CODEX ALIMENTARIUS COMMISSION

Food and Agriculture Organization of the United Nations

World Health Organization

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**Agenda Item 5** **CX/CF 17/11/5**

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**ORIGINAL LANGUAGE ONLY**

**JOINT FAO/WHO FOOD STANDARDS PROGRAMME**

**CODEX COMMITTEE ON CONTAMINANTS IN FOODS**

**Eleventh Session**
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# PROPOSED DRAFT AND DRAFT MAXIMUM LEVELS FOR LEAD IN SELECTED FRUITS AND VEGETABLES (FRESH AND PROCESSED) AND OTHER SELECTED FOOD CATEGORIES IN THE GENERAL STANDARD FOR CONTAMINANTS AND TOXINS IN FOOD AND FEED (CODEX STAN 193-1995) (AT STEPS 7 AND 4)

*Comments submitted at Step 3 (in response to CL2017/23-CF) by Costa Rica, Cuba, Ecuador, Egypt, European Union, Japan, Kenya, New Zealand, Peru, Republic of Korea, FoodDrinkEurope, IFU and WPTC*

## COSTA RICA

Costa Rica agradece a los Estados Unidos de América la oportunidad de emitir comentarios. En ese sentido y debido a que en el país no se cuenta con estudios que nos permitan aportar datos, Costa Rica no tiene comentarios.

## CUBA

Cuba tiene reservas con respecto a la reducción de los niveles de plomo en compotas (conservas de frutas), jaleas y mermeladas de 1 mg/mg a 0.1 mg/kg; Tomates en conserva de 1 mg/kg a 0.05 mg/kg; Concentrados de tomate elaborado de 1.5 mg/kg a 0.05 mg/kg.

## ECUADOR

Ecuador, agradece los esfuerzos realizados por los Estados Unidos, para la elaboración del Anteproyecto y proyecto de Revisión de Niveles Máximos de plomo en algunas frutas y hortalizas frescas y elaboradas y una selección de categorías de alimentos de la Norma General para los Contaminantes y las Toxinas presentes en los alimentos y piensos; al respecto desea expresar lo siguiente:

**(i) Comentarios Generales:**

1. El párrafo 27 del Apéndice I, menciona que: *La Secretaría del Codex pidió que los países, los observadores del Codex y los miembros del GTe presentaran datos sobre los niveles de plomo en los zumos y néctares de bayas y otras frutas pequeñas; los tomates en conserva; los concentrados de tomates elaborados, las compotas (frutas en conserva) y jaleas; el chutney de mango; las castañas en conserva y de puré de castañas; las brasicáceas en conserva; los hongos y setas; las legumbres; y el pescado,* ***preferentemente de los últimos 10 años, a la base de datos del SIMUVIMA/Alimentos de la OMS****. La Secretaría del JECFA hizo la recopilación y clasificación inicial de los datos, en consulta con el GTe, y a partir de la base de datos del SIMUVIMA/Alimentos. El GTe analizó los resultados y decisiones acerca de cuáles datos se excluyeron, cómo deben presentarse los datos, y qué recomendaciones deberían incluirse.*

   Se considera que el término "preferentemente", deja muy abierto a que los datos se usen, no solamente de los últimos 10 años, sino datos con fechas más antigua. En este sentido, Ecuador solicita que se estandarice una periodicidad en cuanto a los datos que se consideren para realizan los análisis y recomendar NM; por ejemplo, consideramos que para el caso de legumbres y pescados el análisis de las muestras tomadas y/o analizadas (1995 y 2016 para los dos cosas), son muestras muy antiguas. En tal caso se sugiere tomar muestras desde el año 2016 como un referente a lo que se menciona en el párrafo 27.

2. Consideramos que el número de muestras para recomendar NM para tomates elaborados, chutney de mango, castañas en conservas y puré de castañas en conservas y brasicáceas en conservas, no es suficiente para dar una recomendación de este tipo, tomando en cuenta que además.

Ecuador ratifica lo que se menciona en el párrafo 41: "… *el número de muestras disponible no era suficiente para llevar a cabo un análisis estadístico de la producción mundial y que un mayor número de muestras daría una idea más realista de los tipos de infracción y su repercusión en el comercio internacional.*"

**EGYPT**

**1- Egypt supports the following recommendation:**

1- 0.03 mg/kg for lead in juices and nectars exclusively from berries and small fruits with the exception of juices and nectars derived exclusively from currants, elderberries, raspberries, and strawberries,

2- 0.05 mg/kg for lead in preserved tomatoes with deletion of the note in the GSCTFF for preserved tomatoes on the adjustment of the ML to take into account the concentration of the product.

3- 0.05 mg/kg for lead in processed tomato concentrates with deletion of the note in the GSCTFF for preserved tomatoes on the adjustment of the ML to take into account the concentration of the product.

4- extending the current ML of 0.1 mg/kg lead in canned vegetables to canned brassica vegetables.

5- 0.6 mg/kg for lead in fungi and mushrooms (excluding mushroom and fungus products)

6- 0.1 mg/kg for Pulses

7- Maintain the current ML for lead in fish of 0.3 mg/kg.

**EU**

The European Union (EU) welcomes and appreciates the work on the revision of the maximum levels for lead by the electronic Working Group led by the United States of America.

In general, the EU considers that the MLs should be lowered wherever possible. In addition, the EU would like to see a reduction of the number of very specific entries in the GSCTFF.

As regards the proposed actions for the individual commodities, the EU would like to present the following position:

For **juices and nectars from berries and other small fruits**, the EU considers that the ML should not be lowered to 0.03 mg/kg but remain at 0.05 mg/kg. As regards the label of this category, the EU considers that in line with REP 15/CF adopted by CAC38, it should be referred to as "*Fruit juices **EXCLUSIVELY** from berries and other small fruits*". This should also be reflected in the exclusion for "*Fruit juices*".

For **preserved tomatoes** and **processed tomato concentrates**, the EU agrees with the proposed approach.

For **jams (fruit preserves) and jellies**, the EU agrees to revise the ML for jams & jellies to 0.2 mg/kg. If no agreement could be reached on an ML of 0.2 mg/kg, the EU would prefer to revoke the current ML of 1.0 mg/kg for this commodity as it is inconsistent with other MLs for lead in the GSCTFF. If this entry is maintained, the EU considers that in line with REP 16/CAC, para 74, it should be referred to as "*Jams, jellies **AND MARMELADES***".

For **mango chutney**: in view of reducing the number of very specific entries and taking into account the limited availability of data, the EU considers it would be preferable to combine "mango chutney" with "jams (fruit preserves) and jellies". In case the ML for jams & jellies would be revoked, the same logic should be applied to mango chutney.

For **canned chestnut and chestnut puree**, the EU considers that it would be preferable to combine this entry with "canned fruits" at 0.1 mg/kg. In case no such agreement could be reached, the EU would prefer to revoke the current ML of 1.0 mg/kg for canned chestnut and chestnut puree as it is inconsistent with other MLs for lead in the GSCTFF.

For **canned brassica vegetables**, the EU agrees to extend the current ML of 0.1 mg/kg in canned vegetables to canned brassica vegetables.

For **fungi and mushrooms**: the EU regrets that the available data have not permitted a further subdivision within this group. The EU considers the proposed ML of 0.6 mg/kg too high for a number of the most frequently consumed mushrooms in Europe such as the common mushroom (or *Agaricus bisporus*), the oyster mushroom (or *Pleurotus ostreatus*) and the shiitake mushroom (or *Lentinula edodes*). For these mushrooms, the EU considers that sufficient data are available for each of those to justify the ML of 0.3 mg/kg applicable in the EU. In case no further subdivision would be possible, the EU would prefer not to establish a generic ML for lead for all fungi and mushrooms.

For **pulses**, the EU considers that the ML for pulses can be lowered from 0.2 mg/kg to 0.1 mg/kg.

For **fish**, the EU can agree to maintain the ML for lead in fish at 0.3 mg/kg.

Finally, the EU considers that the ML for lead in canned vegetables is applicable to kale. The EU also sees no need for the development of a concentration factor for dried fungi and mushroom.

**JAPAN**

Japan expresses its appreciation for the efforts of the United States of America as a chair of the EWG in preparing the Proposed Draft and Draft Revised Maximum Levels for Lead in Selected Fruits and Vegetables (Fresh and Processed) and other selected food categories in the GSCTFF (Codex Stan 193-1995). We would like to provide the following comments in respond to CL2017/23-CF.

- **Juices and nectars from berries and other small fruits**

  Japan supports the proposed revised ML of 0.03 mg/kg for juices and nectars from berries and other small fruits with the exception of some subtypes of berry juices.

  We propose maintaining the current ML of 0.05 mg/kg only for juices and nectars derived from currants, raspberries and strawberries, which have statistically sufficient number of samples (see Table BF-4 of annex of CL 2017/23-CF). As regards elderberry juice, there is weak evidence to exclude from the ML for lead in juices and nectars from berries and other small fruits because occurrence data of this product was represented by only two samples.

  Japan would like to recall the discussion on fruit juices and nectars (excluding juices from berries and other small fruits) at the 9th session of CCCF (ref. CX/CF 15/9/5). Although there were some specific juice subtypes of which the percentage of samples ≤ 0.03 mg/kg (proposed revised ML) was less than 95 percent (e.g. pear nectar (94%, n=18), pomegranate juice (74%, n=19), gac juice (0%, n=1), noni juice (0%, n=1), and quince juice (0%, n=1)), the Committee agreed to lower the ML to 0.03 mg/kg for all fruit juices and nectars including these subtypes of juices (excluding juices from berries and other small fruits).

  Taking into account the past decision and consistency of work process, Japan thinks that elderberry juice can be included in the category of juices and nectars with the ML of 0.03 mg/kg rather than ML of 0.05 mg/kg.

- **Preserved tomatoes and Processed tomato concentrates**

  Japan supports the draft proposed MLs of 0.05 mg/kg and deletion of the note in the GSCTFF.

- **Jam (fruit preserved) and Jellies**

  Japan supports the draft proposed ML of 0.5 mg/kg taking new data submitted by India into consideration.

  We would like to propose putting a note for future re-evaluation of this ML (in the same way as for table olives (REP 16/CF, para.77)) when more data become available.

- **Mango chutney**

  Japan supports combining the data on mango chutney with those of fruit jam and jellies for the purposes of setting an ML for lead in these commodities because the number of samples of occurrence data for mango chutney is too few to set an ML for this product. However, we can agree with 0.1 mg/kg and retaining as a stand-alone category, if main producing countries of this product confirm that ML of 0.1 mg/kg is reasonably achievable.

- **Canned chestnuts and canned chestnuts puree**

  Japan proposes to set an ML of 0.1 mg/kg, the same value as for canned fruits, because the number of occurrence data for these products is too few to set an ML for these products.

  We also propose keeping this product as a separate category from canned fruits in the GSCTFF to avoid any confusion, because chestnuts are “tree nuts” rather than “fruits” in the Codex Classification of foods and animal feeds (CAC/MISC 4).

- **Canned Brassica vegetables**

  Japan supports extending the ML of 0.1 mg/kg for canned vegetables to canned brassica vegetables because the number of occurrence data for this product is too few to set an ML for this product.

  As regard a concern for canned kale we posed at the EWG (CL 2017/23-CF, para. 68), if there is no scientific evidence to support excluding canned kale from the ML for lead in canned vegetables, we can agree with applying the ML to all canned vegetables at 0.1 mg/kg.

- **Fungi and mushrooms**

  Japan supports a proposed ML of 0.6 mg/kg for fresh fungi and mushrooms.

- **Pulses:** Japan supports a proposed revised ML of 0.1 mg/kg.

- **Fish:** Japan supports maintaining the current ML of 0.3 mg/kg.

**KENYA**

**REQUEST FOR COMMENTS**

13. Codex members and observers are kindly invited to provide comments on the proposed draft and draft MLs for lead as indicated in paragraphs 15 - 24.

14. In providing comments, Codex members and observers are kindly invited to take into consideration the work process followed for the revision of the MLs and the analysis of individual foods as provided in Appendix I.

**BACKGROUND**

- This work followed previous work on the review of MLs started in 2012 following the outcome of JECFA73 (2010) safety evaluation of lead where the PTWI of 25 µg/kg bw had been withdrawn and a new PTWI that would be considered health protective had not been possible to establish.
- The study revealed that exposure to lead is associated with various neurodevelopmental effects making fetuses, infants and children most sensitive to lead poisoning
- In order to protect the vulnerable groups, it was agreed at the 6th session of CCCF in 2012 that the maximum levels (MLs) for lead in fruit juices, milk and milk products, infant formula, canned fruits and vegetables, fruits, and cereal grains (except buckwheat, cañihua and quinoa) in the General Standard for Contaminants and Toxins in Food and Feed (GSCTFF) be revised

At CAC 39, New MLs adopted at Step 5/8 except for MLs for preserved tomatoes and jams, jellies and marmalades held at Step 5 awaiting extra data for finalization at CCCF11

Fish and Pulses were also added to the candidate products for lowering MLs of Lead

**The recommendations are:**

**Retain the ML for Fish at 0.3mg/kg**

**Lower MLs for:**

1) **Juices and nectars :Lower from 0.05 to 0.03 mg/kg (with certain berry exceptions)**
2) **Processed tomato conc.: Lower from 1.5 to 0.05 mg/kg**
3) **Mango chutney: Lower from 1 to 0.1 mg/kg (or combine with jams)**
4) **Canned / pureed chestnuts: Lower from 1 to 0.05 mg/kg (or combine with canned fruit)**
5) **Canned brassicas: Extend 0.1 mg/kg canned vegetables to canned brassica veg**
6) **Fungi and mushrooms: Establish 0.6 mg/kg**
7) **Pulses :Lower from 0.2 to 0.1 mg/kg**

**COMMENT**

*1.Support retention of the ML of 0.3 mg/kg for Fish*

*2.Support the lowering of maximum levels of lead in the selected fruits and vegetables*

***JUSTIFICATION**:*

*We might not be able to prevent adoption of the lowered MLs because the call for data has been there since 2012. Kenya accepts the level based on the provided data by other countries analyzed by JECFA as long as it is safe for human health*

*Countries that may import the regulated products will benefit from the lower MLs (Health perspective)*

**NEW ZEALAND**

In response to the circular letter CL 2017/23-CF, New Zealand thanks the delegations from USA for the proposed draft new and draft revised MLs for lead in various food commodities, and acknowledges the work done to date.

New Zealand agrees with the recommendations in paragraphs 15, 16, 17, 21, 22, 23, and 24. In addition, New Zealand comments on the recommendations in paragraphs 18, 19, and 20 as follows.

Para 18 – New Zealand favours adoption of 0.5 mg/kg for lead in jams and jellies on the basis that India had submitted a significant number of samples (30 of 98 samples) that demonstrated higher levels of lead than the alternative option being considered (0.2 mg/kg), and this revised ML represents a significant lowering from the current ML of 1 mg/kg.

Para 19 and 20 – New Zealand favours combining mango chutney with jams and jellies, and canned chestnuts and chestnut puree with canned fruits as the number of samples in both cases is less than desired, and the likely contribution of these foods to dietary lead intake is insignificant with either of the two options and this option of combining these foods with the larger food groups still represents a significant lowering of the MLs from 1 mg/kg in both cases.

Para 19 through 24 – New Zealand agrees with the proposed MLs.

**PERU**

**OBSERVACIONES GENERALES**:

La población de Perú consume productos frutícolas y hortalizas como parte de su dieta diaria. Por lo tanto es necesario hacer una evaluación de la concentración de algunos metales pesados (plomo entre otros, etc.) en los frutos y hortalizas de consumo, ya que las plantas son sistemas captadores de estos metales pesados procedentes del medio ambiente (suelo, aire, agua), los cuales pueden ser considerados como peligrosos para la salud humana.

En el trabajo de Investigación "Evaluación de las Concentraciones de Metales Pesados para Determinar la Calidad de Frutas de Consumo Masivo en la ciudad de Piura" – Revista Científica de la Universidad de Guayaquil – 2014, el contenido de plomo fue determinado en el Laboratorio de Química de la Universidad Nacional de Piura utilizando el método instrumental de Espectrofotometría de Absorción Atómica. Los resultados obtenidos se compararon con los límites máximos permisibles dados por los organismos internacionales. Las muestras de las frutas de Piura analizadas en su contenido de plomo no mostraron niveles altos.

**OBSERVACIONES ESPECÍFICAS**:

Se propone un nivel máximo de plomo tanto en jugos de Naranja, durazno, pera, mango, manzana, piña; como en, productos terminados de 0.2 mg/kg., con la salvedad que estamos refiriéndonos en ambos casos al producto reconstituido listo para ser ingerido, por lo siguiente:

Normalmente, en la industria se usan jugos concentrados para hacer más eficiente el transporte al no mover agua. Al ser concentrados los jugos, si se realiza un análisis de plomo en esa condición (concentrado), habrá una mayor concentración que el nivel propuesto. Por esta razón, el nivel que se está proponiendo es en el jugo puro y listo para su consumo (agregando el agua necesaria de acuerdo a su concentración, lo cual debe ser consignado en la etiqueta).

Para el caso de néctares (parte de jugo más otros ingredientes), de igual manera, nos referimos a 0.2 mg/kg de producto terminado.

**REPUBLIC OF KOREA**

The Republic of Korea would like to submit the following comments on the proposed draft maximum levels for lead:

- We support the proposed maximum levels for the following commodities:
  - Juices and nectars from berries and other small fruits with the exception of juices and nectars derived exclusively from currants, elderberries, raspberries and strawberries (0.03 mg/kg)
  - Preserved tomatoes (0.05 mg/kg)
  - Processed tomato concentrates (0.05 mg/kg)
  - Fish (0.3 mg/kg)
- We support the level of 0.2 mg/kg for jams (fruit preserves) and jellies.
- We propose additional sample collection and re-analysis for mango chutney, canned chestnuts and chestnuts puree and canned brassica vegetables since the current sample numbers are not enough for the analysis.
- Lead concentration can vary significantly according to the species of fungi and mushrooms. Therefore, additional data of lead occurrence and trade volume for each species should be collected to identify the species of fungi and mushrooms in need of lead MLs.
- Pulses may also have different lead concentration based on the species. Therefore, we recommend the EWG to review the lead levels in each species of pulses before recommending a single ML for all pulses.
- Prior to making a decision on MLs for dried fungi and mushrooms, discussions on the feasibility of setting ML and appropriateness of using a concentration factor, collection of occurrence data for dried fungi and mushrooms, contamination pattern between fresh and dried commodities, etc. should be considered.

**FOODDRINKEUROPE**

FoodDrinkEurope is very pleased to see that the e-WG of CCCF supports the industry's conclusion that there is a need to retain a higher ML for Lead in juices and nectars from certain small fruits and berries (elderberries, strawberries, raspberries and currants), as defined in their final proposals that will be presented to the plenary session of CCCF in April. However, we note that the higher ML could not be extended to the whole group of small fruits and berries as per the present EU contaminants Regulation.

We fully appreciate the toxic effects of lead in the diet and the need to reduce exposure where at all possible.

However, we must stress that the presence of the low levels of lead that are seen in juices and nectars is solely due to the levels seen in the natural environment where the fruits grow. Lead, along with other minerals, is "picked up" by the plant and thus appears in the fruits. As most berries and small fruits are generally more acidic than the larger fruits such as orange, apples, etc., this seems to stimulate the uptake of the mineral elements and so they are concentrated in the plants/fruits. Furthermore, we have seen in the past that there are seasonal variations in the same area resulting in higher values being recorded in different years. These can attributed to differences in temperature and rainfall that affect mineral uptake. This has led to our conclusion that there should be a general derogation for the whole group of "small fruits and berries".

As the processes permitted in the production of fruit juices are very limited, there is no technological way of reducing the lead values found in juice, without contradicting the approved processes or significantly altering the taste/appearance of the product, hence reducing the quality/consumer appeal of our products, which are held in high esteem due to the high levels of bio-active compounds they contain.

Red/black juices prepared from small fruits and berries are very rarely, if ever, consumed as 100% juice products, but are usually sold as "fruit nectar" with a juice content between 25 to 50%, or are blended with another fruit variety such as apple or grape. We feel that the additional risk to a consumer that would be presented by retaining the ML at 0,050 mg/kg for the whole group would be very small. In the light of the habit of blending them with grape juice, the reduction of the ML for grape to 0,030 mg/kg could also cause the industry significant issues. Although grape juices do not often show values above 0,030 mg/kg, the data that was examined showed that 4% of them did exceed the proposed lower ML. Samples from certain regions showed an even higher failure rate, which could mean that these products could be excluded from world trade and/or testing costs would be significantly increased to ensure that products were in compliance with the regulation. It should be noted that data in particular for South American grape juices from 2011 – 2015 showed a higher percentage non-compliance at 0,030 mg/kg of 8% than found in the data considered by the e-WG.

Fruit juices in general only make a small contribution to the overall diet. The consumption of juices from "small fruits and berries" is even lower in comparison with main juices varieties like apple, orange and pineapple. Therefore, it is our view that the retention of the higher ML level for this group as a whole entails a very small risk to the consumer.

We are also concerned that there was insufficient data for some of the small fruits (blackberry, bilberry, chokeberry, field berry, youngberry, mulberry) to make a meaningful assessment of their risk to the consumer. For other fruits such as dewberries, sour cherry, gooseberry, rose hips, acerola, aronia, there was none, which means that by default these will fall to the lower limit. Therefore, it is our belief that since the CCCF decided to maintain the category 'small fruits and berries" at a higher level in the past, any recommendation to lower the ML should be substantiated. In the case where few or no data was available, the current ML should then be maintained until a meaningful assessment is possible.

We also understand that a level at which there is no significant effect has to be drawn up to make this type of assessment. However, setting it at 5 % still represents a significant cost to the industry, where sizeable volumes of a product are no longer usable. Additionally, the 5% cut-off could have a detrimental effect on products from certain countries or regions where the problem can be regionally specific (soil/rock type).

We would therefore like to request the CCCF to reconsider retaining the exception for this group of fruits (small fruits and berries) as a whole. If this is unacceptable, we would like to request a reconsideration of the situation of grape, as this is a very important commodity in world trade and the reduction could be detrimental to the fruit processing industries of some countries, specifically in South America. Additionally, we would like to ask that the exemption for the juices where no or very limited data is presently available, to be retained until such a time when further data can be prepared to support or refute the need for the retention of the higher ML level.

We are at your disposal to provide further information if required.

We would like to thank you in advance for your consideration of our position.

**Table 1: Juices and nectars from berries and other small fruits: AIJN dataset**

| Juice type | Total Number 2012-2015 | Percentage | | | Number | Percentage | | | Number | Percentage | | | Number | Percentage | | | Number | Percentage | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | ≤ 0.03 mg/kg | ≤ 0.04 mg/kg | ≤ 0.05 mg/kg | Year 2012 | ≤ 0.03 mg/kg | ≤ 0.04 mg/kg | ≤ 0.05 mg/kg | Year 2013 | ≤ 0.03 mg/kg | ≤ 0.04 mg/kg | ≤ 0.05 mg/kg | Year 2014 | ≤ 0.03 mg/kg | ≤ 0.04 mg/kg | ≤ 0.05 mg/kg | Year 2015 | ≤ 0.03 mg/kg | ≤ 0.04 mg/kg | ≤ 0.05 mg/kg |
| Currant | 206 | 89 | 92 | 94,5 | 67 | 73 | 81 | 82 | 42 | 100 | 100 | 100 | 29 | 90 | 93 | 100 | 68 | 93 | 94 | 96 |
| Grape | 381 | 96 | 98,5 | 98,5 | 92 | 99 | 100 | 100 | 35 | 97 | 97 | 97 | 92 | 92 | 98 | 98 | 162 | 96 | 99 | 99 |
| Raspberry | 213 | 96,5 | 99,3 | 99,3 | 49 | 96 | 100 | 100 | 20 | 95 | 100 | 100 | 45 | 97 | 97 | 97 | 99 | 98 | 100 | 100 |
| Strawberry | 375 | 95,5 | 96,3 | 96,3 | 60 | 100 | 100 | 100 | 33 | 97 | 97 | 97 | 93 | 87 | 89 | 89 | 189 | 98 | 99 | 99 |
| Sour Cherry | 225 | 96,8 | 97,8 | 99,5 | 47 | 100 | 100 | 100 | 37 | 97 | 97 | 100 | 55 | 91 | 95 | 98 | 86 | 99 | 99 | 100 |

* IFU Grape data from Italy, Israel, Australia and Turkey 2015-2016

**Table 2. Grape juice lead data including values obtained from South American Sources, years 2011 to 2015**

| | Number | | | Percentage | | |
|---|---|---|---|---|---|---|
| **Juice type** | **Total** | **≤ 0.03 mg/kg** | **≤ 0.04 mg/kg** | **Total** | **≤ 0.03 mg/kg** | **≤ 0.04 mg/kg** |
| Grape * | 176 | 168 | 174 | 15% | 95% | 99% |
| S American | 1007 | 924 | 993 | 85% | 92% | 99% |
| Total | 1183 | 1092 | 1167 | 100% | 92% | 99% |

South American grape from 2011-2015

3. EU Trade data.

3.1 Cherry juice production
Cherry juice concentrate 65°brix 20,000 MT (value €80m) and
NFC (juice) 15,000 MT (value €10.5m)

3.2 Red/White grape juice production
Grape juice concentrate 65°brix 130,000 MT (value €169m)

**IFU**

The International Fruit and Vegetable Juice Association (IFU) has been for more than sixty years the representative of the worldwide fruit and vegetable juice 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.

**Annex 1. Summary Report**

**Analysis of individual foods**

Paragraph 34, page 6-7.

“During both CCCF09 and CCCF10, the EWG addressed questions about whether certain subsets of berries and other small fruits, such as cranberries and currants, or juices and nectars made from such fruits, would have difficulty meeting proposed revised MLs, even if proposed lower MLs may be acceptable when applied to the occurrence data of these groups as a whole. Consistent with this approach, the EWG examined individual fruit juices in the juices from berries and other small fruits category and evaluated the number of samples that would meet a proposed ML of 0.04 mg/kg or 0.03 mg/kg. Table BF-4 shows the number and percent of each type of juice in the 2017 LOQ-limited dataset, as well as the number and percentage of samples ≤ 0.03 mg/kg and ≤ 0.04 mg/kg for each type of juice. The percentage of samples ≤ 0.03 mg/kg was 96 percent or greater for each type of fruit juice except for currant juice (92%), elderberry juice (50%), raspberry juice (94%), and strawberry juice (88%). The percentage of samples ≤ 0.04 mg/kg was 96 percent or greater for each type of fruit juice except for currant juice (94%), raspberry juice (94%), and strawberry juice (90%). With all four juices removed, 99 percent of the remaining juices could meet the 0.03 mg/kg level and 0.04 mg/kg level.

Thus, for juices and nectars from berries and small fruits other than currants, elderberries, raspberries, and strawberries, lowering the ML to the proposed levels of 0.03 mg/kg or 0.04 mg/kg would eliminate 1 percent of the samples in international trade. Therefore, the EWG recommends extending the current ML of 0.03 mg/kg for juices and nectars to juices and nectars exclusively from berries and other small fruits, with the exception of juices and nectars derived exclusively from currants, elderberries, raspberries, and strawberries, which should be maintained at 0.05 mg/kg. “

**Additional topics**

Paragraph 71. Page 13.

“IFU commented that juices with limited data (e.g., aronia, chokeberry, mulberry, and blackberry) should be retained at an ML of 0.05 mg/kg until data are available to prove otherwise. Alternatively, Japan commented that elderberry juice, having only two samples, should be included under the 0.03 mg/kg ML, and recalled the approach taken at the 9th CCCF to include all juice subtypes (other than juices exclusively from berries and small fruits) under the 0.03 mg/kg ML. Based on these comments, the EWG did not change the recommendations in the paper; however, the Committee may want to consider the issue of elderberry juice further at the plenary.”

**The IFU has following comments:**

The IFU would like to thank and compliment the hard work that has been carried out by the electronic working group led by the United States of America for the proposed draft revision and particularly the work examining fruit juices and nectars.

We were very pleased to see that the e-working group supports and recommends the industry’s conclusion that there was a need to retain a higher ML level for Pb in juices and nectars from certain small fruits and berries, as defined in the final proposals that will be presented to the plenary session of CCCF in April.

However, we do believe that this exemption should remain extended to juices and nectars from small fruits and berries as a whole group.

The fruit juice industry is fully committed to the preparation and sale of high quality and wholesome products that will be enjoyed by consumers. This can be seen by responsible sourcing, the application of GMP and the ongoing control and verification testing that the industry does to ensure the quality and authenticity of our products.

We fully appreciate the need to reduce the exposure of lead in the diet where at all possible based on the ALARA principle. However, we must stress that the presence of the low levels of lead that are seen in our products is solely due to the levels seen in the natural environment where the plants grow. Lead along with other minerals, are “picked up” by the plant and they appear in the plants fruits. Small fruits and berries have a larger surface to volume ratio and this can lead to higher levels of lead concentration compared to larger fruits.

As the processes permitted in the production of fruit juices are very limited, there is no technological way of reducing the Pb values seen in a juice, without conflicting with the approved processes or significantly altering the taste/appearance of the product and reducing the quality/consumer appeal of these products, which are held in high esteem due to the high levels of bio-active compounds that they contain.

**Grape Juice.**

Although grape juices do not often show values above 0.03mg/kg, the data that was examined by the EWG did show that 4% of them did exceed the proposed lower ML (Table BF-4). It should be noted that data collected by the IFU for South American grape juices from 2011 – 2015 showed a higher percentage of non-compliance at 0.03mg/kg of 8 % which is higher than the data considered by the EWG. Table 1. Appendix 1. Taking into account that these max limits are based on the ALARA principle we therefore ask the committee to reconsider the suggested lead ML for grape juice.

**Juices from fruits with limited data.**

The data for juices and nectars derived from aronia (chokeberry), mulberry, and blackberry is limited (often to one sample only) and therefore until more data is available we ask the committee to consider not currently lowering the ML for these fruit juices but to request further analysis and make a decision at an appropriate time in the future.

**Finally, it is also worth noting that** the MLs also were recently discussed in EU and, as a result, the EU established new regulatory MLs that include a similar exemption for the category of juices and nectars from berries and other small fruits adopted in 2015. Commission Regulation (EU) No. 2015/1005, in force since 1st January 2016. This amended Commission Regulation (EU) No. 1881/2006.

Therefore, we believe that maintaining the current Codex exemption for juices and nectars from berries and other small fruits, as the whole group, would be appropriate.

**Conclusions.**

1) The IFU supports entirely the exception of lowering the lead ML of juices and nectars derived exclusively from currants, elderberries, raspberries and strawberries which should be maintained at 0.05mg/kg.

2) Given the arguments that have been provided above we would ask the committee to re-consider retaining the exception for juices and nectars derived exclusively from small fruits and berries, as a whole group.

We should like to thank you in advance for your consideration of our position.

Appendix 1.

**Table 1. Grape juice lead data including values obtained from South American Sources, years 2011 to 2015**

| | Number | | | Percentage | | |
|---|---|---|---|---|---|---|
| **Juice type** | **Total** | **≤ 0.03 mg/kg** | **≤ 0.04 mg/kg** | **Total** | **≤ 0.03 mg/kg** | **≤ 0.04 mg/kg** |
| Grape * | 176 | 168 | 174 | 15% | 95% | 99% |
| S American | 1007 | 924 | 993 | 85% | 92% | 99% |
| Total | 1183 | 1092 | 1167 | 100% | 92% | 99% |

South American grape from 2011-2015

* IFU Grape data from Italy, Israel, Australia and Turkey 2015-2016

Ref. LC/CCCF/11/1

## WORL PROCESSING TOMATO COUNCIL (WPTC)

**Comments on the draft revised maximum levels for leads in tomato products.**

As the trade association representing more than 95% of the volume of tomatoes processed in the world, we are concerned by the small number of samples and the lack of representation of those compared to the volumes of tomatoes processed worldwide and the volume of tomato concentrate traded. In particular, there seem to be very few samples from EU countries and other countries in the Mediterranean Basin.

We would recommend that more sample analysis representative of international production and trade, are carried out before a final decision is made.

For this reason, you will find below:

Table 1: the total volume of tomatoes processed worldwide in 2016, by descending order of volume

Table 2: the volume of tomato concentrates exported worldwide, in descending order of country of origin

**Table 1: Volume of tomatoes processed in 2016 (in thousand metric tonnes)**

| Country | |
|---|---|
| California | 11 470 |
| Italy | 5 180 |
| China | 5 150 |
| Spain | 2 950 |
| Turkey | 2 100 |
| Portugal | 1 507 |
| Brazil | 1 450 |
| Iran | 1 150 |
| Chile | 800 |
| Tunisia | 650 |
| Algeria | 550 |
| Ukraine | 550 |
| Other US States (exc. California) | 476 |
| Canada | 456 |
| Greece | 440 |
| Argentina | 405 |
| Egypt | 350 |
| Australia | 275 |
| Thailand | 260 |
| Czech Republic | 220 |
| Domincan Republic | 210 |
| Israel | 200 |
| France | 183 |
| Russia | 145 |
| Peru | 145 |
| Poland | 130 |
| India | 130 |
| Morocco | 105 |
| South Africa | 100 |
| Syria | 70 |
| New Zealand | 51 |
| Bulgaria | 40 |
| Mexico | 40 |
| Japan | 33 |
| Senegal | 28 |
| Hungary | 25 |
| Slovakia | 20 |
| Venezuela | 20 |
| Jordan | 8 |
| Malta | 8 |
| **Total** | **38 080** |

**(Source : WPTC)**

**Table 2: Statistiques Export des Pays Déclarants (Pays Partenaire: Le Monde)**
**Produit: 200290, Tomates Nda, Préparées Ou Conservées, Exc Au Vinaigre Ou À L'Acide Acétique**

Séries Annuelles: 2011 - 2016

| Déclarant Pays | unité | Quantity | | | | | |
|---|---|---|---|---|---|---|---|
| | | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 |
| Total | T | 3056214 | 2971849 | 3146866 | | | |
| Chine Rép. pop. | T | 1128459 | 1071613 | 984295 | 871936 | 990583 | 927590 |
| Italie | T | 703042 | 653712 | 689294 | 651361 | 654771 | |
| États-Unis | T | 356854 | 349365 | 474458 | 529079 | 458725 | 446120 |
| Espagne | T | 225157 | 201940 | 217571 | 239077 | 288233 | |
| Portugal | T | 194945 | 203454 | 233275 | 219596 | 236690 | 245633 |
| Turquie | T | 72616 | 85169 | 111471 | 140798 | 118634 | 142628 |
| Chili | T | 91733 | 98292 | 93766 | 101058 | 118128 | 116815 |
| Iran Rép. Islam. | T | 91520 | 108984 | 108465 | 119317 | 103134 | 142747 |
| Grèce | T | 58905 | 49084 | 45950 | 53934 | 54711 | 45947 |
| Ukraine | T | 13539 | 22367 | 29073 | 23177 | 21355 | 42029 |
| Pays-Bas | T | 7935 | 10861 | 12404 | 11597 | 20364 | |
| Allemagne | T | 24678 | 26861 | 28725 | 19819 | 19915 | |
| France | T | 8986 | 8589 | 15942 | 18875 | 15124 | 14014 |
| Pérou | T | 7611 | 8337 | 13810 | 19653 | 13801 | 11059 |
| Egypte | T | 5789 | 6888 | 12604 | 6956 | 11818 | |
| Australie | T | 541 | 1915 | 2498 | 5633 | 7291 | 17200 |
| Sénégal | T | 294 | 6722 | 4716 | 1715 | 5625 | 2936 |
| Belgique | T | 4872 | 5429 | 3244 | 6147 | 5268 | |
| Costa Rica | T | 5235 | 4779 | 4414 | 4704 | 5121 | 4137 |
| Slovenie | T | 2131 | 1288 | 2011 | 6662 | 4870 | |
| Hongrie | T | 3537 | 2378 | 3259 | 3139 | 4294 | |
| Russie | T | 671 | 257 | 1269 | 2041 | 4180 | 5286 |
| Pologne | T | 3251 | 2698 | 3359 | 5051 | 3762 | |
| Serbie | T | 986 | 1006 | 1560 | 3179 | 3548 | 3702 |
| Mexique | T | 3990 | 3301 | 4064 | 4987 | 3534 | 2519 |
| Argentine | T | 2350 | 2143 | 2139 | 2479 | 3176 | 3217 |
| Lettonie | T | 610 | 360 | 864 | 243 | 2274 | |
| Brésil | T | 6362 | 3698 | 2609 | 2458 | 2149 | 2420 |
| Croatie | T | 213 | 521 | 1399 | 1624 | 2006 | |
| Tchèque Rép | T | 4333 | 3250 | 2834 | 1898 | 1973 | 3202 |
| Nouvelle-Zélande | T | 1942 | 1282 | 1819 | 1318 | 1954 | 1659 |
| Bulgarie | T | 713 | 592 | 1733 | 2275 | 1874 | |
| Royaume-Uni | T | 591 | 1342 | 700 | 648 | 1597 | 1047 |
| Côte d'Ivoire | T | 100 | 129 | 127 | 608 | 1440 | 1025 |
| Autriche | T | 904 | 958 | 1657 | 1408 | 1101 | |
| Suisse | T | 2730 | 2717 | 2287 | 1459 | 1053 | 1095 |

**Table 2: Statistiques Export des Pays Déclarants (Pays Partenaire: Le Monde)**
**Produit: 200290, Tomates Nda, Préparées Ou Conservées, Exc Au Vinaigre Ou À L'Acide Acétique**

Séries Annuelles: 2011 - 2016

| Déclarant Pays | unité | Quantity | | | | | |
|---|---|---|---|---|---|---|---|
| | | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 |
| Afrique du Sud | T | 222 | 238 | 796 | 942 | 1004 | 1076 |
| Thaïlande | T | 1900 | 1380 | 1560 | 762 | 987 | 1024 |
| Hong Kong | T | 730 | 1062 | 517 | 677 | 863 | 1022 |
| Lithuanie | T | 392 | 374 | 1235 | 930 | 730 | 870 |
| Singapour | T | 543 | 602 | 663 | 615 | 662 | 624 |
| Guatemala | T | 434 | 453 | 461 | 371 | 454 | 376 |
| Malaisie | T | 326 | 305 | 486 | 381 | 445 | 374 |
| Slovaquie | T | 437 | 261 | 405 | 411 | 422 | |
| Canada | T | 801 | 646 | 476 | 803 | 398 | 1890 |
| Finlande | T | 384 | 555 | 475 | 501 | 384 | |
| Suède | T | 176 | 181 | 186 | 303 | 290 | |
| Inde | T | 465 | 197 | 270 | 671 | 286 | 44 |
| Danemark | T | 188 | 169 | 457 | 337 | 269 | |
| Honduras | T | 236 | 222 | 193 | 243 | 240 | |
| Roumanie | T | 183 | 322 | 269 | 129 | 234 | |
| Maroc | T | 1438 | 1347 | 227 | 492 | 187 | 195 |
| Uruguay | T | 92 | 141 | 180 | 227 | 182 | 194 |
| Luxembourg | T | 72 | 87 | 97 | 108 | 119 | |
| Panama | T | 165 | 105 | 107 | 74 | 114 | 67 |
| Maurice | T | 16 | 68 | 49 | 125 | 105 | 121 |
| Taiwan | T | 45 | 58 | 142 | 164 | 103 | 27 |
| Indonésie | T | 23 | 1 | 8 | 9 | 78 | |
| Corée du Sud | T | 19 | 0 | 200 | 160 | 55 | 10 |
| Kenya | T | 88 | 151 | 194 | 60 | 40 | |
| Colombie | T | 36 | 46 | 67 | 59 | 34 | 56 |
| El Salvador | T | 48 | 90 | 104 | 18 | 27 | 63 |
| Estonie | T | 31 | 22 | 6 | 31 | 22 | 45 |
| Kazakhstan | T | 802 | 361 | 22 | 33 | 21 | 88 |
| Algérie | T | 663 | 39 | 70 | 11 | 19 | |
| Nicaragua | T | 0 | 0 | 0 | 0 | 10 | |
| Japon | T | 80 | 0 | 0 | 2 | 6 | 1 |
| Philippines | T | 89 | 18 | 2 | 55 | 4 | 1 |
| Irlande | T | 3 | 17 | 1 | 12 | 3 | 21 |
| Malte | T | 52 | 14 | 0 | 15 | 0 | |
| Norvège | T | 233 | 176 | 148 | 57 | 0 | 24 |
| Équateur | T | 0 | 10 | 11 | 0 | 0 | 22 |
| Islande | T | 0 | 0 | 0 | 0 | 0 | 0 |
| Azerbaïdjan | T | 710 | 663 | 511 | | | |

**Table 2: Statistiques Export des Pays Déclarants (Pays Partenaire: Le Monde)**
**Produit: 200290, Tomates Nda, Préparées Ou Conservées, Exc Au Vinaigre Ou À L'Acide Acétique**

Séries Annuelles: 2011 - 2016

| Déclarant Pays | unité | Quantity | | | | | |
|---|---|---|---|---|---|---|---|
| | | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 |
| Chypre | T | 2 | 0 | 1 | 3 | 0 | |
| Paraguay | T | 0 | 0 | 0 | 0 | 0 | 0 |
| Nigéria | T | 2093 | 5974 | 14414 | | | |
| Jordanie | T | 3871 | 3211 | 2185 | | | |
| Sri Lanka | T | 0 | 0 | 0 | 9 | 0 | 0 |
| Vénézuela | T | 0 | 0 | 1 | 0 | 0 | 0 |

(Source: GTIS)