

# CODEx ALIMENTARIUS COMMISSION



Food and Agriculture  
Organization of the  
United Nations



World Health  
Organization

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Agenda Item 2

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## JOINT FAO/WHO FOOD STANDARDS PROGRAMME

### CODEx COMMITTEE ON FOOD ADDITIVES

#### Fifty-Second Session

Virtual, 1-10 September 2021

#### Matters Referred by the Codex Alimentarius Commission and Other Subsidiary Bodies

#### Comments of the Brazil, Uganda, Tanzania, EAC, ICBA and IFU

##### Brazil

#### Draft provision for trisodium citrate (INS 331(iii)) in FC 01.1.1 "Fluid milk (plain)"

The use of trisodium citrate (INS 331(iii)) in FC 01.1.1 "Fluid milk (plain)" had been extensively discussed at several CCFA sessions. CCFA had decided to associate the provision with notes 438, 439 and B25, to facilitate its application. The conclusions about the discussions at CCFA51 are summarized on paragraphs 75-79 of the REP19/FA.

CAC42 discussed further this provision as summarized on paragraphs 21 – 29 REP19/CAC and agreed to return the draft food additive provision to CCFA for further consideration. Brazil would like to reply to the points expressed by delegations not supporting the provision listed on paragraph 22.

- i. **The use of trisodium citrate (INS 331(iii)) was not technologically justified and could result in changing the nature of the product and cause inconsistencies with the General Standard for the Use of Dairy Terms (CXS 206-1999);**

The use of trisodium citrate in bovine milk is technologically justified, safe to human health and is not used to mask bad handling practices. Therefore, its use in bovine milk complies with the Codex Alimentarius principles for food additives.

According to Fox (1991), the additions of citrate and phosphate to milk promote an increase in the thermal stability of the milk, by the sequestering effect on ionic calcium and, especially in the case of citrate, by the conversion to soluble citrate. Phosphates and citrates are recognized in increasing the thermal stability of milk (Fox, 1991).

Brazilian bovine milk has a lower content of natural citrate, most probably by the influence of the extensive and semi-extensive management system. Feeding of Brazilian cattle based on low nutrient forage, without supplementation, results in production of a milk with poor saline imbalance, with lower sodium citrate content. Thus, the addition of sodium citrate as a stabilizing additive promotes the reduction of the calcium content available for the formation of salt bridges between the protein complexes, thus preventing milk sedimentation, and favoring the stability of this product. Despite the favorable effect of citrate addition, excess of citrate may unbalance milk.

The most commonly found minerals in milk are K, Na, Ca, Mg, Cl and P and the most common organic acid is citrate. It means that citrate naturally occurs in milk.

Besides, the International Dairy Federation (IDF) supports the use of INS 331(iii) in milk from bovine species UHT treated, in order to prevent coagulation and sedimentation. The heat treatment can destabilize milk proteins by altering its original form and electrical charge, so protein sedimentation and gelation may occur throughout its shelf life. The use of sodium citrate in bovine UHT milk is carried out in order to maintain the stability of the casein micelles by binding sodium citrate with free calcium present in the milk.

- ii. **Scientific studies had demonstrated that there was no need to use additives in UHT milk and that currently nitrogen (INS 941) and the food additive group PHOSPHATES were the only additives authorised for use in FC 01.1.1;**

Scientific studies show that the concentration of citrate in raw milk produced in Brazil varies according to regions and seasons of the year. Silva et al. (2004), for example, when evaluating the citrate concentration in three different Brazilian states with representative milk production and in the seasons (dry and rainy) observed different citrates concentrations between Brazilian states. The milk evaluated, with the exception of

the dry season in one Brazilian state, has lower citrate content when compared to the results of Walstra & Jenness (1984), who mention the value of 175 mg/100 mL. An analysis of variance of the data revealed differences between citrate contents in raw milk between states ( $p < 0.003$ ) and between seasons ( $p < 0.022$ ). It is concluded that the natural citrate contents vary between regions of Brazil and seasons of the year, which affects the final citrate content in UHT milk.

Thus, considering the natural variation in citrate levels in milk produced in different regions of Brazil and seasons of the year, it is important to add citrate to maintain milk stability. It is noteworthy that the quality of milk in Brazil has significantly improved and that the Good Agricultural Practices and the Qualification Plan for Milk Suppliers provided for in the Self-Control Program of the dairy industries and described in the Brazilian legislation have driven a continuous improvement in milk quality. Although citrate is approved by Mercosur (Southern Common Market) since 1997, Brazilian milk has been improving year after year showing that citrate use is not used to mask deficiencies in Good Agricultural Practices.

**iii. Permitting the use of this food additive under conditions of GMP could create public health concerns in infants fed with UHT milk; and**

Firstly, the product that is intended to meet the normal nutritional requirements of infants as a substitute for human milk is infant formula. Trissodium citrate is listed on CAC/GL 10 - 1979 as nutrient compound that can be added to infant formula for nutritional purposes. Besides, Brazil highlights that trisodium citrate is already approved for infant formulae under GMP conditions, according to GSFA online and the Codex Standard CXS 72-1981. Even though infants are fed with UHT milk, a health concern is not foreseen for this public.

**iv. This issue was related to the application of section 3.2 of the preamble to the GSFA and therefore the use of food additives in this FC would mislead consumers as they did not expect milk to contain additives.**

Extensive information about UHT treated milk from bovine species demonstrates that the use of citrates complies with all criteria in section 3.2 of the preamble to the GSFA: it is technologically justified, has an advantage, is safe, does not mask bad handling practices and that stabilizers are required in all bovine milks therefore the use does not mislead the consumer. It is important to remember that milk has natural citrate levels and also the permission to use the citrate as additive that has been approved by Mercosur since 1997, without evidence of misleading consumers. Its use follows all labeling recommendations established by Brazilian regulatory bodies with correct information to the consumers. Therefore, we strongly believe that the use of citrate as additive does not mislead consumers.

GSFA allows the use of food additives in this FC that has a numeric ADI. Citrate occurs naturally in milk and has an ADI not specified. According to note B25, the use of citrate in UHT milk from bovine species is only to compensate for citrate or calcium content to prevent sedimentation as a result of climatic conditions.

**References**

FOX, P. F. *Food Chemistry*. Part III. Cork: Cork University College, 1991. 201 p.

MERCOSUR (Southern Common Market). Regulation number 135/1996 inclusion of sodium citrate on the MERCOSUR Regulation about UHT milk identity and quality.

SILVA, P. H. F. da; ABREU, L. R. de; BRITO, J. R. F.; FURTADO, M. A. M. Variações regionais e sazonais na composição salina do leite. *Revista do Instituto de Laticínios Cândido Tostes*, v. 59, p.24-31, 2004.

WALSTRA, P.; JENNESS, R. *Dairy Chemistry and Physics*. Wiley Intersciences, New York, 1984.)

**Uganda**

**Agenda Item 2: Matters Referred by the Codex Alimentarius Commission and other subsidiary bodies): Alignment of food additive provisions in CCNFSDU standards with the GSFA (Ref: CX/FA 21/52/2)**

Uganda supports food additives in the proposed draft guidelines for ready to use therapeutic foods (rutf) (at step 5) CCNFSDU - Table A: Food Additives in RUTF Formulation (CX/FA 20/52/5). Uganda therefore, proposes the proposed draft guideline to progress to the next step.

**Justification;**

The population that consumes the food is very vulnerable thus need for strict regulation.

**Agenda Item 2: Matters Referred by the Codex Alimentarius Commission and other subsidiary bodies): Draft provision for trisodium citrate (INS 331(iii)) in FC 01.1.1 "Fluid milk (plain)" (Ref: CX/FA 21/52/2)**

Uganda does not support the use of trisodium citrate as a food additive in prevention of sedimentation, coagulation and gelation which is a common phenomenon that occurs during prolonged storage of UHT fluid milk.

**Justification;**

- 1) The issue of sediment formation as a result of aggregation of K casein type of protein caused by structural changes due to high processing temperature is common in reconstituted UHT fluid milk and yet most of our processors are packing fresh UHT milk hence it is not of big concern to our industry as of now.
- 2) Sedimentation during storage can be reversed upon mixing by resuspending protein layer.
- 3) Most of the problems of sedimentation and gelation occur due to use of poor quality raw milk whose PH is above 6.65 and processing raw milk with low Heat coagulation temperature. Majority of our processors if not all currently process UHT milk from resazurin 6 which is the highest grade for it to withstand heat stability.
- 4) Sedimentation occurs during prolonged storage of UHT plain milk beyond six months and violation of storage conditions especially storage of UHT milk above 30 degrees for a long time. Most of Ugandan fluid milk has shelf life ranging between 3months to 6months and with adherence to storage conditions and appropriate UHT processing conditions and recommended packaging material, sedimentation is not a likely problem neither has it been identified during routine testing to necessitate use of trisodium citrate in stabilization of fluid milk during storage.

Whereas its use is technologically acceptable, its likely misuse by industry players if allowed can cause more food safety issues as opposed to sensory alteration of milk that has undergone sedimentation.

Therefore, we should focus more on training and equipping industry players on how to prevent such problems during storage rather than give them a free way to use of chemical preservation whose usage we might not have capacity to control and monitor in the event that we allow its usage.

We therefore do not support use of trisodium citrate because coagulation should be controlled by use of high quality raw milk and using appropriate heat treatment methods, followed by recommended packaging and storage conditions. Sedimentation is not a food safety issue of concern because it affects more of sensory properties which can be reversed by physical mixing.

## Tanzania

**Agenda item 2**

**CX/FA 21/52/2 1**

**MATTERS ARISING FROM THE 42 ND SESSION OF THE CODEX ALIMENTARIUS COMMISSION (CAC42) AND THE 43RD SESSION OF THE CODEX ALIMENTARIUS COMMISSION (CAC43)**

i) Draft provision for trisodium citrate (INS 331(iii)) in FC 01.1.1 "Fluid milk (plain)

**COMMENT**

The United Republic of Tanzania does not support the adoption of trisodium citrate (INS 331(iii)) for use UHT under FC 01.1.1

**JUSTIFICATION**

The problem of sedimentation in UHT milk has been observed in reconstituted milk usually covered under FC 01.1.2. In few cases where sedimentation was observed in products under FC 01.1.1 was mainly as a result of poor-quality milk especially where the pH is above 6.6. Sedimentation have also been noticed where the UHT milk is poorly stored. We also take note the proposed note B25 has a lot of ambiguity in regard to the specific conditions permitting the use of the additive. As a result, we find the proposed use potentially able to be misused hence misleading consumers on the true nature of the products.

ii) Technological justification for the use of other food additives in various food products (Para 47: CCPFV29 agreed to forward CCFA CCPFV29's responses regarding the technical justifications for the use of the following (see REP20/PFV Appendix VII, Part A for the specific responses)

**COMMENT**

The United Republic of Tanzania does not support the proposal to use colour in French fries as a way of preventing acrylamide contamination.

**JUSTIFICATION**

The United Republic of Tanzania supports any effort to reduce contaminants in foods. However, use of food colour does not by itself technologically reduce acrylamide contamination. Use of colour in this case would

be to give false impression of the true nature of the french-fries thus potentially conflicting with a preamble of GSFA.

**Agenda item 2:**

**CX/FA 21/52/2 Add.1**

**MATTERS REFERRED BY THE 14TH CODEX COMMITTEE ON CONTAMINANTS IN FOODS**

Request JECFA to: (i) review the lead specifications for diatomaceous earth and charcoal (activated carbon) and (ii) evaluate available data to support development of a lead specification for bentonite.

**COMMENT**

The United Republic of Tanzania supports the request by CCCF to have the additives prioritised for re-evaluation by JECFA.

**JUSTIFICATION**

Lead contamination is a public health priority concern especially in products and additives that are widely used. In this case we note that the proposed additives are widely used in food processing and it will be important to have any safety concern resolved at the earliest possible opportunity.

**EAC (East African Community)**

**Agenda item 2**

**CX/FA 21/52/2 1**

**MATTERS ARISING FROM THE 42 ND SESSION OF THE CODEX ALIMENTARIUS COMMISSION (CAC42) AND THE 43RD SESSION OF THE CODEX ALIMENTARIUS COMMISSION (CAC43)**

i) Draft provision for trisodium citrate (INS 331(iii)) in FC 01.1.1 "Fluid milk (plain)

**COMMENT**

The EAC does not support the adoption of trisodium citrate (INS 331(iii)) for use UHT under FC 01.1.1

**JUSTIFICATION**

The problem of sedimentation in UHT milk has been observed in reconstituted milk usually covered under FC 01.1.2. In few cases where sedimentation was observed in products under FC 01.1.1 was mainly as a result of poor-quality milk especially where the pH is above 6.6. Sedimentation have also been noticed where the UHT milk is poorly stored. We also take note the proposed note B25 has a lot of ambiguity in regard to the specific conditions permitting the use of the additive. As a result, we find the proposed use potentially able to be misused hence misleading consumers on the true nature of the products.

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**COMMENT**

The EAC does not support the proposal to use colour in French fries as a way of preventing acrylamide contamination.

**JUSTIFICATION**

The EAC supports any effort to reduce contaminants in foods. However, use of food colour does not by itself technologically reduce acrylamide contamination. Use of colour in this case would be to give false impression of the true nature of the french-fries thus potentially conflicting with a preamble of GSFA.

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Request JECFA to: (i) review the lead specifications for diatomaceous earth and charcoal (activated carbon) and (ii) evaluate available data to support development of a lead specification for bentonite.

**COMMENT**

The EAC supports the request by CCCF to have the additives prioritised for re-evaluation by JECFA.

**JUSTIFICATION**

Lead contamination is a public health priority concern especially in products and additives that are widely used. In this case we note that the proposed additives are widely used in food processing and it will be important to have any safety concern resolved at the earliest possible opportunity.

### ICBA (International Council of Beverages Associations)

The International Council of Beverages Associations (ICBA) represents the interests of the worldwide non-alcoholic beverage industry. ICBA members include national and regional beverage associations and international beverage companies that operate in more than 200 countries and territories and produce, distribute and sell a variety of non-alcoholic sparkling (carbonated) and still (non-carbonated) beverages including soft drinks, sports drinks, energy drinks, bottled waters, flavored and/or enhanced waters, ready-to-drink teas and coffees, 100% fruit or vegetable juices, nectars and juice drinks, and dairy-based beverages.

ICBA thanks the Codex Committee on Processed Fruits and Vegetables (CCPFV) for their extensive work throughout the electronic working group (eWG), including four comment solicitations on matters referred from the Codex Committee on Food Additives (CCFA) 49, CCFA50 and CCFA51. The CCPFV attempted to find a way forward on the very important issue of use of “non-juice food additive ingredients” in 100% juices. Previously submitted rationale, justification and photos provided during the electronic working group deliberations are attached as Appendix A. ICBA recommends that CCFA establish an electronic working group with a Terms of Reference to: (i) identify the appropriate path forward on the specific issue of “non-juice food additive ingredients” in 100% juices, nectars and concentrates and (ii) seek endorsement of stabilizer and acidity regulator additive provisions in 100% juices.

ICBA is pleased to submit the below general and specific comments in response to CX/FA 21/52/2 and CCPFV report recommendations included in [REP20/PFV Appendix VII Part A](#) (on pectin, proper classification of juices with “non-juice food additive ingredients” within the GSFA – including fruit/vegetable juice blends – and phosphates and tartrates in vegetable juice concentrates).

#### The real issue needs to be identified first

As has become clear through the various iterations of the discussion draft during the CCPFV eWG proceedings, ICBA notes confusion exists between interpretation of Codex treatment of 100% fruit juices (‘juices’ per Codex) and/or nectars which may have added “non-juice food additive ingredients (e.g., benzoates, stabilizers such as xanthan gum)” and their corresponding counterparts without any added “non-juice food additive ingredient (e.g., citric acid, pectin)”. Some view these as belonging to different Codex General Standard for Food Additives (GSFA) categories. Yet, as an example, 100% fruit juices that contain benzoates – a “non-juice food additive ingredient” – is captured by the existing fruit juice standard (CXSTAN 2005) and is tied to GSFA food categories 14.1.2.1 and 14.1.2.3.

#### The questions that need to be asked are two-fold

1. Broadly speaking, what distinguishes a standardized food product from a non-standardized food product? In other words, could compositional standards be modernized to reflect the latest innovations so that similarly positioned (and marketed) products are captured by the same standard, or are they so limited such that they are never subject to change?
2. Where should ‘100% fruit juices with non-juice food additive ingredients’ fit within the existing GSFA food category system ([CODEX STAN 192-1995](#)) or are new subcategories needed?

Upon further examination, the Codex framework is unclear on these points as existing texts do not seem to address the category of 100% fruit juices (‘juices’ per Codex) and/or nectars with added ‘non-juice food additive ingredients’ explicitly.

Nevertheless, marketed 100% fruit juices (‘juices’ per Codex) with ‘non-juice food additive ingredients’ do exist (see Appendix A) and:

- Are labeled with the ‘with’ qualifier on the principal display panel as part of the product name when 100% fruit juice (‘juices’ per Codex) is declared AND
- Do not have any diminution of either (i) fruit juice soluble solids OR (ii) volume (for the expressed fruit juice).

The product label clearly identifies what the product is and therefore the consumer would not be misled.

#### Identifying the right goal

ICBA believes that the correct goal should continue to be:

- Clarify appropriate categorization of 100% fruit juices (‘juices’ per Codex) and/or nectars with added ‘non-juice food additive ingredients’ within the Codex General Standard for Food Additives (GSFA) (i.e., 14.1.2, 14.1.3, 14.1.4.2), in the context of relevant Codex Commodity Standards ([CODEX STAN 247-2005](#)).

Based on comments submitted into the eWG on the issue of 100% fruit juices with 'non-juice food additive ingredients', there is clear acknowledgement – and importantly **consensus** – that 100% juices with 'non-juice food additive ingredients' – including 100% *fruit* juices with 'non-juice food additive ingredients' – exist in the international marketplace. The ongoing dispute revolves only around placement of these products within the GSFA food category system.

## **ICBA Recommendations**

### **1. ICBA Recommendations**

**Pectin:** ICBA supports CCPFV report recommendation to add pectin (INS 440) at GMP to GSFA Tables 1 and 2 for 14.1.2.2. (vegetable juice) and 14.1.2.4. (concentrates for vegetable juice) with corresponding notes 35 (For use in cloudy juices only) and 127 (On the served to the consumer basis).

**CCFA clarification on proper classification:** ICBA supports CCPFV report recommendation that CCFA make clear the proper classification of juice and nectar products with “non-juice food additive ingredients (e.g., stabilizers)” within the GSFA, in view of:

- Significant market presence of these types of products;
- Key to conflict resolution is proper classification of these products within the GSFA;
- The addition of “non-juice food additive ingredients” would not result in the diminution of juice soluble solids or in the case of expressed juice, a change in the volume.

For CCFA's consideration, one viable option to resolve conflicting views is to create new subcategories within GSFA food categories 14.1.2. and 14.1.3., as further described in [Appendix 1 of CX/PFV 20/29/8 in the ICBA Table](#). Any change to the GSFA sub-categories should be accompanied by amendments to provision 4.1.2. in the Codex General Standard for the Labeling of Prepackaged Foods (CXS 1-1985) which would include the following as an additional bullet: “[I]n the case of 100% juices, the ‘with’ qualifier when “non-juice food additive ingredients” are added to the product...”

**CCFA clarification on classification of blends of fruit and vegetable juices and nectars within GSFA:** ICBA supports CCPFV report recommendation for CCFA to make clear classification of blended fruit and vegetable juice (and nectars) with “non-juice ingredient food additives” falls within the broader 14.1.2. category, in view of:

- significant market presence of blends of fruit and vegetable juices and nectars;
- absence of a Codex standard for vegetable juices and nectars.

### **2. ICBA Recommendations**

ICBA believes Chinese plum juice – which is not 100% juice but rather diluted with water – is not relevant to the 100% juice categories and instead is a 14.1.4.2. product. Calcium lactate is in Table 3 and is already permitted for use in 14.1.4.2.

As the issue of technological justification for acidity regulators in general in 100% juices, nectars and concentrates could not be resolved, further discussion on the proper classification of juice products with “non-juice food additive ingredients” could be had within a newly established CCFA eWG.

### **3. ICBA Recommendations**

ICBA supports adding phosphates and tartrates in Tables 1 and 2 for FC 14.1.3.4 (concentrates for vegetable nectar) with notes 33 (as phosphorous), 40 (Pentasodium triphosphate (INS 451(i)) only, to enhance the effectiveness of benzoates and sorbates) and 127 (On the served to the consumer basis).

As the remaining issues related to acidity regulators generally and tartrates specifically in FC 14.1.2.2 (veg juice), 14.1.3.2.(veg nectar) and 14.1.3.4 (conc for veg nectar) are tied to the discussion on the proper classification of juices with “non-juice food additives ingredients”, ICBA suggests this too be part of the newly established CCFA eWG terms of reference.

## **Conclusion**

ICBA thanks CCFA members for taking these comments into careful consideration.

## Appendix A. Photo examples of 100% Juices, Nectars and Concentrates with “non-juice food additive ingredients” across regions globally

### 1. Stabilizers/Emulsifiers in 100% juice and/or nectars

**Technological justification:** Xanthan gum, gellan gum and carboxymethylcellulose serve to stabilize these juices as a possible alternative to pectin to ensure first and foremost uniform appearance, and secondarily to improve mouth feel.<sup>1/2/</sup> The benefits they impart to these juices, nectars and concentrates products include:

- Optimize sensory properties, flavor release and texture profiling;
- Ensure the stability of the drink during its shelf life;
- Enable alternative processes and process parameters;
- Enhance mouthfeel;
- Allow for excellent fruit particle and fruit pulp suspension;
- Delay/prevent phase separation and precipitation during transportation and storage.

High pulp content products tend to separate out exhibiting uneven appearance and composition (concentration of pulp on the bottom of the package). Stabilizers assist by maintaining solids in suspension giving a uniform appearance and composition of the product to the consumer.

For certain juices and nectars of different flavors there are better stabilizing agents than pectin to keep not only insoluble solids suspended but also vitamins and minerals (e.g., calcium) added to fortified products. When precipitation is likely to occur (e.g., calcium) in certain juice/nectar matrices, it is necessary to place a more effective stabilizing agent than pectin.

Additionally, juices and nectars are primarily water making it challenging to incorporate oily compounds, mainly citrus aromatic substances (oils). Use of emulsifiers aims to facilitate the incorporation of such substances in the product in a homogeneous way.

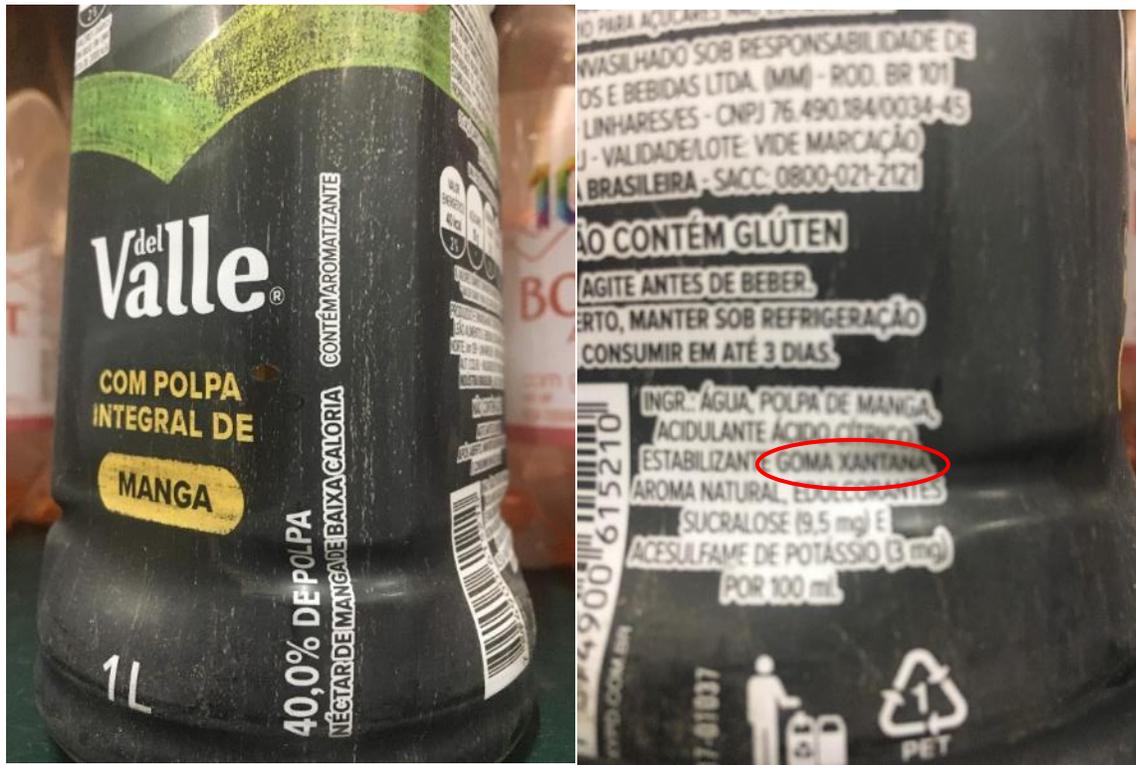
From a processing manufacturing standpoint, when using pectins, it is generally recommended that the pectin solution be dissolved in the liquid product at a temperature of 80°C for optimal hydration and activation. Such high temperature processing may be undesirable in some applications, including when the juice is very sensitive to temperature fluctuation, may be less attractive for low impact, ecologically friendly processors, or may be cost prohibitive in some regions of the world. On the other hand, xanthan gum is cold-soluble. The ability to use xanthan gum at lower processing temperatures e.g., room temperature) supports sustainability and productivity, as manufacturers are able to reduce energy consumption while producing a comparable or superior product to pectin based juice.

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<sup>1/</sup> Stabilizers for Fruit juice - based beverages. [Blendhub Premium Ingredients](#). (Accessed October 7, 2018)

<sup>2/</sup> Akkarachaneeyakorn, S. and S. Tinrat. 2015. [Effects of types and amounts of stabilizers on physical and sensory characteristics of cloudy ready-to-drink mulberry fruit juice](#). Food Sci Nutr. 3(3): 213–220.

## Brazil



Sódio	µmg	33
Vitamina C	15mg	33

(\*) % Valores Diários de referência com base em uma dieta de 2.000kcal ou 8.400kJ. Seus valores diários podem ser maiores ou menores dependendo de suas necessidades energéticas.  
(\*\*) VD não estabelecido.

Ingredientes: Água, açúcar, suco de uva concentrado (50,0% de suco), acidulante ácido cítrico (INS 330), antioxidante ácido ascórbico (INS 300), aroma natural de uva, estabilizante goma guar (INS 412) e corante natural carmim de cochonilha (INS 120).  
**NÃO CONTÉM GLÚTEN.**

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### 3. Acidity regulators in 100% fruit juices and/or nectars

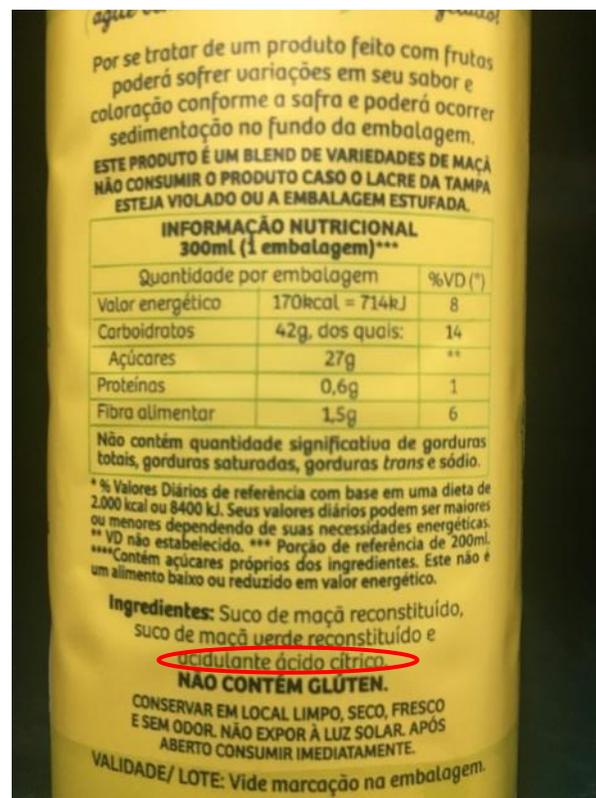
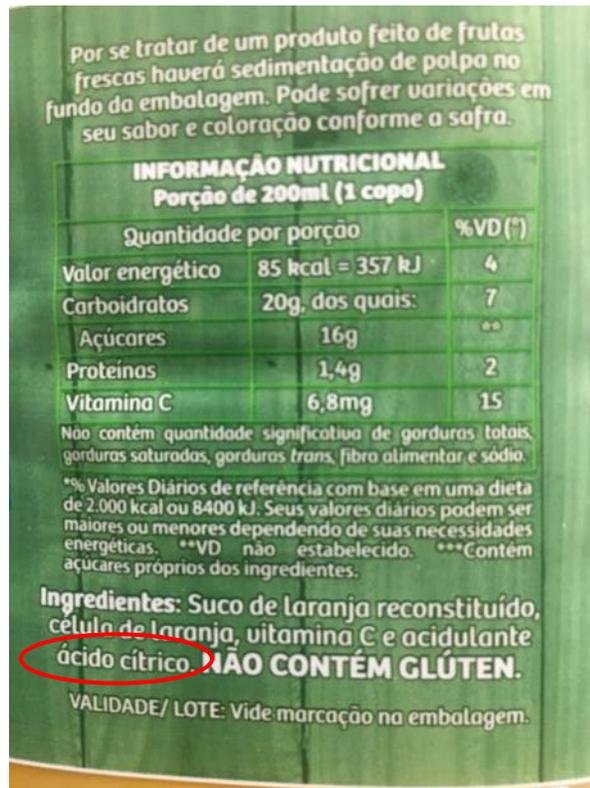
**Technological Justification:** Acidity regulators at times are needed in fruit juices to standardize the acid level of the finished product due to batch and seasonality variability in the raw material (fruit juice concentrates). Also, the use of acidity regulators further lowers the pH to extend the shelf life in 100% fruit juice.

#### Australia



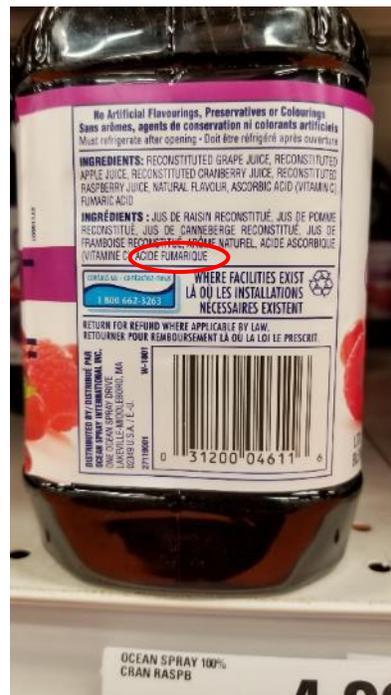


## Brazil



**Canada**









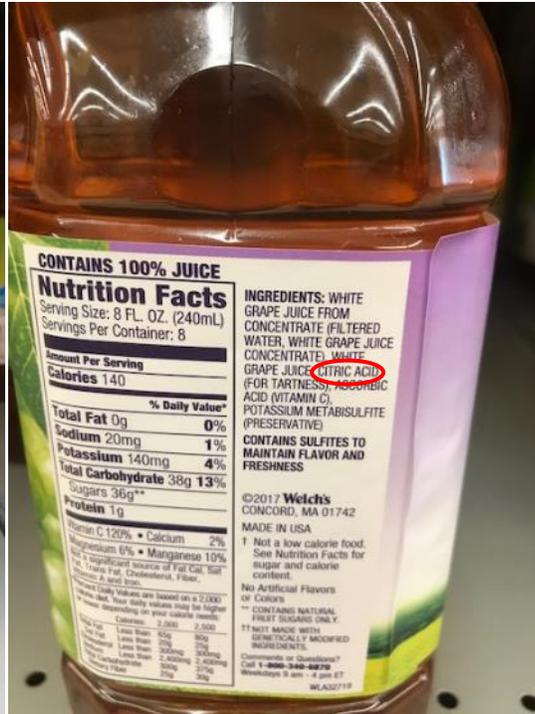


United States









#### 4. Acidity Regulators in 100% vegetable juices (including fruit/vegetable juice blends)

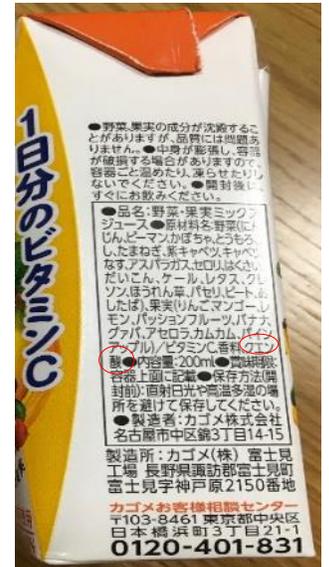
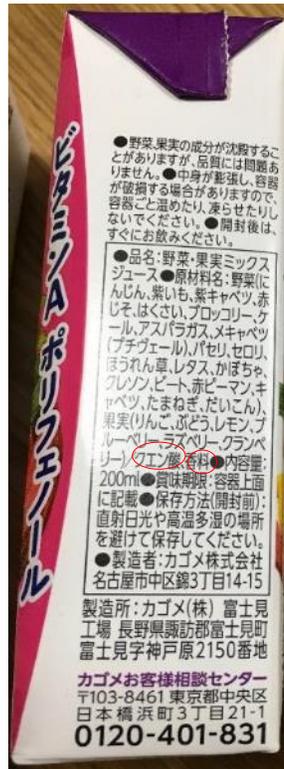
**Technological Justification:** In general, vegetable juices have a lower sugar content than fruit juices resulting in a lower density for vegetable juices. Vegetable juices have less acid and, consequently, a higher pH than fruit juices. Therefore, the processing temperatures for vegetable juice products will be higher than fruit juice products. Moreover, acidity regulators would be justified to ensure shelf-stability of vegetable juice products. Interestingly, the proposed draft revised Codex Standard for Vegetable Juices while not endorsed for adoption by the 2003 Codex Intergovernmental Task Force on Fruit and Vegetable Juices due to limited international trade at the time,<sup>3/</sup> the following acidity regulators were identified: Malic acid (INS 296), Citric acid (INS 330), Tartaric acid (INS 334).

#### Australia

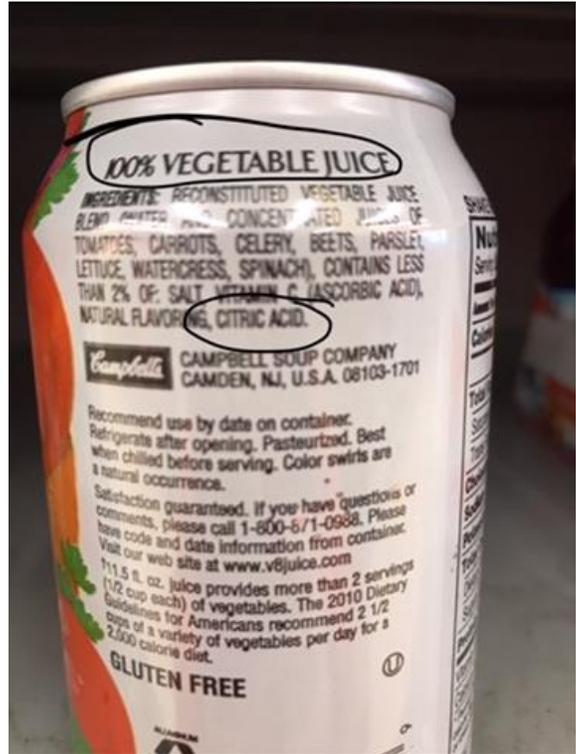


<sup>3/</sup> *Ad hoc* Codex Intergovernmental Task Force on Fruit and Vegetable Juices ([2002 ALINORM 3/39, Appendix III](#) - PROPOSED DRAFT REISED CODEX GENERAL STANDARD FOR VEGETABLE JUICES ([CODEX STAN 179-1991](#)); [2003 ALINORM 3/39A](#)-para. 91, 92)

Japan



United States







### **IFU (International Fruit and Vegetable Juice Association)**

IFU would like to thank CCPFV for their extensive discussions concerning the addition of food additives to juices and nectars, and for their conclusions and recommendations. IFU would like to provide the following comments on each recommendation as follows:-

#### **1. Pectins**

To recommend the addition of pectins (INS 440) at a use level of GMP in Tables 1 and 2 of the GSFA for FC 14.1.2.2 (vegetable juice) with note 35 and for FC 14.1.2.4 (concentrates for vegetable juice) with notes 35 and 127.

Note 35: For use in cloudy juices only.

Note 127: On the served to the consumer basis.

#### **IFU Comments**

IFU agrees with these recommendations.

#### **2. Request CCFA clarification on the proper classification of juice and nectar products with “non-juice food additive ingredients” and provided the following observations/actions (click here for a compilation of these suggestions):**

- To inform CCFA that there was a significant market presence of formulated juice and nectars with “non-juice food additive ingredients” such as EST’s.
- To inform CCFA that a key to resolve some of the food additive issues was to get clarification on the proper classification of formulated juice/nectars with “non-juice food additive ingredients” such as ESTs within the GSFA.
- To ask CCFA for input on how to properly classify formulated juice/nectars with “non-juice food additive ingredients” within the GSFA.
- To inform the CCFA that the addition of “non-juice food additive ingredients” should not result in the diminution of juice soluble solids or the in the case of expressed juice a change in the volume.
- To ask CCFA for input how to properly define “non-juice food additive ingredients”.

#### **IFU Comments**

Whilst examples were provided to the CCPFV of some products labelled as juices and nectars with added EST’s their significance in those markets was not clear. It should also be noted that there are also significant markets where the addition of EST’s to juices and nectars are prohibited to maintain the “naturalness” of the product. Further-more these materials are not approved for use in fruit juices or nectars by the provisions laid down in the Codex STN 247 (2005) or by the provisions given in the GSFA for products categories 14.1.2 & 14.1.3.

IFU agrees with the recommendation to ask CCFA for input on how to properly classify formulated juice/nectars with “non-juice food additive ingredients” within the GSFA, and to ask CCFA how to properly define “non-juice food additive ingredients”.

A solution would need to satisfy Codex members representing both markets, so IFU suggests that these topics be resolved in an e-WG where Codex members (assisted by interested observer organisations) could develop a solution for the proper classification in the GSFA for these types of products and provide a definition for “non-juice additive ingredients”.

Due to the complexity of this issue and the differing opinions how to resolve it we would like to propose that a physical WG (may also be virtual) could be held if a consensus position has not been achieved by the e-WG in the intervening period. The need to call this meeting would of course be at the discretion of the e-WG chair, but our understanding is that this meeting would have to be approved by CCF52 to go ahead prior to the opening of the plenary session of CCFA. IFU is of the opinion that a “round table” discussion on this topic provides an interactive element which can be a helpful step in trying to reach a solution.

#### **3. Request CCFA for classification of blends of fruit and vegetable juices and nectars under GSFA and provided the following observations:**

- To inform CCFA that there was a significant market presence of blends of fruit and vegetable juices and nectars.

- To inform CCFA the broad category of FC 14.1.2 suggested that these types of products should be captured under FC 14.1.2; however, CCPFV did not have consensus and further clarification from CCFA was needed, especially considering the absence of a Codex standard for vegetable juices and nectars.

#### IFU Comments

This could be resolved by the previously suggested e-WG.

4. **CCFA50 requested guidance from the Committee on the technological justification for the use of acidity regulators in general, and calcium lactate (INS 327) specifically, in FC 14.1.2.1 (Fruit juice) generally, and in Chinese plum juice specifically**<sup>3</sup>

CCPFV29 made the following recommendations:

- In general, there was no technological justification for the use of calcium lactate as an acidity regulator for products under FC 14.1.2.1 (Fruit juice).
- Based on the available evidence, Chinese plum juice did not fall under FC 14.1.2.1 (fruit juice). Therefore, whether calcium lactate was technically justified for Chinese plum juice was outside the scope of food additive discussion for FC 14.1.2.1 (fruit juice).
- It appeared that Chinese plum juice was a product under FC 14.1.4 (water-based flavoured drinks), where calcium lactate was already permitted for use as a Table 3 additive at GMP level for products in this category.
- Informed CCFA that the remaining issues could not be resolved at this time until further discussion on the proper classification of juice products with non-juice food additive ingredients

<sup>3</sup> REP18/FA, para 86 (ii) and CCFA50/CRD 2, page 12

#### IFU Comments

We agree with the conclusions about Chinese Plum juice and no further action is required.

The remaining issues can be dealt with by the e-WG as previously suggested.

5. **CCFA requested guidance on the use of acidity regulators in general and phosphates (INS 338; 339(i)-(iii); 340(i)-(iii); 341(i)-(iii); 342(i)-(ii); 343(i)-(iii); 450(i)-(iii),(v)-(vii), (ix); 451(i),(ii); 452(i)-(v);542) and tartrates (INS 334, 335(ii), 337) specifically in FC 14.1.2.2 (Vegetable juice), FC 14.1.2.4 (Concentrates for vegetable juice), FC 14.1.3.2 (Vegetable nectar), and FC 14.1.3.4 (Concentrates for vegetable nectar) and the maximum use levels needed to achieve the intended technological effect**<sup>4</sup>.

- CCPFV29 made the following recommendations:

To add phosphates (INS 338; 339(i)-(iii); 340(i)-(iii); 341(i)-(iii); 342(i)-(ii); 343(i)-(iii); 450(i)-(iii),(v)-(vii), (ix); 451(i),(ii); 452(i)-(v);542) and tartrates (INS 334, 335(ii), 337) in Tables 1 and 2 of the GSFA for FC14.1.3.4 (concentrates for vegetable nectar) with notes 33, 40, 127 and with a maximum use limit of 1000 mg/kg as phosphorous.

Note 33: As phosphorous

Note 40: Pentasodium triphosphate (INS 451(i)) only, to enhance the effectiveness of benzoates and sorbates

Note 127: On the served to the consumer basis

- To inform CCFA that the remaining issues could not be resolved at this time until further discussion on the proper classification of juice and nectar products with non-juice food additive ingredients.

<sup>4</sup> REP18/FA, para 86 (iii) and CCFA50/CRD 2, page 13

#### IFU Comments

IFU agrees with the proposals for phosphates and tartrates as detailed above.

The remaining issues can be dealt with by the e-WG as previously suggested.

IFU thanks the CCFA secretariat for taking these comments into account and we remain at the committee's disposal to assist in resolving all these matters.

#### About IFU

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The International Fruit and Vegetable Juice Association (IFU) has been for over seventy years the only representative of the worldwide fruit and vegetable juice and nectar industry. The members of IFU are producers of juices and related products, associations, traders, machinery and packaging producers, public and private scientific institutions from around the world.