**Conference for Food Protection**

**2012 Issue Form**

**Internal Number: 105**

**Issue: 2012 III-012**

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| **Council Recommendation:** | Accepted as  Submitted |  | Accepted as Amended |  | No Action |  |
| **Delegate Action:** | Accepted |  | Rejected |  |  |  |

*All information above the line is for conference use only.*

**Title:**

ROP 4: Sous Vide and Cook Chill, pH and Temperature Control

**Issue you would like the Conference to consider:**

The Reduced Oxygen Packaging (ROP) Committee recommends changing the requirement to obtain a variance when an acidifying agent is used as a method of food preservation so long as the equilibrium pH of the final product is 5.0 or below which is checked using a pH meter and is held at 41o F or below for no more than 30 days.

The ROP Committee asks that the Council and CFP delegates recognize that products with a pH lower than 5.0 and held at 41o F or below controls pathogen growth and allows products to be held safely for up to 30 days.

**Public Health Significance:**

The change to Subparagraph 3-502.12 (D)(2)(e)(iii) of the 2009 Food Code is driven by 2 factors. First, the original wording is now obsolete and is covered by the recommended change to Subparagraph 3-502.12 (D)(2)(e)(ii) of the 2009 Food Code as requested in 2012 CFP Issue titled: ROP 3: Sous Vide- Cook Chill Time and Temperature Control.

The new wording is based upon research which shows that C. botulinum and L. monocytogenes cannot grow if a food has a pH below 5.0 and a temperature below 41o F. The growth of L. monocytogenes and other pathogens are also controlled by the same factors as listed for Subparagraph 3-502.12 (D)(2)(e)(ii) of the 2009 Food Code

Monitoring of pH as a control for pathogens C. botulinum and L. monocytogenes is important to the safety of the product to ensure that the proper food product pH is consistently maintained.

2012 CFP issue entitled ROP 6: Updates to Food Code Annexes 2 and 3 is recommending:

1. Changes to the Public Health Reasons, Annex 3 of the 2009 Food Code, which will explain the rationale for these changes; and
2. References included in the 'Supplemental Information' attached to the Committee's report also be included into Annex 2 of the 2009 Food Code.

Paragraph 3-502.11 (C) of the 2009 Food Code will now allow ROP processes to add an acidifying agent to reduce pH to below 5.0 so that product may be held at below 41o F for up to 30 days. Research has shown that this yields an acceptable method with a built in safety margin to allow ROP processes without the need for going through the variance process. Health Canada uses this pH and temperature combination to ensure safe production of foods and control of L. monocytogenes and C. botulinum. Additionally, psychrophilic C. botulinum has a pH growth limit at 5.0 at ALL temperatures and L. monocytogenes has a pH growth limit of 4.4 at ALL temperatures and a pH growth limit at 5.0 at refrigeration temperatures (41F). The 'Supplemental Information' attached to the 2012 CFP issue entitled Report - ROP Committee includes additional research to support the Committee's recommendation.

**Recommended Solution: The Conference recommends...:**

that a letter be sent to the FDA requesting the 2009 Food Code (as modified by the Supplement issued in 2011) be amended as follows (using underlining for additions and strike through for language elimination):

**1) The following exclusionary language be added to the end of Subparagraph 3-502.11 (C)**

3-502.11 Variance Requirement.

A FOOD ESTABLISHMENT shall obtain a VARIANCE from the REGULATORY AUTHORITY as specified in § 8-103.10 and under § 8-103.11 before: Pf

(A) Smoking FOOD as a method of FOOD preservation rather than as a method of flavor enhancement; Pf

(B) Curing FOOD; Pf

(C) Using FOOD ADDITIVES or adding components such as vinegar, except as specified in 3-502.12 (D)(2)(e)(iii): Pf

(1) As a method of FOOD preservation rather than as a method of flavor enhancement, Pf or

(2) To render a FOOD so that it is not POTENTIALLY HAZARDOUS (TIME/TEMPERATURE CONTROL OF SAFETY FOOD); Pf

**2) That a new paragraph (d) be added Section 3-502.12 (B)(5)**

3-502.12 Reduced Oxygen Packaging Without a Variance, Criteria.

(B) A FOOD ESTABLISHMENT that PACKAGES POTENTIALLY HAZARDOUS FOOD (TIME/TEMPERATURE CONTROL FOR SAFETY FOOD) using a REDUCED OXYGEN PACKAGING method shall have a HACCP PLAN that contains the information specified under ¶ 8-201.14(D) and that: Pf ...(no changes to paragraphs 1-4)

(5) Includes operational procedures that:....(no changes to subparagraphs a-c)

(d) If pH is used as a barrier to growth of Clostridium botulinum and Listeria monocytogenes such as in 3-502.12 (D)(2)(e)(iii), delineate equilibrium pH measurement, instrument calibration, and pH recordkeeping procedures.

**3) Replace existing Subpargraph (iii) of Section 3-502.12 (D)(2)(e) with new language**

3-502.12 Reduced Oxygen Packaging Without a Variance, Criteria.

~~(iii) Cooled to 3°C (38°F) or less within 24 hours of reaching 5°C (41°F) and held there for no more than 72 hours from PACKAGING, at which time the food must be consumed or discarded; P or~~

(iii) Has an equilibrium pH of 5.0 or less, verified by a properly calibrated digital pH meter, and held at 5°C (41°F) or less until consumed or discarded within 30 days after the date of PACKAGING; P or

**This issue recommends no additional changes to remainder of Section 3-502.12 (D).**

**Submitter Information:**

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