

**CODEX COMMITTEE ON CONTAMINANTS IN FOOD**  
**17<sup>th</sup> Session**

**Panama City, 15-19 April 2024**

**European Union comments on**

**Agenda Item 6:**

**Request for comments at step 3 on sampling plans for methylmercury in fish.**

**(CX/CF 24/17/6 and CL 2024/03-CF)**

*European Union Competence*  
*European Union Vote*

The European Union (EU) welcomes and appreciates the work on the sampling plans for methylmercury in fish by New Zealand and co-chaired by Canada.

The EU would like to share the following comments on the proposed sampling plan for methylmercury contamination in fish, which is included in Appendix I of CX/CF 24/17/6 and on the examples, which are included in Appendix II:

- The definition of sampling plan: the proposed definition is rather a definition of a methylmercury test procedure, which can be included as a separate entry. The second paragraph on screening methods should be deleted from the definition, as it not strictly needed for the definition, and it is a repetition of paragraph 20. It is proposed to add the following definition a sampling plan: **‘A procedure for the sampling of food from a certain lot with a view of a specific chemical analysis of that lot, in order to ensure that the sample that is taken, is representative for the concentration of the concerned chemical within the lot.’**
- The EU agrees with the provisions of paragraph 14 that the entire aggregate sample should be homogenised, in order to allow the preparation of a representative laboratory sample. The definition of ‘test portion’ seems to suggest that it is sufficient to comminute only the laboratory sample. Therefore, it is proposed to add the following sentence to the definition of ‘aggregate sample’: **‘The entire aggregate sample should be comminuted in a mill.’**
- Definition of laboratory sample: it is proposed to change the definition to ~~‘The smallest comminuted quantity of fish muscle, or whole fish.~~ **A sample intended for the laboratory, which consists out of** a comminuted quantity of fish muscle or whole fish. The laboratory sample may be a portion of or the entire aggregate sample. **The aggregate sample should be comminuted in a mill.** If the aggregate sample is larger

than the laboratory sample(s), the laboratory sample(s) should be removed in a random manner from the **homogenised** aggregate sample.

- Definition of test portion: A **randomly removed** portion of the comminuted laboratory sample. ~~The entire laboratory sample should be comminuted in a mill. A portion of the comminuted laboratory sample is randomly removed~~ for the extraction of methylmercury for chemical analysis.
- Paragraph 6: It is proposed to begin with provision that the minimum weight of the aggregate sample should be 1 kilogram and then to explain how the size of the incremental sample should be calculated: ~~'The suggested minimum weight of the incremental sample should be an approximate division of the minimum aggregate sample based on the number of incremental samples taken from the lot as specified in Table 3 (100g) resulting in an aggregate sample of at least 1kg. The aggregate sample should contain a quantity of sample of at least 1 kilogram. The minimum weight of the incremental sample should be determined by dividing 1 kilogram by the required number of incremental samples, as listed in Table 3'~~. **The aggregate sample should contain a quantity of sample of at least 1 kilogram. The minimum weight of the incremental sample should be determined by dividing 1 kilogram by the required number of incremental samples, as listed in Table 3'**. Incremental samples taken from a lot or sub-lot should be of comparable weight.
- The EU proposes to limit the number of incremental samples to maximum 10 incremental samples of 100 grams. More incremental samples of a lower weight seem impractical and are not considered to contribute to a higher representativeness of the sample for the lot. For example, taking 100 incremental samples of 10 grams of fish from a specific part of the fish would be extremely laborious. On the other hand, taking more than 20 to 100 incremental samples of 100g would lead to an aggregate sample size, which will be difficult to homogenise.
- Table 3: in line with the previous comment, the EU proposes to remove the 4 rows at the bottom of the table. On the fourth row the lot weight range could be modified from '>0.5 - ≤ 1' to '> 0.5'. This way for large lots of more than 1 ton 10 incremental samples of 100 grams will need to be taken.
- Table 4 for the category 1-10 kg: the draft sampling plan foresees that the aggregate sample should be at least 1 kg, by calculating the size of the required incremental samples, so normally the aggregate sample size should not exceed 3 kilograms. This is scenario that can only occur for the category < 1 kg, where whole fishes are sampled. Therefore, the EU is of the opinion that the option of sampling at the tail of the fish, should rather be related to the size of the fish and not to the size of the lot. Because only for tuna studies are available on the distribution of mercury in the different parts of the fish, because for fishes of 1-10 kilograms no significant economical damage is expected for the sampling at the head and the tail and in order to be consistent with the provisions for the category of > 10 kilograms, it is proposed to re-phrase as follows: 'Midline (halfway between the gill opening and the anus) strip from backbone to belly. For lots of 0.05 MT or greater where the aggregate sample would exceed 3kg, ~~the muscle close to the tail.~~ **For very large fish 6-10 kilograms and in case the sampling in the middle of the fish would cause a significant economic damage, incremental samples can also be taken as equal parts of the muscle from behind**

**the head and close to the tail.** This approach is also consistent with example 2 in Appendix II.

- Appendix II, example 1
  - 40 incremental samples of 100 grams, result in an aggregate sample of 4 kilograms instead of 1 kilogram. Following the suggestion of the EU to delete the 4 rows at the bottom of table 3, it is proposed to re-phrase as follows:
    - A first aggregate sample is taken of the smaller sized (lot relative) fishes, which weigh about 2-2.75 kg: ~~40~~ **10** incremental samples (fishes) are taken.
    - A second aggregate sample is taken of the larger sized (lot relative) fishes, which weigh about 2.75-3.5 kg: ~~40~~ **10** incremental samples (fishes) are taken.
  
- Appendix II, example 2.
  - 40 incremental samples of 100 grams, result in an aggregate sample of 4 kilograms instead of 1 kilogram. Following the suggestion of the EU to delete the 4 rows at the bottom of table 3, it is proposed to re-phrase as follows:
    - A first aggregate sample is taken of the smaller sized (lot relative) fishes, which weigh about 2-4 kg: ~~40~~ **10** incremental samples (fishes) are taken...
    - A second aggregate sample is taken of the fishes of the medium size (lot relative) of about 4-6 kg: ~~40~~ **10** incremental samples (fishes) are taken....
  
  - In line with the EU suggestion that for lots of 10 tons 10 incremental samples need to be taken, it is proposed to adjust the example for the third aggregate accordingly:
    - A third aggregate sample is taken of the larger size (lot relative fishes) of about 6-8 kg: ~~3~~ **10** incremental samples (fishes) are taken, each incremental sample is
      - Constituted of the right side dorso-lateral muscle meat in the middle part of the fish (symmetrically around line B in Figure 1) and weighs about ~~350~~ **100 grams**. This results in an aggregate sample of about 1 kg to be homogenised and analysed separately. This results in one aggregate sample of about 1 kg to be homogenised and analysed separately.

OR

- Constituted of equal parts of ~~175~~ **50** grams of the muscle meat close to the tail part (the regions around line C in Figure 1) and the muscle meat close to the head part of one fish (the region of line A in Figure 1) which are combined to form an incremental sample of about ~~350~~ **100** grams per fish. This results in one aggregate sample of about 1 kg to be homogenised and analysed separately.

Even though the majority of the Codex Member are not in favour of establishing sampling plans for mercury in fish at a retail stage, the EU would still like to emphasize that established MLs should be applied to fish throughout the whole chain regardless the stage of food chain where the samples were taken (i.e. MLs should be applied also to fish and fish products placed on the market for final consumer). Therefore, the EU is of the opinion that it might be appropriate to also provide specific sampling provisions for fish products.

The EU is of the opinion that the draft sampling plan can be recommended for final adoption at step 5/8 based on the data/ information provided in Appendices II and III.