

**Conference for Food Protection  
2012 Issue Form**

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<b>Council Recommendation:</b>	Accepted as Submitted _____	Accepted as Amended _____	No Action _____
<b>Delegate Action:</b>	Accepted _____	Rejected _____	

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**Title:**

ROP 2: Definitions for Reduced Oxygen Packaging

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

The 2010-2012 Reduced Oxygen Packaging (ROP) Committee examined the definitions of ROP provided in the Food Code (Chapter 1 - Purpose and Definitions) and concluded that the definitions of sous vide packaging needed to be harmonized with both the Food Code (Annex 6 - Food Processing Criteria) and with the accepted understanding of the ROP process. It was also felt by the Committee, that a statement of what is excluded from ROP could be useful for inspectors and operators. There is some confusion of what constitutes ROP and the exclusionary language proposed will address that confusion. Finally, the Committee thought that several changes to the definitions in Annex 6 - Food Processing Criteria also warranted some edits to improve the clarity of the definitions and make sure that the language of the annex was aligned with the Food Code itself.

**Public Health Significance:**

ROP offers unique advantages and opportunities for the food industry but also raises several microbiological and potential foodborne illness concerns. Products packaged using ROP may be produced safely if proper scientifically validated controls are in effect. Updates and clarifications of Food Code requirements and public health reasons are essential to ensure proper safeguards and to avoid unproductive confusion for inspectors and operators. Recommended changes are suggested to the most current Food Code 1-201.10. Items 1, 3 and 4 below are simply clarifications to existing definitions.

The Committee also recommended the addition of a new paragraph (item 2 below) to the most current Food Code section 1-201.12. This definition was needed to define what is excluded from ROP. This includes short term storage of food products held in cold storage temperatures of 41°F or below in oxygen barrier bags for less than 48 hours as it does not allow sufficient time for the production of *Clostridium botulinum* toxin nor the rapid and progressive growth of *Listeria monocytogenes*. The current Food Code allows up to 48 hours to cool product from 41° F to 34° F for reduced oxygen packaging. As long as product is stored below 41° F no regulatory action would be taken on this product until the product reached the end of the 48 hour time period. The 48 hour time frame is validated by numerous studies reviewed by the CFP's ROP committee. The Skinner-Larkin model for pathogen growth (see Appendix 4 in the ROP issue report) shows that the 48 hour time

frame is a conservative estimate and *C. botulinum* and *L. monocytogenes* would take far longer to produce toxin or grow to dangerous levels.

Additional rationale for the recommended changes is included in the Table 1 Summary of Food Code and Annex changes proposed by the 2010-2012 ROP Committee. That table is included in the 2010-2012 Reduced Oxygen Packaging Committee Final Report as Appendix 1.

**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) Modify language in Section 1-201.10(B) Reduced Oxygen Packaging (2) (e) to read: Sous vide PACKAGING, in which raw or partially cooked FOOD is ~~placed in a hermetically sealed impermeable bag~~ vacuum packaged in an impermeable bag, cooked in the bag, rapidly chilled and refrigerated at temperatures that inhibit the growth of psychrotrophic pathogens.

2) Add a new subparagraph (3) to Section 1-201.10(B) Reduced Oxygen Packaging with exclusionary language to read:

Section 1-201.10(B) (3) Reduced Oxygen Packaging does not include:

a) Placing product in a bag and sealing it immediately prior to or after, cooking, cooling or reheating the product as long as the product is:

i. Labeled with the time and date the product is placed in the bag: <sup>Pf</sup>

ii. Removed from the bag within 48 hours of the time product is placed in the bag: <sup>P</sup>

3) Modify language on page 572 in Annex 6 Food Processing Criteria, Section 2 Reduced Oxygen Packaging, paragraph (B) Definitions, subparagraph (1) to read:

Cook-chill is a process that uses a plastic bag filled with hot cooked food from which air has been expelled and which is sealed, or closed with a plastic or metal crimp.

4) Modify language on page 573 in Annex 6 Food Processing Criteria, Section 2 Reduced Oxygen Packaging, paragraph (B) Definitions, subparagraph (5) to read:

Vacuum Packaging reduces the amount of air from a package and hermetically seals the package so that a ~~near-perfect~~ vacuum remains inside. A common variation of the process is Vacuum Skin Packaging (VSP). A highly flexible plastic barrier is used by this technology that allows the package to mold itself to the contours of the food being packaged.

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