

JOINT FAO/WHO FOOD STANDARDS PROGRAMME
CODEX COMMITTEE ON FOOD HYGIENE
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Comments on the

PROPOSED DRAFT GUIDELINES FOR CONTROL OF SPECIFIC ZONOTIC PARASITES IN MEAT: *TRICHINELLA SPIRALIS* AND *CYSTICERCUS BOVIS* (At Step 3)

Comments submitted by:

Argentina, Colombia, Costa Rica, Mexico, Nicaragua, Norway, St. Lucia and United States of America

ARGENTINA

Argentina appreciates the opportunity to provide these comments.

In POINT 7.2.1 Testing, we suggest a new paragraph related to the possibility of increasing the samples weight for Digestion Method in relation to the specific country epidemiological situation.

We take into account the 2012 recommendations of the International Commission on Trichinellosis to control *Trichinella* in wild and domestic animals for human consumption.

The text should be written as follow:

XX- When a country epidemiological situation requires, it could be increased the samples weight for Artificial Digestion analysis in pigs meat for human consumption.

COLOMBIA

Colombia is pleased to submit the following comments on the "Proposed Draft Guidelines For Control Of Specific Zoonotic Parasites In Meat: *Trichinella* in Meat of Suidae" at Step 2 of the Procedure, at Step 2 of the Procedure, circulated by the Secretariat of the Codex Alimentarius Commission

Through all the document we will use Appendix I as reference document CX/RVDF, 12/44/7 Spanish version, attached.

I. 2.3.3 Paragraphs 17 and 32

Both paragraphs make references to a document that is still under development. To date, it is uncertain whether this text will be approved in their current state. Therefore, we recommend waiting until discussion regarding this first text is concluded so as to avoid discrepancies in the texts approved by the OIE, and also to ensure the achievement of the objective outlines in the document.

"17. A generic risk profile which takes into account the FAO/WHO/OIE Guidelines for the Surveillance, Management, Prevention and Control of Trichinellosis ("FAO/WHO/OIE Guidelines Trichinella") will be available as an addition to the repository of risk profiles on the FAO and WHO websites.

32. Testing procedures are described in Chapter 2.1.16 of the OIE Manual of Diagnostic Tests and Vaccines for Terrestrial Animals and any consequential changes to on-farm bio security practices described in the Terrestrial Animal Health Code draft Chapter 8.13 (under development).

II Paragraphs 19, 26, and 28

On the International Commission on Trichinellosis: "recommendations on methods for the control of *Trichinella* in domestic and wild animals intended for human consumption"

"2.4. Curing to Inactivate Trichinae

Curing and smoking processes are not recommended for control of trichinae in pork, horse or game meats.

Methods for preparation of meats, which are not considered secure, include:

- Cooking using microwaves.
- Curing, drying, or smoking".

Therefore this control method should not be included, to develop the draft document.

"19. (...) *freezing, cooking and **curing** processes (...)*

26. **Validated curing procedures can be used to inactivate Trichinella.** (...)

28. (...) ~~Curing method,~~ or (...)

Proposal "19. (...) *freezing, and cooking ~~and curing~~ processes (...)*

26. ~~Validated curing procedures can be used to inactivate Trichinella.~~ (...)

28. (...) ~~Curing method,~~ or (...)

III 3.1. Scope - Paragraph 7

The following comments refers to the Spanish version only.

*"These Guidelines apply to the control of all species and genotypes of **Trichinellathat**"*

Proposal: *"These Guidelines apply to the control of all species and genotypes of **Trichinella that**"*

IV. 6.1. Identification of a food safety issue - Paragraph 14.

This comment refers to the Spanish version only.

*"Los consumidores están expuestos al ingesta de una infección por **Trichinellacuando** consumen".*

Proposal: "Los consumidores están expuestos al riesgo de una infección por **Trichinella cuando** consumen"

V. 7.2. Availability of post-slaughter control measures. - Paragraph 19.

The following comment refers to the Spanish version only.

*"Las medidas de control post matanza utilizadas actualmente para Trichinella incluyen, una vez validadas, **a: Los análisis de laboratorio, así como procesos de: congelación, cocción y curado. La irradiación de la carne de suidos que también es una opción para destruir a la Trichinella en la carne, antes de su consumo (...)**"*

Proposal: Las medidas de control post sacrificio utilizadas actualmente para Trichinella incluyen una vez validadas, **análisis** de laboratorio, así como procesos de congelación, cocción y curado. La irradiación de la carne de suidos **que** también es una opción para destruir a la Trichinella en la carne, antes de su consumo (...)"

COSTA RICA

After consulting our experts and in response to your request for comments. Costa Rica does not have any objections about the documents developed for both parasites.

MEXICO

General Comments:

We suggest working on a generic document to control of specific zoonotic parasites in meet, and include both annexes pairs parasite-commodity *Trichinella* in Suidae and *Cysticercus* in domestic cattle, or work on each one separately.

In addition, the text is ambiguous; there are two specific guidelines being developed in this document, yet the title suggest a single comprehensive guideline.

CX/RVDF 12/44/6	Comments	Rationale
<p>14. <i>Los consumidores están expuestos al riesgo de una infección por Trichinella cuando consumen carne cruda o insuficientemente cocida, de animales que contienen la larva de dicha especie.</i></p> <p>Risk management activities should incorporate a "primary production-to-consumption" approach in order to identify all steps in the food chain where mitigations are required.</p>	<p>There is a missing space after <i>Trichinella</i> and the next word. [This comment only applies to the Spanish version].</p> <p>...of animals of this species that contain the larvae.</p>	<p>Helps with clarity.</p>
<p>7.2.2 Freezing:</p> <p>24. Freezing meat should utilize cooling regimes that ensure lethality for all <i>Trichinella</i> present in different portions of meat or whole carcasses.</p>	<p>Freezing meat should utilize cooling regimes parameters that ensure lethality for all <i>Trichinella</i> present in different portions of meat or whole carcasses.</p>	<p>(Comment for the Spanish translation).</p>
<p>7.2.4 Curing:</p> <p>26. Validated curing procedures can be used to inactivate <i>Trichinella</i>. It will be up to the competent authority to validate these procedures and the process controls for these procedures.</p>	<p>26... It will be up to the competent authority to define the way to validate these procedures and the process controls for these procedures.</p>	<p>It is assigning officials a responsibility that does not necessarily fall under their jurisdiction in many countries.</p>

NICARAGUA

Nicaragua commends the host countries that have organized and prepared this document, and suggests the following corrections to the aforementioned document:

Specific Comments:

Nicaragua supports the provisions of **Appendix I** PROPOSED DRAFT GUIDELINES FOR CONTROL OF SPECIFIC ZOO NOTIC PARASITES IN MEAT: TRICHINELLA IN MEAT OF SUIDAE, but we should wait for the results of the OIE. We therefore believe this document should be held at Step 3 for further discussion, since it follows the guidelines of the OIE.

The structure of this document represents what should be ideally implemented. It was very important to include a section on risk communication to raise awareness among farmers, industries, competent authorities, consumers and travelers on the risk of the consumption of meat from this type of species and the risk of developing this disease.

In regards to **Appendix II** PROPOSED DRAFT GUIDELINES FOR CONTROL OF SPECIFIC ZOO NOTIC PARASITES IN MEAT: [TAENIA SAGINATA / CYSTICERCUS BOVIS] IN MEAT OF DOMESTIC CATTLE, we support further development of this document since it is well structured, and these guidelines are very helpful for the competent authorities and the industry in terms of risk-based control measures for T. Saginata and C. Bovis in domestic cattle.

NORWAY

Norway appreciates this opportunity to comment upon the proposed draft guidelines for control of specific zoonotic parasites in meat: *Trichinella spiralis* and *Cysticercus bovis* (CX/FH 12/44/7) and we appreciate the effort the European Union and New Zealand have put into preparing this draft.

(i) General comments; Appendix I

Norway mainly supports the document and the joint effort to develop common standards on this subject, both by Codex and the OIE. There should be made cross-references between this document and the OIE document

(Draft with changes to the Terrestrial Code Chapter 8.13) that is under development on the same subject. Norway is of the opinion that it is important to enhance the good cooperation between the Codex and the OIE. This was recently done when working on the guidelines for the control of *Campylobacter* and *Salmonella* in chicken meat. Furthermore, we are of the opinion that these draft guidelines should include the whole food chain. It is also our recommendation that the Forty-fourth Session of the CCFH make specific comments to the OIE regarding pre-slaughter measures.

Lastly, we have remark on the wording of competence. Several places in the document the competence is written as Competent Authority, Veterinary Authority or National Competent Authority. In order to get consistency we suggest to use the wording Competent Authority throughout the document.

(ii) Specific comments; Appendix I

SECTION 4 Definitions

Controlled housing: [means a type of husbandry in which domestic pigs are housed and fed in a facility that is completely roofed and constructed in such a manner as to prevent **entry of rodents and wildlife, e.g. openings, such as those for air ventilation or water pipes should be covered with wire or specific devices.** ~~pigs from being exposed to free flying birds and other wildlife, and from coming in contact with the earrion of free flying birds or other wildlife.~~]

Rationale: Rodents and wildlife may carry Trichinella, therefore it is in important to prevent the entry of them. This insertion is in line with similar text in the proposed OIE document.

SECTION 7 Identification and selection of post-slaughter control measures using a risk-based approach

Paragraph 23 – Currently used post-slaughter control measures for *Trichinella* include: laboratory testing, freezing, cooking and curing. Irradiation of pork products is also a validated option to destroy *Trichinella* in pork prior to consumption. These measures ~~may be~~ **are** subject to the approval of the competent authority, where appropriate.

Rationale: Our national legislation only allow some of the control measures in question; so if a slaughterhouse in our country would want to use another control measure, this would be subject to an approval by the competent authority. Therefore we suggest that this paragraph be rewritten.

Paragraph 26 – Validated curing procedures can be used to inactivate *Trichinella*, **if these procedures are validated in accordance with an internationally accepted protocol.** It will be up to the competent authority to ~~validate control these procedures and~~ the process controls for these procedures.

Rationale: In order to make the document consistent we suggests to insert similar text is used other places in the document, e.g. paragraph 22.

Furthermore, we are of the opinion that the task of validating procedure is not within the responsibilities of the Competent Authorities.

(i) General comments; Appendix II

Norway mainly supports the document.

However, we are of the opinion that it is important to include humans with unknown infective status regarding *T. saginata*/ *Cysticercus bovis* working at the holding within the risk factors. The reasoning for this is that humans may cause infections in the herd.

Furthermore, we have remark on the wording of competence. Several places in the document the competence is written as Competent Authority, Veterinary Authority or National Competent Authority. In order to get consistency we suggest to use the wording Competent Authority throughout the document.

(ii) Specific comments; Appendix II

SECTION 7 Identification and selection of control measures using a risk-based approach

Paragraph 20 – [New post mortem detection methods based on laboratory procedures may be used if appropriately validated, **in accordance with an internationally accepted protocol.**]

Paragraph 21 – Suspect cysts should be submitted for laboratory identification according to validated techniques, **in accordance with an internationally accepted protocol.** ~~acceptable to the national competent authority.~~

Rationale: In order to make the document consistent we suggests to insert similar text is used other places in the document, e.g. paragraph 22 in appendix I..

Furthermore, we are of the opinion that the task of validating procedure is not within the responsibilities of the Competent Authorities.

ST. LUCIA

St. Lucia would like to thank the working group led by the European Union and New Zealand for the work done on this document.

St. Lucia would like to propose that Appendix I: Proposed Draft Guidelines for Control of Specific Zoonotic Parasites in Meat: *Trichinella* in Meat of Suidae be held at Step 3 until the finalised Chapter 8.13 of the OIE Terrestrial Animal Health Code is produced and considered.

St. Lucia does not support a joint working group with OIE or a joint OIE – CODEX standard production.

St. Lucia would like to propose that Appendix II: Proposed Draft Guidelines for Control of Specific Zoonotic Parasites in Meat: [*Taenia saginata*/ *Cysticercus bovis*] in Meat of Domestic Cattle be advanced for adoption.

UNITED STATES OF AMERICA

The United States is providing several suggestions for revisions, primarily to correct minor errors and provide clarity. We provide separate comments for each appendix.

GENERAL COMMENTS

These annexes provide flexible options for countries to consider and implement based on their needs and resources, i.e., there is not a one size fits all control measure(s) for every country. These guidelines should only pertain to post-harvest and forward, and should only mention primary production (pre-harvest stages) when directly relevant to post-harvest measures. We support references to OIE or other appropriate guidance for primary production measures.

As noted in last year's comments, statements made in this document about 'risk-based' measures should be accurately defined to make it clear that the pertinent scientific evidence is available to support the risk-based determinations.

As agreed to by the working group, the U.S. fully supports that the final OIE text be considered prior to completion of the *Trichinella* annex. Until the OIE text becomes available for the working group to consider, the draft document should remain with the working group. Of particular note is the absence of section 6.3 on Risk Assessment Policy and Risk Assessment, as well as paragraphs 8.1-8.3 and 9.1-9.2, which will refer to work that is not yet completed.

We wish to specifically address the recommendations of the working group for consideration by the 44th session of CCFH listed in CX/FH 12/44/7.

- Decide on the value of the risk profiles for *T. spiralis* and *T. saginata* / *C. bovis* and their possible lodgement on the FAO/WHO website

The U.S. does not support the incorporation of statements related to the availability of risk profiles in paragraph 17 in the *Trichinella* annex and paragraph 14 in *C. bovis* annex. Such references are not needed and, since the risk profiles do not yet exist, reference to them would be inappropriate. We do not oppose the development of risk profiles under the auspices of the FAO/WHO horizontal effort and adding them to the repository of risk profiles on the FAO and WHO websites.

- Take into account the work of OIE in revising Chapter 8.13 "Infection with *Trichinella* spp." of the OIE Terrestrial Animal Health Code in July 2012

The U.S. supports referencing the appropriate pre-harvest measures from the upcoming OIE revised document. The U.S. supports leaving the draft *Trichinella* guideline at its current status until the OIE document is finalized. It is only then that the guideline can reference the correct measures; it would be inappropriate to reference a draft OIE document for which the exact language and understanding may change in later drafts.

- Take into account the outcomes of the FAO/WHO Expert Group on Parasites meeting in September 2012

The U.S. presumes that this expert group meeting serves to initiate the development of the general document on parasites to which the *Trichinella* and *C. bovis* annexes will be attached. The U.S. supports examination of the scientific positions and other output of the expert group with respect to these two annexes. It does not appear likely that the output of the expert meeting will be available with sufficient time before the CCFH meeting to incorporate relevant information in these annexes; this further supports not finalizing these parasite annexes, particularly the *Trichinella* one, at this time.

- Consider a physical working group, in conjunction with OIE, to further a whole-of-food-chain, risk-based approach to control of *Trichinella* spp. and *T. saginata* / *C. bovis*

The U.S. does not support the establishment of a physical working group in conjunction with OIE on this issue. OIE and Codex have different operating procedures, which could complicate the development of a document. Moreover, it is not clear whether this risk-based approach is to be a joint standard, nor is it clear where such a document would fit within Codex. It is best to allow OIE to conduct its evaluations for pre-harvest measures and Codex to conduct its evaluations for post-harvest measures. The U.S. does support communication between the two bodies to ensure appropriate references between the two sets of measures are made and correct understanding of each other's positions is established.

- Consider an extension of the scope of the proposed draft Guidelines for *Trichinella* to other susceptible species intended for human consumption

The U.S. does not support inclusion of other species in the current draft. As noted in the document, meat from Suidae is the most important source of human infection. It is not clear how much of the current guidance would apply to other species or whether additional provisions would need to be added. Such information could make the guidance more confusing. The provisions needed for other species should be considered before making a determination of whether to include other species in an extension of this guidance or in a separate annex, as noted in paragraph 6. It would also be best that CCFH give consideration to whether it is necessary to address other species after the FAO/WHO Expert Group on Parasites report has been released.

In the comments below, text to be removed is indicated by strike outs and text to be added is underlined.

APPENDIX I: PROPOSED DRAFT GUIDELINES FOR CONTROL OF SPECIFIC ZOOONOTIC PARASITES IN MEAT: *TRICHINELLA* IN MEAT OF SUIDAE

SECTION 3 – SCOPE AND USE OF THE GUIDELINES

Paragraph 6

Merge the second and third sentences as shown below.

The control of *Trichinella* in meat from other species (e.g. horses, bears, walrus etc.) ~~may be included in a future extension of this guidance or a separate annex. The occurrence of *Trichinella* in these other species is~~ however taken into account where considered relevant to

the control of *Trichinella* in meat from Suidae.

Rationale: There is no need to signal possible future changes such as a new annex; this document would become out of date if such activities occur.

Paragraph 12

In the first sentence change “*Trichinella* ssp.” to “*Trichinella* spp.”:

These Guidelines provide a framework for post-slaughter mitigations to protect human health with regard to meat and meat products of Suidae which are at risk for infection with *Trichinella* ~~ssp.~~ spp.;

Rationale: Editorial

SECTION 4 – DEFINITIONS

Revise the first sentence in the definition of Biosecurity as follows:

Biosecurity – means a prescribed set of management practices designed to prevent the introduction and spread of disease, in this case *Trichinella trichinellosis*.

Rationale: Editorial. All other definitions begin with “means” (alternatively, “means” can be deleted from all the other definitions, as it is not needed). The disease is trichinellosis; *Trichinella* is the causative agent.

Change the footnotes on “herd” and “veterinary authority” from 5 (related to equivalence) to 6 (the OIE Terrestrial Animal Health Code).

SECTION 6 – PRELIMINARY RISK MANAGEMENT ACTIVITIES

Paragraph 16

In the first sentence, change “a” to “an”:

Risk profiles are an important tool within “Preliminary Risk Management Activities” when applying ~~a~~an RMF to a food safety issue.

Rationale: Editorial

Paragraph 17

Delete this paragraph:

~~17. A generic risk profile which takes into account the FAO/WHO/OIE Guidelines for the Surveillance, Management, Prevention and Control of Trichinellosis (“FAO/WHO/OIE Guidelines Trichinella”) will be available as an addition to the repository of risk profiles on the FAO and WHO websites.~~

Rationale: Reference to a document that does not exist should be removed.

SECTION 7 – IDENTIFICATION AND SELECTION OF CONTROL MEASURES USING A RISK-BASED APPROACH

Paragraph 18

Revise the first sentence as follows:

At primary production, the most important risk factors for infection of domestic pigs include garbage feeding (including uncooked meat), exposure to carcasses of infected pigs, and exposure to reservoir wildlife, ~~or vermin~~ (especially rats).

Rationale: For consistency with the definition of reservoir wildlife, which apparently includes rats. (The last sentence of the definition says “Rats are of particular concern.”)

Paragraph 23

Add a comma after “specificity”:

23. Any test that is chosen should have known performance characteristics, i.e. sensitivity and specificity, if a risk-based approach to ensuring food safety is to be applied.

Rationale: Editorial.

Paragraph 24

Delete footnote #8 in the last sentence.

Trichinella species and genotypes that are known be cold tolerant include *Trichinella* T6, *T. britovi*, and *T. nativa*⁸.

Rationale: Codex documents generally do not include references to scientific literature.

Paragraph 26

Revise the paragraph as follows:

26. Validated curing procedures can be used to inactivate *Trichinella*. It will be up to the competent authority to ensure that the~~validate these~~ procedures and the process controls for these procedures have been validated.

Rationale: Generally validation studies are conducted by industry or academia, not the competent authority.

APPENDIX II: PROPOSED DRAFT GUIDELINES FOR CONTROL OF SPECIFIC ZOOONOTIC PARASITES IN MEAT: [TAENIA SAGINATA/CYSTICERCUS BOVIS] IN MEAT OF DOMESTIC CATTLE

SECTION 1 - INTRODUCTION

Paragraph 1

In the fourth sentence add a “p” in “poulations.”

Very few countries are free from *T. saginata* in cattle populations.

Rationale: Corrects a typographical error.

SECTION 3 – SCOPE AND USE OF THE GUIDELINES

Paragraph 11

In the last sentence, change “judging” to “assessing”:

The Guidelines could also be used when ~~judging~~ assessing the equivalence of different control measures for beef meat applied by different countries.

Rationale: The word “assessing” is a more appropriate term in this context, where we mean to evaluate.

SECTION 6 – PRELIMINARY RISK MANAGEMENT ACTIVITIES

Paragraph 14

Delete the last sentence in square brackets:

~~[A generic risk profile will be available as an addition to the repository of risk profiles on the FAO/WHO websites].~~

Rationale: Reference to a document that does not exist should be removed.

Paragraph 16

Delete this square-bracketed paragraph.

~~[16. Paragraph 6. 3 will refer to any work initiated at the request of CCFH to FAO/WHO JEMRA on risk-based examples of control measures and be finalised in due course. Development of risk based control measures should be based on slaughterhouse information (e.g., intensities of slaughter inspection or types of post harvest control measures) and epidemiological information from other sources as relevant].~~

Rationale: The purpose of paragraph 16 is not clear, and it does not seem necessary. Further, the suggestion to produce risk-based examples to be developed by FAO/WHO does not exactly correspond to the section title. Also, since these do not exist at this time, reference to them should be removed.

SECTION 7 - IDENTIFICATION AND SELECTION OF CONTROL MEASURES USING A RISK-BASED APPROACH

Paragraph 18

Modify the paragraph as follows:

A traceability system between slaughterhouse and farm should be available so the information on carcasses positive for [*T. saginata* / *C. bovis*] can be ~~utilised in investigation of~~ used to identify risk factors at the farm level ~~and to help support~~ possible intensification of post mortem inspection. Similarly, a traceability system between farm and slaughterhouse can be ~~utilised~~ used to identify farms without risk factors that would allow for a ~~lesser~~ reduced intensity of routine post mortem inspection.

Rationale: Editorial.

Paragraph 22

Remove the period from within the second sentence:

Since the sensitivity of routine post mortem meat inspection for [*T. saginata* / *C. bovis*] is very low, particularly in lightly infected animals, a significant proportion of individual carcasses containing [*T. saginata* / *C. bovis*] cysts- would pass undetected.

Rationale: Corrects a typographical error.

Paragraph 23

Change “further” to “additional” in the first sentence:

When a suspect carcass or part is identified during routine inspection procedures, additional inspection of the suspect carcass and its parts and cohorts can increase the sensitivity of inspection for identifying infected parts and/or ~~further~~ additional infected carcasses.

Rationale: Editorial.

Paragraph 24

Revise the paragraph as follows:

Temperature treatment at regimes that ensure lethality for [*T. saginata* / *C. bovis*] is an available control measure. Heat treatment can also ~~also be used for to treat~~ be used meat from suspect or confirmed [*T. saginata* / *C. bovis*] carcasses and lines of carcasses. Such treatments should be validated and applied as specified in national legislation.

Rationale: Editorial.

Paragraph 25

Change “further” to “additional”:

Salting and irradiation according to validated processes are ~~further~~ additional treatments that may be available.

Rationale: Editorial.

Paragraph 27

Delete “is”:

The Competent Authority / Veterinary Authority may apply movement control measures to herds where it is determined from monitoring information that this ~~is~~ would be an appropriate risk-based measure.

Rationale: Corrects a typographical error.

Paragraph 28

In the second bullet change “further” to “additional”:

~~Further~~ Additional post mortem procedures applied to an individual carcass or a related group of carcasses when a suspect [*T. saginata* / *C. bovis*] cyst is detected

Rationale: Editorial.

Paragraph 29

Delete the text in square brackets after the bullets.

~~{Paragraph 28 and 29 will refer to any work initiated at the request of CCFH to FAO/WHO/JEMRA on risk-based examples of control measures and be finalised in due course. Development of risk based control measures should be based on slaughterhouse information (e.g., intensities of slaughter inspection or types of post harvest control measures) and epidemiological information from other sources as relevant}.~~

Rationale: Since these examples do not exist at this time, reference to them should be removed.