TO: Joint Committee on Food Equipment

FROM: Michael Perez, Chair of the Joint Committee

DATE: October 7, 2020

SUBJECT: Adjudication ballot - Proposed revision to NSF/ANSI 170 – Glossary of Food Equipment Terminology (170i28r4)

Enclosed is an adjudication ballot for revision 4 of NSF/ANSI 170, issue 28. This is being forwarded to the Joint Committee for consideration. Please review the proposal and submit your ballot by October 21, 2020 via the NSF Online Workspace <www.standards.nsf.org>.

This two-week ballot allows voters the opportunity to respond, change or reaffirm their vote based on the content of the comments contained herein.

Included in the reference items for this ballot is the response letter to the negative vote not resolved. Additionally, below is the comment in italics and the response from the issue proponent and TG discussion on September 15, 2020 in bold.

**Ballot comment**

The stated purpose of the ballot is to harmonize the language between FDA Food Code and NSF Food Equipment Standards. While the use of the term "TCS" has been harmonized, the definitions of that term have not.

The ballot suggests that pH and Aw are independent determinants of whether or not a food is TCS. Whereas, the FDA Food Code lists the interaction of pH and Aw as to determine its classification as a non-TCS food or if a food should undergo additional testing to determine if it is capable of supporting the growth or toxin formation of pathogenic organisms.

Simply listing the outermost limits does not address the food items that fall within those limits, yet would not be considered TCS due to the interaction of pH and Aw. For example, FDA would consider a food with pH of 5.0 but with an Aw of 0.90 as a non-TCS food.

This poses a conflict between the equipment standards and the FDA Food Code - one which regulators would be expected to arbitrate in the field.

**Response**

Thank you for your vote, comment and subsequent dialogue since this ballot closed. Per the detailed discussion during the Task Group teleconference on September 15, 2020, the following motion was accepted:

Motion, D.Melaragno: to move forward with R4, including the outer most limits of pH and water activity as is, with the expectation that a new issue paper would be submitted to discuss the addition of a table.
Voting options:

1. **Affirmative:** you are voting to accept the ballot document as it stands after your consideration of the unresolved negative comments.
2. **Negative:** You are voting to reject the ballot document as it stands after your consideration of the unresolved negative comments. Voters who change an affirmative to a negative shall cite the unresolved negative comment that caused their decision.
3. **Abstain:** You do not feel that you have sufficient information to make an informed decision on this issue.

Please note that if you do not return a vote in this adjudication ballot, your original vote will remain in effect.

At the close of this adjudication ballot, all results will be tallied to determine if the requirements for consensus have been satisfied.

**Purpose**
The purpose of this ballot is to affirm new and revised language for the harmonization of language between the FDA Food Code and NSF Food Equipment Standards

**Background**
Issue paper FE-2019-09 recommended the Joint Committee of Food Equipment (JCFE) consider changing the term *Potentially Hazardous Foods* currently used in NSF Food Equipment Standards to the term *Time/Temperature Control for Safety Food* used in the FDA Food Code. Making this change would require adding a definition to NSF/ANSI 170 Glossary of Food Equipment Terminology.

The issue paper was initially presented to the JCFE during its annual meeting in August 2019. The committee discussed the topic in some detail and motioned the language be sent to the JCFE as a straw poll for review and comment. Revision 1 straw ballot received a 27 : 1 : 1 (Yes : No : Abstain) vote and several comments for suggested improvement.

The Task Group met on December 10, 2019 to discuss the comments, revise the language and unanimously motioned the updated language be sent to this TG as revision 2 straw ballot. This ballot resulted in a 7 : 4 : 0 (Yes : No : Abstain) vote, with further comments to increase clarity and harmonization with the FDA Food Code. This updated language was then presented to the TG as revision 3 and although received a unanimous affirmative vote (11 : 0 : 0), the issue proponent correctly pointed out that the NOTE inaccurately stated: “but are limited to”. The FDA Food Code does not include a qualifying preface and simply lists examples.

After this final language update, revision 4 was sent to the JCFE as an approval ballot which resulted in a vote of 24 : 1 : 1 (Affirmative : Negative : Abstain). Prior to the September 15, 2020 Task Group meeting, the issue proponent, negative commenter and TG Chair discussed options for revisions which were then presented and discussed extensively during the meeting. In the end, the TG motioned to send the existing revision 4 language back to the JC for adjudication.
Issues:
A negative vote was submitted by James Leonard, and Tony Gagliardi abstained. Please refer to the negative comment and response letter in the reference documents for the negative voter recommendation.

If you have any questions about the technical content of the ballot, you may contact me in care of:

Michael Perez  
Chair, Joint Committee on Food Equipment  
c/o Al Rose  
Joint Committee Secretariat  
NSF International  
Tel: 734-827-3817  
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[Note – the recommended changes to the standard which include the current text of the relevant section(s) indicate deletions by use of strikeout and additions by grey highlighting. Rationale statements are in red italics and only used to add clarity; these statements will NOT be in the finished publication.]

NSF/ANSI Standard for Food Equipment —

Glossary of Food Equipment Terminology

3.155 potentially hazardous food: 3.XXX time/temperature control for safety (TCS) food (formerly known as “potentially hazardous food”)

(1) A food that is natural or synthetic and requires temperature control because it is in a form capable of supporting the following: rapid and progressive growth of infectious or toxigenic microorganisms; growth and toxin production of Clostridium botulinum; or, in raw shell eggs, the growth of Salmonella enteritidis;

(2) Potentially hazardous food: Time/temperature control for safety food includes:
— animal food (a food of animal origin) that is raw or heat-treated;
— food of plant origin that is heat-treated or consists of raw seed sprouts;
— cut melons;
— cut leafy greens;
— cut tomatoes or mixtures of cut tomatoes that are not modified in a way so that they are unable to support pathogenic microorganism growth or toxin formation; and
— garlic and oil garlic-in-oil mixtures that are not acidified or otherwise modified at a food processing plant in a way that results in mixtures that do not support growth as specified above pathogenic microorganism growth or toxin formation;

(3) Potentially hazardous food: Time/temperature control for safety food does not include:
— an air-cooled hard-boiled egg with shell intact, or a shell egg that is not hard-boiled but has been treated to destroy all viable salmonellae; or
— a food having a water activity (a) value of 0.85 or less than 0.88; or
— a food with a pH of 4.6 or less than 4.2; or
— a food, in an unopened hermetically sealed container, that is commercially processed to achieve and maintain commercial sterility under conditions of nonrefrigerated storage and distribution; or
— a food for which laboratory evidence demonstrates that rapid and progressive growth of infectious or toxigenic microorganisms or the growth of S. enteritidis in eggs or C. botulinum cannot occur, as defined previously in this section, and that may contain a preservative, other barrier to the growth of microorganisms, or a combination of barriers that inhibit the growth of microorganisms; or

Rationale: The United States Food Code has revised the phrase Potentially Hazardous Food to Time/Temperature Control for Safety Food. Updating NSF 170 and the other applicable NSF Food Equipment Standards adds consistency and continuity with these regulations.
— a food that does not support the growth of microorganisms as specified under part (1) of this definition even though the food may contain an infectious or toxigenic microorganism or chemical or physical contaminant at a sufficient level to cause illness.

NOTE – cut leafy greens means fresh leafy greens whose leaves have been cut, shredded, sliced, chopped, or torn. Examples include: iceberg lettuce, romaine lettuce, leaf lettuce, butter lettuce, baby leaf lettuce (i.e., immature lettuce or leafy greens), escarole, endive, spring mix, spinach, cabbage, kale, arugula and chard. Does not include: Herbs such as cilantro or parsley or whole heads of lettuce or other raw agricultural commodities. ‘Cut’ does not include removing and discarding exterior leaves, which is a common practice for display in retail food establishments.

Rationale: Proposed language is based on definition for “cut leafy greens” within the U.S. FDA Food Code and Fact Sheet from Oregon Department of Agriculture.¹

3.155 potentially hazardous food: See time/temperature control for safety (TCS) food