TO Codex Contact Points  
Contact Points of international organizations having observer status with Codex

FROM Secretariat,  
Codex Alimentarius Commission,  
Joint FAO/WHO Food Standards Programme

SUBJECT Request for comments at step 3 on the proposed draft standard for quinoa

DEADLINE 28 February 2017

COMMENTS To:  
Codex Contact Point of the United State of America  
Food Safety and Inspection Service, US  
Department of Agriculture  
E-mail: uscodex@fsis.usda.gov  
Copy to:  
codex.bolivia@ibnorca.org;  
normaquinua@ciq.org.bo;  
henry.kim@fda.hhs.gov

Copy to:  
Secretariat  
Joint FAO/WHO Food Standards Programme  
Viale delle Terme di Caracalla  
00153 Rome, Italy  
E-mail: codex@fao.org

BACKGROUND

1. The 38th session of the Codex Alimentarius Commission1 (CAC38) approved a new work on a standard for quinoa. The Commission agreed to establish an electronic working group (eWG), chaired by Bolivia and co–chaired by the United States, in order to prepare a draft standard for quinoa for distribution for comments at Step 3. The eWG would work in English and Spanish.

2. The proposed draft Standard is attached as Annex I. The report of the eWG is attached as Annex II. Guidelines for comments is provided in Annex III. The list of participants is given in Annex IV.

REQUEST FOR COMMENTS

3. Codex members and observers are invited to send their comments at Step 3 on the proposed draft Standard for Quinoa as indicated above.

4. Comments should be submitted through the Codex Contact Point or recognized international organizations having granted observer status with the Codex Alimentarius Commission. Comments should be formulated in accordance with the relevant general guidelines and presented in a Word file for easy analysis and compilation.

5. Codex members and observers are also invited to consider the questions (2) and the recommendation to the Committee on Contaminants in Foods to consider the application of the maximum levels for cadmium and lead for cereal grains in the General Standard for Contaminants and Toxins in Food and Feed (CODEX STAN 193-1995) to quinoa grains.

1 REP15/CAC para 93
PROPOSED DRAFT STANDARD FOR QUINOA

(At Step 3)

1 Scope

1.1 This standard applies to quinoa (Chenopodium quinoa Willd.) as defined in Section 2, suitable for human consumption, packaged or in bulk.

1.2 It does not apply to quinoa used as seeds for propagation, products derived from quinoa (e.g., flour, flakes).

2 Description

2.1 Definition of the Product

Quinoa is the grain obtained for Chenopodium quinoa Willd. Contains all essential amino acids and it is gluten free.

2.2 Processed Quinoa

Processed quinoa are quinoa grain that have been subjected to cleaning (e.g., eliminating impurities, removing saponin) and sorting (e.g. by color and size), with the purpose of obtaining a product safe and suitable for human consumption.

3 Quality Factors

3.1 Quality factors - general

3.1.1 Quinoa shall be safe and suitable for human consumption.

3.1.2 Quinoa shall be free from abnormal flavours and odours, and living insects and mites.

3.1.3 Quinoa color should be a characteristic of every variety, for example white (pearly, pale, grayish), black, red, golden, brown, yellow, orange.

3.2 Quality factors - specific

3.2.1 Moisture content. 13.5 % m/m maximum.

3.2.2 Extraneous matter

3.2.2.1 Extraneous matter is all organic and inorganic materials other than quinoa.

3.2.2.2 Organic extraneous matter includes husks, stem parts, impurities of animal origin, other seed species, and leaves. 0.1% m/m maximum.

3.2.2.2 Inorganic extraneous matter includes stones, plastics. 0.1% m/m maximum. Metal and glass almost extinguish.

3.2.3 Defect

3.2.3.1 Definition of defect

3.2.3.1.1 Broken Grains are pieces of grains whose sizes are less than three quarters of the whole grain, resulting from mechanical action.
3.2.3.1.2 Damaged Grains are grains that differ from others in their form or structure, because they have been altered by physical, chemical and biological agents.

3.2.3.1.3 Germinated Grains are grains that show initial development of the radicle (embryo) after processes.

3.2.3.1.4 Coated Grains are grains that retain the shell (perigone) or part of the flower attached to grain, before or after processes.

3.2.3.1.5 Immature Grains are grains that have not reached physiological maturity, characterized by its small size and greenish coloration.

3.2.3.2 Tolerances

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<thead>
<tr>
<th>Requirements</th>
<th>Limit [%]</th>
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<tbody>
<tr>
<td>Broken Grains</td>
<td>3%</td>
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<tr>
<td>Damaged grains</td>
<td>2.5%</td>
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<tr>
<td>Germinated Grains</td>
<td>0.5%</td>
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<tr>
<td>Covered Grains</td>
<td>0.3%</td>
</tr>
<tr>
<td>Immature Grains</td>
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3.2.4 Protein Content

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<td>Protein</td>
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3.2.5 Saponin Content

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<th>Requirements</th>
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<td>Saponin</td>
<td>≤0.12%</td>
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3.3 Size

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<tr>
<td>Extra Large</td>
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</tr>
<tr>
<td>Large</td>
<td>&gt;2 - 1.7</td>
</tr>
<tr>
<td>Medium</td>
<td>&gt;1.7 - 1.4</td>
</tr>
<tr>
<td>Small</td>
<td>≤1.4</td>
</tr>
</tbody>
</table>

4 Food additives

The use of additives is not permitted.

5 Contaminants

5.1 The products covered by this standard shall comply with the maximum levels of the General Standard for Contaminants and Toxins in Food and Feed (CODEX STAN 193-1995).

5.2 Pesticide residues
The products covered by this standard shall comply with the maximum residue limits for pesticides established by the Codex Alimentarius Commission.

6 Hygiene

6.1 It is recommended that the products covered by the provisions of this standard be prepared and handled in accordance with the appropriate sections of the General Principles of Food Hygiene (CAC/RCP 1-1969) and other relevant Codex texts such as codes of hygienic practice and codes of practice.

6.2 The products should comply with any microbiological criteria established in accordance with the Principles and Guidelines for the Establishment and Application of Microbiological Criteria related to Foods (CAC/GL 21-1997).

7 Packaging

7.1 Quinoa shall be packaged in containers which will safeguard the hygienic, nutritional, technological, and organoleptic qualities of the product.

7.2 The packing must be safe and suitable for the intended use. Toxic materials, unpleasant odors or flavors should not be transfer to the product. All the materials used must be clean, new and of an adequate quality so as not to cause damage to the product.

8 Labelling

The products covered by this standard shall be labelled in accordance with the General Standard for the Labelling of Pre-packaged Foods (CODEX STAN 1-1985):

8.1 Name of the Product

The product name that must appear on the label shall be “quinoa” or “processed quinoa”. Optional information, such as product origin, quality, color, etc., may be included.

8.2 Non-retail containers

Information for non-retail containers shall be given either on the container or in accompanying documents, except that the name of the product, lot identification, and the name and address of the manufacturer, packer, distributor or importer, as well as storage instructions, shall appear on the container. However, lot identification, and the name and address of the manufacturer, packer, distributor or importer may be replaced by an identification mark, provided that such a mark is clearly identifiable with the accompanying documents.

9 Methods of analysis and sampling

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<th>Available</th>
<th>Method</th>
<th>Principle</th>
<th>Type</th>
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<tr>
<td>Moisture content</td>
<td>ISO 712</td>
<td>Gravimetric</td>
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</tr>
<tr>
<td>Protein Content</td>
<td>ISO 1871</td>
<td>Titrimetry, Kjeldahl</td>
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</table>

2 The listing of methods of analysis and sampling will be removed when the standard is adopted by CAC and included in CODEX STAN 234-1999.
ELECTRONIC WORKING GROUP REPORT FOR THE QUINOA STANDARD DRAFT

1. A total of 20 member countries, one member organization and four observer organizations registered to participate in the electronic working group (eWG). The list of participants is given in Annex IV.

2. In May 2016, the first draft was sent to the members of the eWG for a first round of comments. Eight member countries, one member organization and two observer organizations submitted comments on the draft.

3. The Chair and Vice-Chair reviewed the comments submitted and modified the draft as appropriate.

4. In September 2016, the second draft was sent to the members of the eWG for another round of comments. Seven member countries and two observer organizations submitted comments on the second draft.

5. The Chair and Vice-Chair reviewed the comments submitted and modified the draft as appropriate.

6. In addition, two specific consultations were made to members of the eWG.

7. In December 2016, the summary report of the eWG and the proposed draft standard were submitted to the Codex Secretariat for circulation for comments at Step 3 to Codex members and observers.

Reviews and modifications

8. Comments received from members of the eWG were about the scope, definitions, test methods, adaptation to other standards developed by the Committee on Cereals, Pulses and Legumes (CCCPL) and structure (format).

9. Section 1. The scope was revised to make emphasis that the standard does not apply to quinoa seeds or derivative products like quinoa flour or quinoa flakes.

10. Section 2.2. The definition does not include a reference to “it contains all essential aminoacids and is gluten-free” as these qualities are the characteristics that make quinoa different from other grains and this is based on scientific evidence.

11. Section 2.3. The wording was improved for better clarity and a description of the process that quinoa undergoes was included.

12. Section 3. The section takes into account the format and provisions (when relevant) in the standards developed by CCCPL and the provisions in the Procedural Manual.

13. Section 3.1.3. The section includes colors of quinoa characteristic from each region.

14. Section 3.2.1. The humidity content level was adapted in accordance to the requirements of other grains.

15. Section 3.2.2. The term “extraneous matter” was clarified to facilitate the application of the provision.

16. Section 3.2.4. The level of protein content was reduced taking into account other Codex standards addressing similar provisions.

17. Section 3.2.5. This section was included to set up a maximum permissible limit value of saponin in quinoa. The objective of this level is to guarantee the organoleptic quality of the product.

18. Section 3.2.6. The size “Extra Large size” was retained as this is an international standard and therefore should be inclusive to worldwide marketing practices.

19. Section 7. The wording was improved for clarity.
20. Section 8.1. The section includes various denominations for the product to cover different marking / labeling practices worldwide.

21. Section 9. The section includes a list of methods of analysis relevant for the application of the provisions in the standard.

Consultations on two questions

22. The Chair and Vice Chair of the eWG conducted two consultations within the eWG as described below:

23. First question - Enlargement of the scope of the standard to cover "whole quinoa" with saponin

The United States of America commented that "Whole Quinoa" with saponin is also traded internationally, and the importer then further processes the "Whole Quinoa" to remove saponin. The resulting "Processed Quinoa" without saponin is used for human food and saponin is used for industrial purposes. The United States recognized that the terms of reference of the standard is for "Processed Quinoa" without saponin.

Therefore, the United States recommended that the eWG recommends the Commission to broaden the scope of the standard to include "Whole Quinoa" with saponin.

Replies from members of the eWG

Three member countries and 1 observer organization commented on this question. They support retention of the current scope of the standard.

24. Second Question

The United States of America commented that the maximum levels (MLs) for cadmium (0.1 mg/L) and lead (0.2 mg/L) in cereal grains listed in the General Standard for Contaminants and Toxins in Food and Feed (GSCTFF) (CODEX STAN 193-1995) notes that these MLs do not apply to Quinoa.

Therefore, the United States suggested that the eWG recommends that this matter be considered by the Committee on Contaminants in Foods (CCCF) for guidance to determine whether the MLs for cadmium and lead can or cannot apply to Quinoa so that the note can be removed and the MLs be extended to cover quinoa grains.

Replies from members of the eWG

25. Three member countries and 2 observer organizations commented on this question. They support the recommendation.
GENERAL GUIDELINES FOR COMMENTS

In order to facilitate the collection of comments and to prepare a useful document with all of them, Members and Observers are kindly requested to submit comments under the following headings:

(I) General comments

(ii) Specific comments

In specific comments, a reference to the section / paragraph of the document in question should be included.

Members and observers are requested, when proposing amendments to specific paragraphs, to accompany their proposed amendment with the appropriate technical basis. Additional texts should be underlined / bold and deletions crossed out.

In order to facilitate the work of the Secretariats, we kindly ask you to avoid texts with colors or shading, nor to use the change control, since the documents are printed in black and white, and the marks usually disappear when copying and pasting the comments in the compiled document.

In order to reduce the volume of translations and save paper, members and observers are requested to avoid reproducing the full document, but only those parts of the text in which changes and / or amendments are proposed.
### List of participants

#### CHAIR
Mr. Edgar Soliz Morales  
[edgar.soliz@ciq.org.bo](mailto:edgar.soliz@ciq.org.bo)

#### VICE CHAIR
Dr. Henry Kim  
[Henry.Kim@fda.hhs.gov](mailto:Henry.Kim@fda.hhs.gov)

<table>
<thead>
<tr>
<th>Country</th>
<th>Name</th>
<th>Position/Institution</th>
<th>Email</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>AUSTRALIA</strong></td>
<td>Karina Baker</td>
<td>Email: <a href="mailto:codex-contact@agriculture.gov.au">codex-contact@agriculture.gov.au</a></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Gustavo Ventura</td>
<td>Agricultural engineer</td>
<td><a href="mailto:gventura@magyp.gob.ar">gventura@magyp.gob.ar</a></td>
</tr>
<tr>
<td><strong>ARGENTINA</strong></td>
<td>Sandra Ucha</td>
<td>Biologist, National Food Institute Administration of Drugs, Food and Medical Technology (ANMAT)</td>
<td>[<a href="mailto:codex@acfs.go.th">codex@acfs.go.th</a>; <a href="mailto:acfs.chu@gmail.com">acfs.chu@gmail.com</a>](<a href="mailto:codex@acfs.go.th">mailto:codex@acfs.go.th</a>; <a href="mailto:acfs.chu@gmail.com">acfs.chu@gmail.com</a>)</td>
</tr>
<tr>
<td></td>
<td>Israel Vaca</td>
<td>Director of Food Safety, Ministry of Agriculture, Livestock, Aquaculture and Fisheries (MAGAP) - AGROCALIDAD</td>
<td><a href="mailto:israel.vaca@agrocalidad.gob.ec">israel.vaca@agrocalidad.gob.ec</a></td>
</tr>
<tr>
<td><strong>BRAZIL</strong></td>
<td>Afranio Alves de Jesús</td>
<td>Secretariat of Animal Health and Plant Protection - SDA</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Valeria Espinoza</td>
<td>Bolivian Institution for Quality and Standardization (IBNORCA)</td>
<td><a href="mailto:valeria.esponiza@ibnorca.org">valeria.esponiza@ibnorca.org</a></td>
</tr>
<tr>
<td></td>
<td>Thania Huayllani</td>
<td>SINDAN ORGANIC SRL</td>
<td><a href="mailto:thania@sindanorganic.com.bo">thania@sindanorganic.com.bo</a></td>
</tr>
<tr>
<td></td>
<td>Lizzie Lopez</td>
<td>Andean Valley S.A. (AVSA)</td>
<td><a href="mailto:llopez@andeanvalley.com">llopez@andeanvalley.com</a></td>
</tr>
<tr>
<td><strong>BOLIVIA</strong></td>
<td>Willy Salinas</td>
<td>Ministry of Foreign Affairs (MRE)</td>
<td>[<a href="mailto:wsalinas@ree.gob.bo">wsalinas@ree.gob.bo</a>; <a href="mailto:willy.salinas@gmail.com">willy.salinas@gmail.com</a>](<a href="mailto:wsalinas@ree.gob.bo">mailto:wsalinas@ree.gob.bo</a>; <a href="mailto:willy.salinas@gmail.com">willy.salinas@gmail.com</a>)</td>
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<tr>
<td></td>
<td>Niaz ali Sepahvand</td>
<td>Seed and plant improvement institute</td>
<td><a href="mailto:niazsepahvand@gmail.com">niazsepahvand@gmail.com</a></td>
</tr>
<tr>
<td><strong>CHILE</strong></td>
<td>Diego Varela</td>
<td>Chilean Agency for Food Safety and Quality - ACHIPIA</td>
<td><a href="mailto:diesgo.varela@achipia.gob.cl">diesgo.varela@achipia.gob.cl</a></td>
</tr>
<tr>
<td><strong>GREECE</strong></td>
<td>Danai Papanastasiou</td>
<td>Scientific Officer</td>
<td><a href="mailto:dpapanastasiou@efet.gr">dpapanastasiou@efet.gr</a></td>
</tr>
<tr>
<td><strong>EUROPEAN UNION</strong></td>
<td>Bernadette Klink-Khachan</td>
<td>Email: <a href="mailto:Sante-Codex@ec.europa.eu">Sante-Codex@ec.europa.eu</a></td>
<td></td>
</tr>
<tr>
<td><strong>ECUADOR</strong></td>
<td>Wladimir Morales</td>
<td>Food Safety Analyst, Ministry of Agriculture, Livestock, Aquaculture and Fisheries (MAGAP) - AGROCALIDAD</td>
<td><a href="mailto:washington.morales@agrocalidad.gob.ec">washington.morales@agrocalidad.gob.ec</a></td>
</tr>
<tr>
<td><strong>UNITED STATES</strong></td>
<td>Kenneth Lowery</td>
<td>International Issues Analyst, U.S. Codex Office</td>
<td><a href="mailto:Kenneth.lowery@fsis.usda.gov">Kenneth.lowery@fsis.usda.gov</a></td>
</tr>
<tr>
<td></td>
<td>Patrick McCluskey</td>
<td>Chief, Policies Procedures and Market Analysis Branch, United States Department of Agriculture</td>
<td><a href="mailto:Patrick.j.McCluskey@usda.gov">Patrick.j.McCluskey@usda.gov</a></td>
</tr>
<tr>
<td><strong>INDIA</strong></td>
<td>Dr. SC Khurana</td>
<td>Consultant (Standards), Food Safety and Standards Authority of India (FSSAI)</td>
<td><a href="mailto:khurana183@gmail.com">khurana183@gmail.com</a></td>
</tr>
<tr>
<td><strong>IRAN</strong></td>
<td>Farnaz Dastmalchi</td>
<td>Standard Research Institute (ISIRI) / Faculty of Food Industry and Agriculture</td>
<td><a href="mailto:farmazdastmalchi@yahoo.com">farmazdastmalchi@yahoo.com</a></td>
</tr>
<tr>
<td></td>
<td>Niaz ali Sepahvand</td>
<td>Seed and plant improvement institute</td>
<td><a href="mailto:niazsepahvand@gmail.com">niazsepahvand@gmail.com</a></td>
</tr>
<tr>
<td><strong>MALAYSIA</strong></td>
<td>Ruhana Abdul Latif</td>
<td></td>
<td><a href="mailto:ruhana@moh.gov.my">ruhana@moh.gov.my</a></td>
</tr>
</tbody>
</table>
MEXICO
Gabriela Alejandra Jiménez Rodríguez
Deputy Director of Standards
General Directorate for the Promotion of Agriculture Sub-secretariat from agriculture
Email: gjimenez dgvdt@sagarpa.gob.mx

PERU
Susan Karin Dioses Córdova
Specialist in Agro-Food Safety
National Agricultural Health Service - SENASA
Email: sdioses@senasa.gob.pe

Gloria Castillo
Instituto Nacional de Calidad - INACAL
Email: gcastillo@inacal.gob.pe

Claudia Solano
Commission for the Promotion of Peru for Export and Tourism - PROMPERÚ
Email: csolano@promperu.gob.pe

POLAND
Magdalena Kowalska
Email: kodeks@ijhars.gov.pl

REPUBLIC OF KOREA
Kim Hyun-jin
Assistant Director
Agro-Livestock and Fishery products policy division, Ministry of Food and Drug Safety (MFDS)
Email: brightzmun@korea.kr

Park Ji-min
Codex researcher
Ministry of Food and Drug Safety (MFDS)
Email: ppuny83@korea.kr

SENEGAL
Cheikh Fall Alassane
National Coordinator
Ministry of Agriculture and Rural Equipment
Email: senegal_grtkf@yahoo.fr

SWITZERLAND
Franziska Franchini
Scientific Officer
Federal Food Safety and Veterinary Office FSVO
Email: franziska.franchini@blv.admin.ch

THAILAND
Usa Bamrungbhuet
Director of the Office of Standard Development
National Bureau of Agricultural Commodity and Food Standards
Email: codex@acfs.go.th

Chutima Sornsumram
Standard Officer National
National Bureau of Agricultural Commodity and Food Standards
Email: codex@acfs.go.th; acfs.chu@gmail.com

CODEX OBSERVERS.
Katherine A. Carroll
National Health Federation
Email: katacarroll@gmail.com

Dr. Anne Bridges
Technical Director
AACC International
Email: annebridges001@earthlink.net

Marcelo Aguilar
General Secretariat – CAN
Comunidad Andina
Email: maguilar@comunidadandina.org

Susanne Meyer
Secretary General
European Vegetable Protein Federation
Email: smeyer@agep.eu