Background

1. The 51st Session of the Committee on Food Hygiene (CCFH51) advanced the revised *General Principles of Food Hygiene* (CXC 1-1969) to CAC43 for adoption at Step 5/8. CCFH51 further agreed to return the diagram of the decision tree for identification of critical control points (CCPs) to Step 2 for drafting by Brazil, Honduras, Jamaica and Thailand for comments at Step 3 and consideration by CCFH52.

2. Through CL 2020/55-FH, Members and Observers were invited to provide comments on two options for decision trees that were based on discussions and comments made at CCFH51.

3. Comments were received from Argentina, Australia, Canada, Dominican Republic, Ecuador, El Salvador, European Union, Kenya, Malaysia, Mexico, New Zealand, Peru, Philippines, South Africa, Thailand, Uganda, United States of America, Uruguay, Food Drink Europe, International Commission on Microbiological Specifications for Foods, International Dairy Federation, International Fruit and Vegetable Juice Association and International Organization for Standardization.

4. The majority of the respondents indicated the preference for option 1 of the decision tree, with some modifications. A smaller number of respondents chose option 2 and others presented different examples of tools/trees. Two respondents were of the opinion that the decision tree is not necessary, as it may not encompass all existing situations.

5. It was highlighted that the decision tree should be flexible enough so it can be used by different sectors in the food production chain. Although option 1 was considered the most appropriate, the following problems were identified in this proposal and proposals are made for amendment of the questions in this option:

Question 1: Can the hazard be controlled at this step by GHPs?

6. It was stated that, in accordance with section 3.7 (Determine the critical control points (Step 7/Principle 2) of Chapter Two of the *General Principles of Food Hygiene* (CXC 1-1969), "critical control points (CCPs) should be determined only for hazards identified as significant from the result of the hazard analysis. CCPs are established at stages where control is essential and where a deviation could result in the production of a potentially unsafe food". If GHPs can control all significant hazards identified, there is no need to identify CCPs. Thus, question 1 from both trees (Can hazards be controlled by GHP?) should not be part of a decision tree to identify CCPs, since the starting point for determining the need for CCPs is that the hazard is identified as significant. It is true that the decision tree applies to significant hazards; however, by deleting question 1, one of the main modifications of the
document, which is the possibility of all hazards (significant or not) being controlled by GHP (routine or of greater attention) will not be reflected.

7. The suggestion of inserting a footnote to question 1 stating to consider a hazard’s significance and whether it could be controlled by GHPs to address this concern could be accepted. Additionally, some hazards can be prevented by other prerequisite programs besides GHPs. For example, supplier control can prevent many hazards. For this reason, the question was left more comprehensive to include the different prerequisite programs.

<table>
<thead>
<tr>
<th>New Q1: Can the hazard be controlled at this step by prerequisite programmes (e.g. GHPs)?*</th>
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<tbody>
<tr>
<td>* Consider the significance of the hazard (i.e., the likelihood of occurrence in the absence of control and the severity of impact of the hazard) and whether it could be sufficiently controlled by GHPs. GHPs could be routine GHPs or GHPs that require greater attention to control the hazard (e.g. monitoring and recording).</td>
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Question 2: Could contamination with the identified hazard occur, or increase, in excess of acceptable levels?

8. Many respondents identified this question as problematic because it does not consider the inherent hazards present in food. Example: the control step of pasteurization and the risk of the presence of pathogens in milk. The answer to Q2 could be “No”, as there is no “contamination” or “increase” of the risk at this step (it is only present). This can lead the user to a decision that pasteurization would not be a CCP. Thus, some Members suggested editing the question to consider that the hazard might be originally present and not only be generated (occur) precisely in the evaluated step. Other members suggested deleting the question. Considering the footnote inserted in Q1 about considering the significance of hazards, and that only the significant hazards will be considered in the tree (by CCP definition), the question 2 was removed.

9. Considering that it’s more important and logical to start identifying a control measure in the step that is being assessed, before checking for a subsequent step that could control the hazard, the questions have been reordered. It is proposed to relocate the text of the previous fourth question as question number 2 and place the question 3 after the new question 2.

<table>
<thead>
<tr>
<th>New Q2: Do control measures exist at this step?</th>
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Question 3: Will a subsequent step eliminate the identified hazard or reduce its likely occurrence to an acceptable level?

10. No editorial or question position change. If there is a control measure in a subsequent step that eliminates/reduces the hazard to an acceptable level, this subsequent step is the CCP.

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<thead>
<tr>
<th>Q3. Will a subsequent step eliminate the identified hazard or reduce its likely occurrence to an acceptable level?</th>
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Question 4: Do control measures exist at this step?

11. This question was placed as question 2.

Question 5: Can this step prevent, reduce or eliminate the hazard to an acceptable level?

12. If the answer to the new Q3 is “No” (there is no subsequent step to control the hazard), it should be confirmed that the control measure applied in the step is effective or the process should be modified.

13. The “No” to this question links to the need to “modify the step, product or process to provide an adequate control measure for the hazard”. The answer “Yes” identifies the step as a CCP.

14. Furthermore, second bullet point of item 3.7 of the Chapter Two of the General Principles of Food Hygiene exemplifies a situation in which a control measure is used in combination with other control measure at another stage of the process (to control the same hazard), in which case both steps are to be considered as CCP. One Member suggested that this situation be captured in a footnote: “Consider whether the control measure in this step works in combination with a control measure in another step to control the same hazard, in which case both steps should be considered as CCPs.”
New Q4: Can this step prevent, reduce or eliminate the hazard to an acceptable level?**

** Consider whether the control measure at this step works in combination with a control measure at another step to control the same hazard, in which case both steps should be considered as CCPs.

Question 6: Is control necessary at this step for safety?

15. In the former decision tree, the answer "No" leads to "Not a CCP." The inconsistency is that to reach this question from the tree, it was indicated that the hazard may occur beyond an acceptable level (Q2), the subsequent step will not address the hazard (Q3), control measures do not exist in this step (Q4), and control is not required in this step (Q6) (therefore this step is not a CCP). Where would the control measure be, if not in this step or in a subsequent step? This question created a lot of uncertainty, as the user could answer that controls are not necessary and disregard significant risks. For this reason, the question was deleted.

Conclusion

16. Based on the comments received and in line with the request from CCFH51, a proposal for a new decision tree is presented in Annex 1 for consideration by CCFH.

17. To address the concerns of some respondents with question 1 in Annex 1, a CCP determination worksheet (Annex 2) which proceeds directly from the selection of a significant hazard is offered as an alternative to the decision tree.

Recommendation

18. CCFH is invited to consider the CCP decision tree and the CCP determination worksheet that would fit as “Example of a CCP Decision Tree” or “Example of a CCP determination worksheet” (See Annexes 1 and 2, respectively) and whether either of the two proposals are suitable for inclusion in the General Principles for Food Hygiene (CXC 1-1969)
Annex 1 - “Example of a CCP Decision Tree (Apply to each Step for a Specified Hazard).”

Q1. Can the hazard be controlled at this step by prerequisite programs (e.g. GHPs)?*

Yes → This step is not a CCP.

No →

Q2. Do control measures exist at this step?

Yes → This step is a Critical Control Point (CCP)

No →

Q3. Will a subsequent step eliminate the identified hazard or reduce its likely occurrence to an acceptable level?

Yes → This step is not a CCP. A subsequent step should be a CCP.

No →

Q4. Can this step prevent, reduce or eliminate the hazard to an acceptable level? **

Yes → Modify the step, process or product to implement a control measure

No →

* Consider the significance of the hazard (i.e., the likelihood of occurrence in the absence of control and the severity of impact of the hazard) and whether it could be sufficiently controlled by GHPs. GHPs could be routine GHPs or GHPs that require greater attention to control the hazard (e.g. monitoring and recording).

** Consider whether the control measure at this step works in combination with a control measure at another step to control the same hazard, in which case both steps should be considered as CCPs.
Annex 2 - “Example of a CCP determination worksheet (Apply to each Step for a Specified Hazard).”

<table>
<thead>
<tr>
<th>Process step</th>
<th>Significant hazards</th>
<th>Q1. Could the hazard be controlled at this step?</th>
<th>Q2. Is this step specifically designed to prevent or eliminate the hazard or reduce it to an acceptable level?</th>
<th>Q3. Would a subsequent step eliminate the hazard or reduce it to an acceptable level?</th>
<th>CCP number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identify process step</td>
<td>Describe hazard and cause</td>
<td>If yes, proceed to Q2. If no, proceed to Q3</td>
<td>If yes, this is a CCP. Proceed to the last column. If no, proceed to Q3.</td>
<td>If yes, this step is not a CCP. Identify the subsequent step where the hazard would be controlled. If no, modify this step, process or product to control the hazard</td>
<td>Number the CCP and include in HACCP worksheet</td>
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