



JOINT FAO/WHO FOOD STANDARDS PROGRAMME

CODEX COMMITTEE ON FOOD ADDITIVES

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PROPOSED DRAFT FOOD ADDITIVE PROVISIONS FOR ASPARTAME-ACESULFAME SALT (INS 962)

(Replies to CL 2012/5-FA, Part B, point 7)

BACKGROUND

1. The 44th Session of the Codex Committee on Food Additives (CCFA) agreed to circulate the two provisions for the use of aspartame-acesulfame salt (INS 962) in food categories 14.1.3.1 (Fruit nectar) and 14.1.3.3 (Concentrates for fruit nectar) for comment at Step 3 for consideration at its next session.¹ The Committee recalled that these provisions resulted from a specific request for new uses of high intensity sweeteners.² The United States of America (USA) was requested to compile, in a structured form, the comments submitted on the use of aspartame-acesulfame salt in food categories 14.1.3.1 and 14.1.3.3.³ The Committee also agreed to establish a physical Working Group, which would meet immediately prior to the 45th Session and be chaired by the USA, working in English only, to consider and prepare recommendations for the Plenary based on the information compiled by the USA.⁴

2. CL 2012/5-FA, Part B, Point 7 requested specific comment on these two provisions. Comments were received from Colombia, Costa Rica, European Union, Calorie Control Council (CCC), and International Sweeteners Association (ISA).

SUMMARY OF COMMENTS AND RECOMMENDATION

Food Category No.	Food or Food Category	Max Level (mg/kg)	Notes	Recommendation	Comment Summary
14.1.3.1	Fruit nectar	350	Note 113	Adopt at Step 8	<p>Colombia: ML should be revised due to existence of a vulnerable population and potential high exposure.</p> <p>Costa Rica: No comments.</p>
14.1.3.3	Concentrates for fruit nectar	350	Notes 113 & 127	Adopt at Step 8	<p>EU: Supports <u>only</u> in energy-reduced or with no added sugar products. This should also be applied to the other sweeteners already listed in food categories 14.1.3.1 and 14.1.3.3.</p> <p>CCC: Supports. Level needed to achieve appropriate functional effect, and CCFA has agreed that the use of intense sweeteners is justified in these food categories.</p> <p>ISA: Supports. Other sweeteners are listed in GSFA for use in these food categories, and their technological need has been established. Use of aspartame-acesulfame salt provides flexibility to food manufacturers.</p>

¹ REP 12/FA, para. 132 and Appendix IX, Part I.

² REP 12/FA, para. 73.

³ REP 12/FA, para. 134.

⁴ REP 12/FA, para. 135.

Notes:

Note 113: Use level reported as acesulfame potassium equivalents (the reported maximum level can be converted to an aspartame-acesulfame salt basis by dividing by 0.44). Combined use of aspartame-acesulfame salt with individual acesulfame potassium or aspartame should not exceed the individual maximum levels for acesulfame potassium or aspartame (the reported maximum level can be converted to aspartame equivalents by dividing by 0.68).

Note 127: As served to the consumer.

TECHNOLOGICAL JUSTIFICATION IN SUPPORT OF COMMENTS**Colombia**

According to the information in the JECFA monograph for aspartame-acesulfame (INS 962), an ADI of 40 mg/kg bw for aspartame and of 15 mg/kg bw for acesulfame potassium was established, and the salt is manufactured in an approximately 2:1 weight ratio (i.e., 66.6% aspartame and 33.3% acesulfame K), so that the total intake should consider the two components.⁵

The following maximum use levels have been established by Codex Alimentarius in the GSFA database for the additive (INS 962):

Number	Food Category	Maximum Level (mg/kg)
01.1.2	Dairy-based drinks, flavoured and/or fermented (e.g., chocolate milk, cocoa, eggnog, drinking yogurt, whey-based drinks)	350
01.7	Dairy-based desserts (e.g., pudding, fruit or flavoured yoghurt)	350
02.4	Fat-based desserts excluding dairy-based dessert products of food category 01.7	350
04.1.2.4	Canned or bottled (pasteurized) fruit	350
04.1.2.5	Jams, jellies, marmalades	1.000
04.1.2.8	Fruit preparations, including pulp, purees, fruit toppings and coconut milk	350
04.1.2.9	Fruit-based desserts, including fruit-flavoured water-based desserts	350
04.2.2.3	Vegetables, (including mushrooms and fungi, roots and tubers, pulses and legumes, and aloe vera), and seaweeds in vinegar, oil, brine, or soybean sauce	200
04.2.2.6	Vegetable (including mushrooms and fungi, roots and tubers, pulses and legumes, and aloe vera), seaweed, and nut and seed pulps and preparations (e.g., vegetable desserts and sauces, candied vegetables) other than food category 04.2.2.5	350
05.1.5	Imitation chocolate, chocolate substitute products	500
07.2	Fine bakery wares (sweet, salty, savoury) and mixes	1.000
09.3	Semi-preserved fish and fish products, including mollusks, crustaceans, and echinoderms	200
09.4	Fully preserved, including canned or fermented fish and fish products, including mollusks, crustaceans, and echinoderms	200
13.4	Dietetic formula for slimming purposes and weight reduction	450
13.5	Dietetic foods (e.g., supplementary foods for dietary use) excluding products of food categories 13.1-1.4 and 13.6	450
14.2.7	Aromatized alcoholic beverages (e.g., beer, wine and spirituous cooler-type beverages, low-alcoholic refreshers)	350

In Colombia, according to the 2005 nutritional situation survey (ENSIN), the dietary records for the general population include the following foods that are mentioned in the GSFA database:

⁵ <http://www.fao.org/ag/agn/jecfa-additives/specs/Monograph1/Additive-047.pdf>.

Food	% Population Consuming	Average Consumption (g/p/d)	Consuming Population (Individuals)
Alcoholic beverages	6.8	1583.4	2,916,424
Fish	9.9	98	4,245,971
Chocolate	25.6	13.6	10,979,480

In Colombia, there is substantial consumption of **alcoholic beverages**, of which about 90% is beer consumption. The remaining percentage corresponds to alcoholic beverages, such as brandy and rum, which together represent approximately 5% of the national consumption.⁶

Food	ML (mg/kg food)	Maximum intake of the substance (mg/p/d)	mg aspartame 66%	mg acesulfame 33%	%s over the ADI aspartame	% over the ADI acesulfame
Alcoholic beverages	350	55.42	0.56	0.28	1%	2%
Fish	200	19.6	0.20	0.10	0%	1%
Chocolate & derivatives	500	6.8	0.07	0.03	0%	0%
		Exposure/kg bw/d	0.83	0.42	2%	3%

Despite the fact that there is not substantial consumption of the aspartame-acesulfame salt, there is a general perception that the national consumption could be underestimated, since its use in other food matrices may not be known.

This is due to the fact that Colombia has a population prone to **Type II diabetes mellitus**, which is estimated to be 7% of the population older than 30 years, of whom it is believed that approximately 63% are not diagnosed,⁷ for whom the consumption of artificial sweeteners could be high, and whose condition results in a high risk population that is not reflected in the consumption data in the Colombian national nutritional situation survey (ENSIN).

Due to the above, Colombia suggests that, on account of the existence of a vulnerable population and high consumption of food containing the sweetener, the proposed maximum level of 350 mg/kg for fruit nectars should be revised, since this could contribute more to exposure than is presented in the available information.

Costa Rica

Costa Rica appreciates the opportunity to support the document, as proposed, and have no additional comments.

European Union

The EU is convinced that the use of sweeteners is justified only when such use has an advantage. Therefore, the EU would support the provisions for Aspartame-acesulfame salt (INS 962) in the food categories 14.1.3.1 and 14.1.3.3 only in energy-reduced or with no added sugar products.

The EU recommends that such an approach is followed also for the other sweeteners already listed in the food categories 14.1.3.1 and 14.1.3.3.

Calorie Control Council

The CCC supports the use of the aspartame-acesulfame salt in Food Categories 14.1.3.1 Fruit Nectar and 14.1.3.3 Concentrates for Fruit Nectar at 350 mg/kg as served. This level is needed to achieve the

⁶ "Una Estimación de la Adulteración y la Falsificación de Bebidas Alcohólicas en Colombia Informe Final" FEDESARROLLO Junio de 2012

⁷ Romero Massa Elizabeth, Acosta Ospino Sindy, Carmona Castilla Ivonne, Jaimes Sarmiento Alexandra, Masco Mier María Mercedes, Páez Góngora Ángela, Vega Jiménez Chemary Calidad de vida de personas con diabetes mellitus tipo 2 residentes en Cartagena Colombia. *cienc.biomed.2010; 1(2):190 - 198*

appropriate functional effect. The Codex Committee of Food Additives (CCFA) has agreed that these are food categories in which intense sweeteners may be used and has already adopted provisions for other intense sweeteners, including aspartame and acesulfame K, in these food categories.

International Sweeteners Association

The ISA would like to support the above provisions for aspartame-acesulfame salt, for adoption at step 8.

Both aspartame (INS 951) and acesulfame K (INS 950) are already approved in these categories of the GSFA and the technological need for use in the categories has already been established. The technological need for the use of the individual sweeteners in these categories also applies to the use of aspartame-acesulfame salt. The adoption of aspartame-acesulfame salt will offer food and beverage manufacturers more flexibility in process and handling while applying these same constituent sweeteners

Aspartame-acesulfame salt provides a novel delivery vehicle for the sweeteners aspartame and acesulfame. As it is a single molecule comprising the constituent sweeteners, it provides unique benefits to food and beverage manufacturers.