



## JOINT FAO/WHO FOOD STANDARDS PROGRAMME

### CODEX COMMITTEE ON FOOD HYGIENE

#### Forty-fifth Session

Hanoi, Viet Nam, 11 - 15 November 2013

### PROPOSED DRAFT GUIDELINES FOR CONTROL OF SPECIFIC ZONOTIC PARASITES IN MEAT: *TRICHINELLA* SPP. AND *CYSTICERCUS BOVIS*

(At Step 3)

Comments submitted by European Union, Ghana and Kenya

#### EUROPEAN UNION

##### ***Trichinella* spp. in meat of Suidae:**

The revised OIE Chapter on Trichinellosis has been renumbered: it is now "Chapter 8.14"; therefore the relevant parts of the proposed draft Guidelines should be edited accordingly.

Rationale: in annex I of document CX/FH 13/45 /4 it is referred to as chapter 8.14.

In section 4 (Definitions) we think that is more appropriate to translate the term "domestic pigs" as "cerdos domésticos".

Rationale: the current translation actually means domesticated pigs which could lead to misinterpretations.

The term "cerdos de cría" is found throughout the whole document in Spanish instead of "cerdos domésticos". But this term is not defined in section 4. We strongly recommend to change the term "cerdos de cría" all along the document to "cerdos domésticos".

Rationale: It is more consistent to use only defined terms to avoid confusion.

##### ***7.1 Availability of control measures at farm level***

18. Biosecurity measures that are capable of ~~fully~~ preventing *Trichinella* infection can only be achieved for domestic pigs kept under controlled management conditions. Such measures are described in Article 8.14.3 of the *OIE Terrestrial Animal Health Code, Chapter 8.14. Infection with Trichinella spp.*

Rationale: Controlled housing conditions can result in a negligible risk status but biosecurity measures cannot "fully" exclude any risk.

##### ***7.2 Availability of post-slaughter control measures***

19. Post-slaughter control measures for *Trichinella* spp. include: laboratory testing, freezing, cooking and curing processes. Irradiation of meat of Suidae is also an option to destroy *Trichinella* spp. in meat prior to consumption. Control measures should be validated and approved by the competent authority, as appropriate. Non-weaned pigs **slaughtered** below the age of 5 weeks may be derogated from post-slaughter control measures.

Rationale: This exclusion should only be applied if slaughtered below the age of 35 days.

##### 7.2.1 Testing

20. When laboratory tests are performed on individual carcasses, those selected should be tested in accordance with the diagnostic techniques recommended in Chapter 2.1.16. *Trichinellosis* of the OIE *Manual of Diagnostic Tests and Vaccines for Terrestrial Animals* (digestion assays) and the ICT *Recommendations for Quality Assurance in Digestion Testing Programmes for Trichinella*<sup>8</sup>.

21. ~~If a *Trichinella* positive carcass is identified during post-slaughter testing, the competent authority should be notified. The competent authority can then decide which follow-up actions are necessary.~~ Other diagnostic methods for *Trichinella* spp. may be used if recommended in the OIE *Manual of Diagnostic Tests and Vaccines for Terrestrial Animals* or another international standardisation body.

22. 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.

**23. If a *Trichinella*-positive carcass is identified during post-slaughter testing, the competent authority should be notified. The competent authority can then decide which follow-up actions are necessary.**

~~23.~~ **23bis.** Positive carcasses should be disposed of according to recommendations in the OIE *Terrestrial Animal Health Code draft Chapter 4.12 Disposal of dead animal*.

*Rationale:* Editorial, to improve the text flow. In this proposal paragraphs 20 – 22 are about testing and paragraphs 23 – 24 about the actions to be taken after positive results.

### 7.3. Selection of risk-based control measures

27. The competent authority may provide derogation from specific controls or change the level of application of specific controls where a “negligible risk” compartment has been established. In this context, a “negligible risk compartment” is a compartment ~~with~~ **where** a public health decision on a negligible risk of *Trichinella* infection in domestic pigs kept under controlled management conditions has been implemented as described in Article 8.14.5 of the OIE *Terrestrial Animal Health Code*, Chapter 8.13-~~4~~.

*Rationale:* Linguistic comment. As stated above, OIE refers to chapter 8.14 in document CX/FH13/45/4.

In line with the minutes of the 44<sup>th</sup> CCFH meeting, the EUMS fully acknowledge that the official recognition of an animal disease status is the remit of OIE. Therefore, we do not believe that alternative conditions to the OIE conditions for negligible risk compartments based on surveillance data can be considered in these Codex Guidelines. The *Trichinella* negligible risk status is based on controlled housing conditions. Such conditions must be verified on the spot and can be further confirmed by surveillance data (possibly influencing the frequency of on the spot checks).

Similarly, a negligible risk country status cannot be considered in these Guidelines.

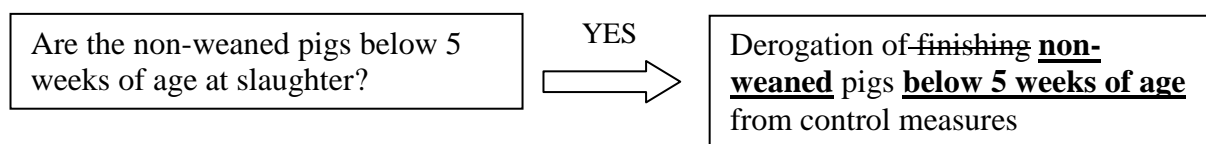
We would like confirmation of the CCFH and the OIE on our understanding of the respective competences. The EUMS welcome a debate on this matter within the OIE, but such debate should no longer postpone the progress of the Codex Guidelines.

### **7.3. Selection of risk-based control measures**

Paragraph 28:

The first pathway of this example of decision tree seems to be contradictory to paragraph 12 under Section “DEVELOPMENT OF THE DRAFT GUIDELINES” (page 2 of document CX/FH 13/45/5) : piglets < 5 weeks of age at slaughter → YES → derogation of finishing pigs from control measures. It is understood that it would be possible to have a derogation from control measures if “non-weaned piglets are < 5 weeks at age of slaughter”. This should not consequently mean derogations of finishing pigs from control measures. Paragraph 12 says that “the exclusion (of non-weaned piglets below 5 weeks) was maintained”.

The following change is proposed:



Paragraph 29:

~~29. A “negligible risk compartment” is a compartment where a public health decision on a negligible risk of *Trichinella* infection in domestic pigs kept under controlled management conditions has been implemented as described in Article 8.13.5. of the OIE Terrestrial Animal Health Code, Chapter 8.13 Infection with *Trichinella* spp.~~

This paragraph should be deleted as the same information is given in paragraph 27.

Section 10. Non-domesticated Suidae, feral pigs and cross-breeds, paragraph 34

34. Positive carcasses should be disposed of according to recommendations in the OIE Terrestrial Animal Health Code Chapter 4.12 Disposal of dead animals.

Rationale: editorial

***Taenia saginata* in meat of domestic cattle:**

Title

**PROPOSED DRAFT GUIDELINES FOR CONTROL OF SPECIFIC ZOOONOTIC PARASITES IN MEAT: *TAENIA SAGINATA* ~~IN~~ IN MEAT OF DOMESTIC CATTLE**

Rationale: editorial, 2\* “in”

Section 1, Introduction:

It is proposed to merge paragraphs 2 and 3 as follows

"2 The public health significance of *T. saginata* is limited due to the mostly benign clinical symptoms as illustrated in the global ranking of foodborne parasites using a multicriteria ranking tool for scoring parasites based on public health criteria only during the FAO/WHO expert meeting on Foodborne Parasites – Multicriteria based ranking for risk management (Annex 5, Figure 2 of the report\*). However, the economic importance is high for several reasons:

- Resources involved in routine meat inspection
- Downgrading and condemnation of affected carcasses (or routine treatment to inactivate cysticerci such as freezing or cooking)
- Intensified livestock controls at farm level when affected herds are identified.

As governments review their meat hygiene systems, non-risk based control measures for meat and meat products in trade can be disproportionate to the level of risk reduction achieved.

\* <http://www.fao.org/food/food-safety-quality/a-z-index/foodborne-parasites/en/> "

Rationale: *There is a repetition in the current paragraph 2 and the second sentence of paragraph 3. It also seems appropriate to refer to the FAO/WHO expert meeting illustrating the statement on public health.*

5. These Guidelines incorporate elements of a risk management framework (RMF) approach as developed by the Codex Committee on Food Hygiene for managing microbiological hazards (~~{Principles and Guidelines for the Conduct of Microbiological Risk Management (CAC/GL 63-2007)}~~) i.e.:

Rationale: editorial, unnecessary square brackets and missing bracket.

Section 3. Scope and use of the Guidelines

8. These Guidelines, used in conjunction with *FAO/WHO/OIE Guidelines for the Surveillance, Prevention and Control of Taeniasis/Cysticercosis*<sup>11</sup> (***“FAO/WHO/OIE Guidelines Taeniasis”***) address the control of cysticercosis in the meat of domestic cattle that may cause human taeniasis. They are based on the *Code of Hygienic Practice for Meat* (CAC/RCP 58-2005) that provides generic advice on a risk-based approach to meat hygiene.

19. The Guidelines, used in conjunction with the *FAO/WHO/OIE Guidelines Taeniasis*, apply to all steps in a “primary production-to-consumption” food chain continuum.

### 3.2. Use

410. The Guidelines develop specific guidance for control of cysticercosis in meat according to a risk-based approach to selection of post-harvest control measures as risk management options. The Guidelines are supplementary to and should be used in conjunction with the *General Principles of Food Hygiene* (CAC/RCP 1 – 1969), the *Code of Hygienic Practice for Meat* (CAC/RCP 58-2005) and the *FAO/WHO/OIE Guidelines for the Surveillance, Prevention and Control of Taeniasis/Cysticercosis*<sup>11</sup>

*Rationale:* numbering and suggestion to use a more specific short terminology “FAO/WHO/OIE Guidelines Taeniasis” for the FAO/WHO/OIE Guidelines for the Surveillance, Prevention and Control of Taeniasis/Cysticercosis instead of simply “FAO/WHO/OIE guidelines” to avoid confusion with other guidelines and to be consistent with the approach in appendix I.

Suggestion to use this same wording “FAO/WHO/OIE Guidelines Taeniasis” throughout the rest of the annex, e.g. para 19.

Footnote 11

<sup>11</sup>FAO/WHO/OIE Guidelines for the Surveillance, Prevention and Control of Taeniasis/Cysticercosis (~~to be provided~~) [www.oie.int/doc/ged/d11245.pdf](http://www.oie.int/doc/ged/d11245.pdf)

*Rationale:* These guidelines are available at [www.oie.int/doc/ged/d11245.pdf](http://www.oie.int/doc/ged/d11245.pdf)

### Section 4. Definitions

**Domestic cattle** mean all domesticated cattle species, including *Bos taurus* and *B. indicus*), banteng (*Bos javanicus*), gayal (*Bos frontalis*), and yaks (*Bos grunniens*), and additionally all *Bubalus* and *Bison* species.

*Rationale:* editorial, redundant bracket

### Section 7.2.3. Treatment of meat, Paragraphs 25 and 26:

Temperature treatment (heating and ~~cooling~~ **freezing**) at regimes that ensure lethality for *T. saginata* is an available routine preventative control measure. Heat treatment is also used for meat from suspect or confirmed *T. saginata* carcasses and lines of carcasses. Such treatments should be validated according to national guidelines.

The EUMS agree with the risk based approach proposed in paragraphs 29, 30 and 31 of the proposed draft Guidelines. The EUMS have doubts on the possibility to determine the status in relation to *Taenia saginata* prevalence, based on:

- Slaughterhouse information: indeed, the sensitivity of the current meat inspection systems is very low. Therefore, there is a high potential of underreporting.
- Public health data demonstrating –absent or very rare human infection: there are some doubts on the quality of the information available and underreporting may be a problem.

The EUMS would therefore welcome a short summary at the CCFH meeting on the outcome of the Joint FAO/WHO expert meeting on risk-based examples for control of *Trichinella* spp. and *Taenia saginata/Cysticercus bovis*, held in Geneva from 22 to 25 October 2013.

26. Salting and irradiation according to validated processes are further treatments that may be available. **The General Standards on Irradiated Food<sup>12bis</sup> should be taken into account.**

<sup>12bis</sup> General Standard for Irradiated Foods (CODEX STAN 106-1983)

*Rationale:* to be consistent with appendix I.

## **GHANA**

### **General comment**

OIE documentation references have been adopted as proposed by the EWG i.e. (*OIE Terrestrial Animal Health Code, Chapter 8.13 Infection with Trichinella spp.*).

### **Specific comments**

## **Section 6. Preliminary risk management activities**

Paragraph 15:

We propose the following changes to the first sentence:

Consumers are exposed to the risk of *Trichinella* spp. infection when they consume raw, ~~or~~ insufficiently cooked **or inadequately cured meat** containing infectious larvae.

**Rationale:** *Curing is an acceptable practice for inactivation of larvae, provided the curing process is validated and is applied correctly.*

### **Section 7.2.1 Testing**

Paragraph 21 - 23:

Consider the following changes to the sequences of sentences and further paragraphs:

#### **New Paragraph 21:**

Move second sentence to first sentence i.e:

**Other diagnostic methods for *Trichinella* spp. may be used if recommended in the OIE Manual of Diagnostic Tests and Vaccines for Terrestrial Animals or another international standardisation body.**

**Paragraph 22** should be retained.

#### **New Paragraph 23:**

First two sentences of old paragraph 21 becomes the first two sentences of new paragraph 23.

The only sentence of old paragraph 23 becomes the third sentence of new paragraph 23 to read as follows:

**If a *Trichinella*-positive carcass is identified during post-slaughter testing, the competent authority should be notified. The competent authority can then decide which follow-up actions are necessary. Positive carcasses should be disposed of according to recommendations in the OIE Terrestrial Animal Health Code draft Chapter 4.12 Disposal of dead animal.**

**Rationale:** *The sequence of events is better described in the proposed changes.*

### **Section 7.3. Selection of risk-based control measures**

We propose that paragraph 29 should be deleted.

~~29. A “negligible risk compartment” is a compartment where a public health decision on a negligible risk of *Trichinella* infection in domestic pigs kept under controlled management conditions has been implemented as described in Article 8.13.5. of the OIE Terrestrial Animal Health Code, Chapter 8.13 Infection with *Trichinella* spp.~~

**Rationale:** *Paragraph 29 is a repetition of the second sentence of paragraph 27.*

## **PROPOSED DRAFT GUIDELINES FOR CONTROL OF SPECIFIC ZOOONOTIC PARASITES IN MEAT: TAENIA SAGINATA IN MEAT OF DOMESTIC CATTLE**

### **Editorials**

Ghana suggests the following editorial comments.

Numbering of Paragraph 19 and 110 should be changed to 9 and 10 respectively.

### **Specific comments**

#### **Section 3. Scope and use of the Guidelines**

##### **Section 3.2 Use**

##### **1st paragraph, 1<sup>st</sup> sentence**

**Replace “develop” with “provides” to read:**

The Guidelines ~~develop~~ **provides** specific guidance for control of cysticercosis in meat according to a risk-based approach to selection of post-harvest control measures as risk management options.

**Rationale:** *For better rendition.*

**KENYA****APPENDIX 1****Introduction :****Specific comments**

**We propose to strike off the word ‘should be’ and add the words ‘include and approach’ before the word ‘risk-based and after respectively in the first sentence.**

**Para 2.** Post-slaughter control measures to protect consumers from exposure to *Trichinella* spp. in the meat of Suidae ~~should be~~ **includes** risk-based **approach** . Traditional control measures including post-slaughter testing and/or processing of meat and meat products may not be required in circumstances where a public health decision on a negligible level of risk to consumers has been implemented as described in the *OIE Terrestrial Animal Health Code (Chapter 8.13 Infection with Trichinella spp.)*.

**Rationale: Should be is a strong language for a guideline.**

**2. Objectives**

4. The primary objective of these Guidelines is to provide guidance to governments and industry on risk-based measures to prevent exposure of humans to *Trichinella* spp. in meat of Suidae.

**Comment**

**We propose to strike the word ‘indication’ and strike off the word ‘information’ and also strike off the word ‘can and will’ in the second sentence.**

5. The Guidelines provide a consistent and transparent technical basis for reviewing and implementing control measures based on epidemiological ~~information~~ **indication** and risk analysis. The risk-based control measures that are selected ~~can and will~~ vary between countries and production systems. Measures applied at the national level should be taken into account in the judgement of equivalence 2 by importing countries, thereby facilitating international trade.

**Rationale: Indication: To be consistent with other Codex standards and text,**

~~Can and vary;~~For ease of clarity

**4. Definitions****5. Principles applied to control of *Trichinella* spp. in meat of Suidae**

**Para 14 roman iii below: We propose to add the word ‘control’ after the word ‘measures’**

iii. Competent authorities should recognise the equivalence of alternative hygiene **control** measures where appropriate, and promulgate meat hygiene measures that achieve required outcomes in terms of CX/FH 13/45/5 6

**6. Preliminary risk management activities****Comment**

**We propose to strike off the word ‘insufficiently’ and add the word ‘inadequately’**

15. Consumers are exposed to the risk of *Trichinella* spp. infection when they consume raw or ~~insufficiently~~ **inadequately** cooked meat containing infectious larvae. Risk management activities should incorporate a “primary production-to-consumption” approach in order to identify all steps in the food-chain where control measures are required.

**Rationale: For ease of clarity**

16. Preliminary risk management activities appropriate to these Guidelines include:

Development of a national, regional, or compartment risk profile ~~[noting that 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”) has been published on the FAO and WHO websites.]~~

**Rationale: There is no need to add the text in the main document/annex.**

## 7. Identification and selection of risk-based control measures

### 7.1 Availability of control measures at farm level

### 7.2 Availability of post-slaughter control measures

#### Comment

We propose to strike off the word ‘curing’

19. Post-slaughter control measures for *Trichinella* spp. include: laboratory testing, freezing, cooking **and euring** processes. Irradiation of meat of Suidae is also an option to destroy *Trichinella* spp. in meat prior to consumption. Control measures should be validated and approved by the competent authority, as appropriate. Non-weaned pigs below the age of 5 weeks may be derogated from post-slaughter control measures.

*Rationale: Curing: This is contrary to International Commission on Trichnella recommendation*

#### Comment:

We propose to strike off the word ‘or irradiation’

#### 7.2.3 Cooking ~~or irradiation~~

25. Inactivation of *Trichinella* spp. by these methods should be performed in accordance with validated methods such as those described in the "*Recommendations on Methods for the Control of Trichinella in Domestic and Wild Animals Intended for Human Consumption*" prepared by the ICT Standards for Control Guidelines Committee. ~~The General Standards on Irradiated Food<sup>9</sup> should also be taken into account.~~

#### Comment:

We propose to add the following sentence below to para 25 mentioned above.

#### 7.2.3 bis

. Inactivation of *Trichinella* spp. by these methods should be performed in accordance with validated methods such as those described in the "*Recommendations on Methods for the Control of Trichinella in Domestic and Wild Animals Intended for Human Consumption*" prepared by the ICT Standards for Control Guidelines Committee. The General Standards on Irradiated Food<sup>9</sup> should also be taken into account

#### Rationale:

*The inactivation measures are different. One is heat treatment while the other one is physical.*

*Separation also aides clarity*

#### Comment:

We propose to strike off the word ‘the last sentence’

#### 7.2.4 Curing

26. Inactivation of *Trichinella* spp. by curing procedures are not recommended by the ICT, as described in "*Recommendations on Methods for the Control on Trichinella in Domestic and Wild Animals Intended for Human Consumption*". ~~Only curing methods officially validated by the competent authority should be performed to assure the effectiveness of these procedures.~~

*Rationale: This is contrary to the ICT recommendation as outlined in the same paragraph.*

## Appendix II

### PROPOSED DRAFT GUIDELINES FOR CONTROL OF SPECIFIC ZOOLOGICAL PARASITES IN MEAT: *TAENIA SAGINATA* IN MEAT OF DOMESTIC CATTLE

## 2. Objectives

#### Comment

We propose to strike off the word ‘information’ and replace it with ‘indication’

**Para 7.** The Guidelines also provide a consistent and transparent technical basis for reviewing national or

regional control measures based on epidemiological ~~information~~ **indication** and risk analysis. The Guidelines should be taken into account in the judgement of equivalence by importing countries where such measures differ from their own, thereby facilitating international trade.

*Rationale:*

*Indication: To be consistent with other Codex standards and texts.*

## **6.2 Risk Profile**

### **Comment**

**We propose to strike off the word 'the last sentence'**

**Para 16.** Risk profiles provide a collation of scientific information that guides risk managers and industry in taking further actions as part of applying a RMF approach to a food safety issue. Both risk profiles and risk CX/FH 13/45/5 11 assessment can assist in the design of food control systems that are tailor-made to individual food production and processing systems. ~~A generic risk profile will be available as an addition to the repository of risk profiles on the FAO/WHO websites.~~

*Rationale: Not necessary in this main document. The sentence is also futuristic in the present content.*

### **Comment**

**In the last sentence, the word 'potential' is added before the word 'risks----.**

17. Epidemiological evidence to support decisions on appropriate control measures to be applied can be gathered from a range of sources. For example, both industry and governments may have historical records on test results from slaughter populations and farm investigations. Human health surveillance and treatment data, where available, are useful in assessing any residual/**potential** risks that may exist in different regions or countries.

*Rationale: For clarity*

## **7. Identification, selection and implementation of risk-based control measures**

### **Comment**

**In para 20 the second sentence the word 'farms' is replaced with 'herds'**

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

**Rationale: A herd is the epidemiologic unit which will help in conceptualising the dynamism of the parasitic hazard.**

### **7.2 Post-slaughter control measures**

#### **7.2.1. Post mortem inspection**

### **Comment**

**In para 21 we have added the word 'practicable' in the second statement after the word 'and'**

21. Routine post-slaughter control measures for *T. saginata* are essentially limited to meat inspection. Where necessary and **practicable**, a sample of suspect cysts should be subject to laboratory identification according to validated techniques acceptable to the national competent authority.

*Rationale: To take into consideration countries this might be technologically challenged.*

### **Comment**

Para 26. ~~Salting~~ and irradiation according to validated processes are further treatments that may be available.

*Rationale: The high salt concentration required might be detrimental to human health.*