Delegation of Chile requests that the 48th Codex Committee on Food Additives (CCFA) complete its work on revision of the General Standard for Food Additives (GSFA) provisions for Quillaia extract type 2 which was accepted for consideration at Step 3 at the 47th session. Specifically we request that the CCFA revise the GSFA provision for Quillaia extracts in food category 14.1.4 by deleting Note 168 so as to permit the use of Quillaia extract type 2 in this food category, and that this revision be advanced at Step 5/8 for consideration at the 39th Codex Alimentarius Commission.

Note 168 currently limits approval for quillaia extracts in food category 14.1.4 to type 1 extracts only. This note was adopted in 2007 because the committee incorrectly believed that only Quillaia extract type 1 was commercially available and that the JECFA ADI was based only on type 1 extracts rather than being a group ADI covering both types of extract based on saponin content (see GSFA note 293). Since that time process improvements in production of extracts have resulted in a purer Quillaia extract type 2 which is better suited as an emulsifier in the food category than type 1 extracts.

The proposed revision is supported by information covering all requirements in the Codex Procedural Manual for revision of food additive provisions in the GSFA (pp. 55 – 56):

- Specifications for Quillaia extract type 2 were prepared by the 61st JECFA and published in FNP 52 Add 11 (2003). Revised specifications were prepared by the 79th JECFA at the request of CCFA and published in FAO JECFA Monographs 16 (2014).
- Safety evaluations of quillaia extracts were conducted by the 26th, 29th, 57th, 61st and 65th meetings of JECFA. At the 65th meeting (2006, WHO Technical Report Series 934) the Committee assessed the need for additional toxicological studies on Quillaia extract type 2 and concluded that no additional studies were necessary and included type 2 extracts in a group ADI of 0-1 mg/kg bw for both Quillaia extract type 1 and Quillaia extract type 2 expressed as quillaia saponins.
- Quillaia extract type 2 is proposed only for use in food category 14.1.4 "Water based flavoured drinks, including "sport", "energy" or electrolyte" drinks and particulated drinks," similar to type 1 extracts.
- Quillaia extract type 2 meets each of the three required criteria to demonstrate technological justification under Section 3.2 of the Preamble of the GSFA: they provide an advantage by reducing the content of residual impurities such as carbohydrates, polyphenols and tannins when compared to type 1 extracts; they do not present an appreciable health risk based on the JECFA safety assessment; and they serve the technological functions of producing stable emulsions and foams in commercial beverages.

- The maximum use level of Quillaia extract type 2 would be identical to type 1 extracts at 50mg/kg which has been considered justified by CCFA based on intake assessments conducted by JECFA at its 57th and 65th meetings and the group ADI established at the 65th meeting.
- Consumers will not be misled by the use of this additive. Section 3.2(c) of the General Standard for Food Additives notes an appropriate use of additives in food is "...to improve its organoleptic properties, provided that this does not change the nature, substance or quality of the food so as to deceive the consumer." The use of high-purity Quillaia extract type 2 improves the visual appearance of beverage emulsions by greatly reducing non-saponin solids while maintaining the same saponin content as the type I extracts currently permitted in the GSFA. Quillaia extract type 2 can also contribute to stable foam formation in beverages by stabilizing the water/air interface of bubbles. No other properties which consumers expect in beverages within this food category are affected. Further, as labelled in prepackaged foods, consumers will not be misled since emulsifiers and foaming agents are common and expected ingredients in this food category.

Sustainable husbandry and natural processing of the quillaia tree and its products are an important part of Chilean agriculture and food production. An apparent misunderstanding concerning the commercial availability of Quillaia extract type 2 and the 2006 JECFA safety evaluations and resulting ADI led the CCFA to introduce note 168 in the GSFA in 2007. Because Quillaia extract type 2 is safe and suitable for use in beverages covered under Food Category 14.1.4, we request that CCFA complete its work on INS 999 and amend the GSFA provision for Quillaia extracts in Food Category 14.1.4 by deleting note 168.

#### COLOMBIA

The difference between type I (999(i)) and type II (999(ii)) lies in the way of obtaining the additive (type II is derived from type I) with the consistent difference in the content of saponins; while type I contains between 20% and 26%, type II has between 65% and 90%. This taking into account the criteria for purity and identity published by Codex

Thus, the Chilean proposal must be assessed taking into consideration the foregoing because saponins toxicity is recognized, especially the fraction 18 QS.

This being the case, provided that the content of saponins in type II extracts be guaranteed to be as safe as in type I, which was evaluated by the JECFA, Colombia supports Chile's request to remove Note 168.

For this purpose, Colombia asks that the discussion focuses in ensuring that saponins content of between 65% and 90% allowed in type II extracts are as safe as that allowed for type I, set between 20% and 26%.

#### MEXICO

Mexico wishes to support the position of Chile, on the elimination of Note 168 "*Quillaia extract, Type I (INS 999(i)) only*" in the category of foods **14.1.4** "Water-based flavoured drinks, including "sport," "energy," or "electrolyte" drinks and particulated drinks", since there is no risk issue, and therefore the use of that note is not justified.

This due to the fact that the allowed level for each type of extracts takes into account the contents of saponins and this is established in Note 293 "*On the saponin basis*" in food category **14.1.4**.