

# CODEX ALIMENTARIUS COMMISSION



Food and Agriculture  
Organization of the  
United Nations



World Health  
Organization

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Agenda Item 3

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## JOINT FAO/WHO FOOD STANDARDS PROGRAMME CODEX COMMITTEE ON METHODS OF ANALYSIS AND SAMPLING

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### ENDORSEMENT OF METHODS OF ANALYSIS AND SAMPLING PLANS FOR PROVISIONS IN CODEX STANDARDS

*(Comments of Chile, European Union, Ghana, and Uruguay)*

#### Chile

#### **Contexto:**

Se envían planes de muestreo para provisiones del Codex standard de los comités CCNFSDU, CCSCH, CCAFRICA, CCASIA y Comité de Coordinación de Norteamérica y Sudoeste pacífico.

#### **Posición país:**

En relación a las propuestas del documento, se sugiere armonizar la descripción de los principios analíticos de los métodos:

## APPENDIX I

## CODEX COMMITTEE ON NUTRITION AND FOODS FOR SPECIAL DIETARY USES (CCNFSDU43)

*Methods of analysis for provisions in the Standard for Infant Formula and Formulas for Special Medical Purposes Intended for Infants (CXS 72-1981)*

All additions are shown in **bold underlined** font.

Commodity	Provision	Method	Principle	Type	Comentarios de Chile
Infant Formula	<b>Vitamin B12</b>	AOAC 2014.02	<del>LC-UV</del> <b>Liquid chromatography (UV detector)</b>	III	Describir correctamente el principio
	Total amino acids (excluding taurine and tryptophan) For use according to Section 3.1.3 (a) footnotes 3 and 4 of CXS 72-1981	AOAC 2018.06 / ISO 4214   IDF 254 /AACC 07-50.01	<del>UHPLC-UV</del> <b>Ultra High Performance Liquid Chromatography (UV detector)</b>	II	Describir correctamente el principio
	<b>Tryptophan</b> For use according to Section 3.1.3 (a) footnotes 3 and 4 of CXS 72-1981	AOAC 2017.03	<del>HPLC</del> <b>Liquid chromatography (reversed phase-Fluorescence detector)</b>	II	Describir correctamente el principio

## APPENDIX II

## CODEX COMMITTEE ON SPICES AND CULINARY HERBS (CCSCH5)

## Methods of analysis for provisions in the Standard for Dried Roots, Rhizomes and Bulbs – Dried or Dehydrated Ginger (CXS 343-2021)

Commodity	Parameter–Provision	Method	Principle	Type <sup>1</sup>	Comentarios de Chile
<i>Dried Roots, Rhizomes and Bulbs – Dried or Dehydrated Ginger</i>	Moisture	ISO 939	Distillation	I	Sin comentarios
<i>Dried Roots, Rhizomes and Bulbs – Dried or Dehydrated Ginger</i>	Total Ash on dry basis	ISO 939 and ISO 928	Distillation and Gravimetry	I	Sin comentarios
<i>Dried Roots, Rhizomes and Bulbs – Dried or Dehydrated Ginger</i>	Acid Insoluble Ash on dry basis	ISO 939 and ISO 930	Distillation and Gravimetry	I	Sin comentarios
<i>Dried Roots, Rhizomes and Bulbs – Dried or Dehydrated Ginger</i>	Volatile Oil on dry basis	ISO 939 and ISO 6571	Distillation followed by Volumetry	I	Sin comentarios
<i>Dried Roots, Rhizomes and Bulbs – Dried or Dehydrated Ginger</i>	Extraneous Matter	ISO 927	<del>Visual Examination followed by Gravimetry</del> Gravimetry (Visual examination)	I	Mejorar principio del método
<i>Dried Roots, Rhizomes and Bulbs – Dried or Dehydrated Ginger</i>	Foreign Matter	ISO 927	<del>Visual Examination followed by Gravimetry</del> Gravimetry (Visual examination)	I	Mejorar principio del método
<i>Dried Roots, Rhizomes and Bulbs – Dried or Dehydrated Ginger</i>	Insect Damage	Method V-8 Spices, Condiments, Flavours and Crude Drugs (Macroanalytical Procedure Manual) MPM: V-8. Spices	Visual Examination	IV	Sin comentarios
<i>Dried Roots, Rhizomes and Bulbs – Dried or Dehydrated Ginger</i>	Whole dead insect	ISO 927	Visual examination	I	Sin comentarios
<i>Dried Roots, Rhizomes and Bulbs – Dried or Dehydrated Ginger</i>	Mammalian/ Other Excreta	MPM V-8 Spices, Condiments, Flavours and Crude Drugs (Macroanalytical Procedure Manual) MPM: V-8. Spices (For whole)	<del>Visual Examination followed by Gravimetry</del> Gravimetry (Visual examination)	IV	Mejorar principio del método
<i>Dried Roots, Rhizomes and Bulbs – Dried or Dehydrated Ginger</i>	Mould visible	Method V-8 Spices, Condiments, Flavours and Crude Drugs (Macroanalytical Procedure Manual) MPM: V-8. Spices	Visual examination	IV	Sin comentarios
<i>Dried Roots, Rhizomes and Bulbs – Dried or Dehydrated Ginger</i>	Live Insect	ISO 927 AOAC 960.51	Visual Examination Visual Examination	IV IV	Sin comentarios
<i>Dried Roots, Rhizomes and Bulbs – Dried or Dehydrated Ginger</i>	Calcium (as oxide) on dry basis	ISO 1003, Annex A	<del>Chemical reaction followed by gravimetry</del> Gravimetry (Chemical reaction)	IV	Sin comentarios
<i>Dried Roots, Rhizomes and Bulbs – Dried or Dehydrated Ginger</i>	<del>SO<sub>2</sub></del> – Sulfur dioxide	AOAC 963.20	Colorimeter	II	Cambiar el nombre de la provisión al termino y no formula química

<sup>1</sup> According to the definition of “types of method of analysis” as per Codex Procedural Manual Section II

**Methods of analysis for provisions in the Standard for Dried Floral Parts-Cloves (CXS 344-2021)**

Commodity	Parameter-Provision	Method	Principle	Type1	Comentarios de Chile
Dried Floral Parts-Cloves	Moisture	ASTA 2.0	Distillation	I	Sin comentarios
Dried Floral Parts-Cloves	Volatile oil	ISO 6571	Distillation Volumetry	I	Sin comentarios
Dried Floral Parts-Cloves	Total ash (dry basis)	ISO 928	Gravimetry <del>(incineration)</del>	I	Describir mejor el principio
Dried Floral Parts-Cloves	Acid Insoluble Ash	ISO 930	Gravimetry <del>(incineration)</del>	I	Describir mejor el principio
Dried Floral Parts-Cloves	Extraneous matter	ISO 927	<del>Visual</del> Gravimetry (Visual Examination)	I	Describir mejor el principio. Se entiende como materia extraña como: cualquier sustancia en los alimentos no presente en forma característica, es decir, que proviene del exterior, ejemplo, vidrio, metal, restos de animales o insectos, etc.
Dried Floral Parts-Cloves	Foreign matter	ISO 927	<del>Visual</del> Gravimetry (Visual Examination)	I	Describir mejor el principio. Se entiende como materia foránea aquella que no es deseada pero puede estar presente, a consecuencia del mismo alimento. ejemplo: tallos, espinas
Dried Floral Parts-Cloves	Insect damage	ISO 927	Visual Examination	IV	Es correcto el daño por insectos
Dried Floral Parts-Cloves	Insect damage	Method V-8 Spices, Condiments, Flavors and Crude Drugs	Visual Examination	IV	Ok
Dried Floral Parts-Cloves	<del>Insects/Excreta/Insect fragments</del>	<del>ISO 927</del>	<del>Visual Examination</del>	<del>IV</del>	Esto correspondería a materia extraña especificada y ya esta como tipo I en la provisión de materia extraña
Dried Floral Parts-Cloves	Crude fibre	ISO 5498	Gravimetry ( <del>extraction and filtration</del> )	I	Describir mejor el principio
Dried Floral Parts-Cloves	Mould visible	Method V-8 Spices, Condiments, Flavours and Crude Drugs	Visual Examination	IV	Ok
Dried Floral Parts-Cloves	<del>Insects/Excreta/Insect fragments</del>	<del>ISO 927</del>	<del>Visual Examination</del>	<del>IV</del>	Esto correspondería a materia extraña especificada y ya está como tipo I en la provisión de materia extraña
Dried Floral Parts-Cloves	Mammalian or/and Other excreta	Method V-8 Spices, Condiments, Flavours and Crude Drugs	Visual Examination	IV	Sin comentarios

**Methods of analysis for provisions in the Standard for Dried Leaves - Dried Basil (CXS 345-2021)**

<b>Commodity</b>	<b>Parameter – Provision</b>	<b>Method</b>	<b>Principle</b>	<b>Type</b>	<b>Comentarios de Chile</b>
Dried Leaves - Dried Basil	Moisture	ISO 939	Distillation Volumetry	I	Describir mejor el principio
Dried Leaves - Dried Basil	Total Ash	ISO 928	Gravimetry <b>(incineration)</b>	I	Describir mejor el principio
Dried Leaves - Dried Basil	Acid Insoluble Ash	ISO 928 and ISO 930	Gravimetry <b>(incineration)</b>	I	Describir mejor el principio
Dried Leaves - Dried Basil	Volatile Oil	ISO 6571	<del>Distillation</del> hydrodistillation Volumetry	I	Describir mejor el principio
Dried Leaves - Dried Basil	Extraneous Matter	ISO 927	<del>Visual</del> Gravimetry (Visual Examination)	I	Describir mejor el principio. Se entiende como materia extraña como: cualquier sustancia en los alimentos no presente en forma característica, es decir, que proviene del exterior, ejemplo, vidrio, metal, restos de animales o insectos, etc.
Dried Leaves - Dried Basil	Foreign Matter	ISO 927	<del>Visual</del> Gravimetry (Visual Examination)	I	Describir mejor el principio. Se entiende como materia foránea aquella que no es deseada pero puede estar presente, a consecuencia del mismo alimento. ejemplo: tallos, espinas
Dried Leaves - Dried Basil	Insect Damage	Method V-8 Spices, Condiments, Flavours and Crude Drugs (Macroanalytical Procedure Manual, FDA Technical Bulletin Number 5)	Visual Examination	IV	Ok
Dried Leaves - Dried Basil	Insects/Excreta/Insect Fragments	Method appropriate for particular spice from AOAC Chapter 16, subchapter 14	Visual Examination	IV	Ok pero hay que tener en consideración que corresponde a materia extraña.
Dried Leaves - Dried Basil	Mould damage	Method V-8 Spices, Condiments, Flavours and Crude Drugs (Macroanalytical Procedure Manual, FDA Technical Bulletin Number 5)	Visual examination (for whole)	IV	Ok pero hay que tener en consideración que corresponde a materia extraña.
Dried Leaves - Dried Basil	Mammalian Excreta, And Other Excreta	Method V-8 Spices, Condiments, Flavours and Crude Drugs (Macroanalytical Procedure Manual, USFDA, Technical Bulletin V.39 B) (For whole)	Visual Examination	I	Ok pero hay que tener en consideración que corresponde a materia extraña. Y el método ISO 927 a esta como tipo I.

## CODEX COMMITTEE ON SPICES AND CULINARY HERBS (CCSCH6)

## Methods of analysis for provisions in the Standard for Dried Floral Parts – Saffron (CXS 351-2021)

Commodity	Provision	Method	Principle	Type	Comentarios de Chile
<i>Dried Floral Parts – Saffron</i>	Moisture	ISO 3632-2 (Clause 7)	Gravimetry	I	Indicar la cláusula del método ISO 3632-2
<i>Dried Floral Parts – Saffron</i>	Total Ash	ISO 3632-2 (Clause 12) and ISO 928	Gravimetry	I	Indicar la cláusula del método ISO 3632-2
<i>Dried Floral Parts – Saffron</i>	Acid Insoluble Ash	ISO 3632-2 (Clause 13) and ISO 930	Gravimetry	I	Indicar la cláusula del método ISO 3632-2
<i>Dried Floral Parts – Saffron</i>	Soluble extract in cold water	ISO 3632-2 (Clause 11) and ISO 941	Extraction	I	Indicar la cláusula del método ISO 3632-2
<i>Dried Floral Parts – Saffron</i>	Taste strength (expressed as picrocrocín) $A_{1cm}$ 1%257 nm	ISO 3632-2 (Clause 14)	<del>Absorbance</del> –(Spectrometry (UV-Vis))	IV	Describir mejor el principio del método
<i>Dried Floral Parts – Saffron</i>	Aroma strength (expressed as safranal) $A_{1cm}$ 1%330 nm	ISO 3632-2 (Clause 14)	<del>Absorbance</del> –(Spectrometry (UV-Vis))	IV	Describir mejor el principio del método
<i>Dried Floral Parts – Saffron</i>	Coloring strength (expressed as crocín) $A_{1cm}$ 1%440 nm	ISO 3632-2 (Clause 15 &16)	<del>Absorbance</del> –(Spectrometry (UV-Vis))	IV	Describir mejor el principio del método
<i>Dried Floral Parts – Saffron</i>	Extraneous Matter	ISO 3632-2	<del>Visual Examination followed by Gravimetry</del> Gravimetry (Visual Examination)	I	Describir mejor el principio del método
<i>Dried Floral Parts – Saffron</i>	Foreign Matter	ISO 3632-2	<del>Visual Examination followed by Gravimetry</del> Gravimetry (Visual Examination)	I	Describir mejor el principio del método
<i>Dried Floral Parts – Saffron</i>	Insect Damage	ISO 927	<del>Visual Examination followed by Gravimetry</del> (Visual Examination)	I	Describir mejor el principio del método
<i>Dried Floral Parts – Saffron</i>	Whole dead Insects /Insect Fragments	ISO 927	Visual Examination	+ II	Hay una contradicción pues ya hay un método tipo I para Materia extraña, si se desea incluir debe ser tipo II
<i>Dried Floral Parts – Saffron</i>	Whole dead Insects /Insect Fragments	Macro analytical Procedure Manual, USFDA, Technical Bulletin V.39 B (For whole)	<del>Visual Examination followed by Gravimetry</del> Gravimetry (Visual Examination)	III	Se propone incluir como tipo III
<i>Dried Floral Parts – Saffron</i>	Visible mould	Method V-8 Spices, Condiments, Flavors and Crude Drugs (Macro analytical Procedure Manual, FDA Technical Bulletin Number 5) <a href="http://www.fda.gov/Food/FoodScienceResearch/Laboratory-Methods/ucm084394.htm#v-32">http://www.fda.gov/Food/FoodScienceResearch/Laboratory-Methods/ucm084394.htm#v-32</a>	<del>Visual Examination followed by Gravimetry</del> Gravimetry (Visual Examination)	I	Describir mejor el principio del método. El link no es ta disponible ( <b>Page Not Found</b> )
<i>Dried Floral Parts – Saffron</i>	Mammalian Excreta	Macro analytical Procedure Manual, USFDA, Technical Bulletin V.39 B (For whole)	<del>Visual Examination followed by Gravimetry</del> Gravimetry (Visual Examination)	I	Describir mejor el principio del método. Corresponde a materia Extraña específica excretas. Incluir Link. <a href="https://www.fda.gov/food/laboratory-methods-food/mpm-v-8-spices-condiments-flavors-and-crude-drugs#v">https://www.fda.gov/food/laboratory-methods-food/mpm-v-8-spices-condiments-flavors-and-crude-drugs#v</a>
<i>Dried Floral Parts – Saffron</i>	Other Excreta	AOAC 993.27 (For Ground)	Enzymatic Detection Method	IV	Ok
<i>Dried Floral Parts – Saffron</i>	Rodent filth	ISO 927	<del>Gravimetry</del> (Visual Examination)	I	Describir mejor el principio del método

### European Union

The European Union (EU) welcomes the initiative from CCCF16 to align sampling plans for flour meal, semolina and flakes derived from maize and cereal-based foods for infant and young children with the DON and fumonisins sampling plans in the same commodities.

The EU wishes to make the following comments regarding the method performance criteria for aflatoxins in cereals:

Aflatoxin B1, B2, G1 and G2 are analysed with the same method of analysis and aflatoxin B1 is not the most challenging compound for achieving a reasonably low limit of quantification (LOQ). Applying the criteria approach for methods which use a 'sum of components' as described in the CCMAS Information Document, for unequally weighted components, results in limit of detection (LOD) and LOQ values that are very low and, therefore, difficult to attain with collaboratively tested methods currently available.

The EU is of the opinion that the proposed solution to allow LOD and LOQ for AFB2, AFG1 and AFG2 assuming the LOD and LOQ values of AFB1 in case that those parameters cannot be validated (marked by an asterisk in Table 3) is acceptable in principle. However, the EU would favour an amendment of the CCMAS Information Document to account for situations where the components included in the ML definition are not present in constant ratios and where the inclusion of weighing factors of the individual components results in LOD/LOQ values that cannot be validated. For such cases the EU proposes  $0.5 \cdot ML/n$  as the single criterion for the LOQ of the individual components, with n being the number of components included in the ML definition.

### Ghana

**POSITION:** Ghana proposes the inclusion of AOAC (935.47 and 937.09b) methods in this determination as a type III method.

**RATIONALE:** This method is used in Ghana for the determination of chloride.

### Uruguay

Uruguay congratulates the work well done by the GTE that addresses the need to review and updated CXS 234 and thanks the countries and SDOs for leading or/and join in the work on the GTE.

We suggest the following recommendation for being consider by the physical meeting of Endorsement Working Group and under Agenda (Endorsement of methods of analysis and sampling):

Product	Provision	Method	Principle	Type	Comments
CX/MAS 23/42/3 Endorsement of Methods of Analysis Provisions and Sampling Plans in Codex Standards / Spices and culinary herbs					
Dried or dehydrated Ginger	SO2	ISO 5522	Titrimetry	II	It is a method for more than one matrix. We suggest same method as raisins