

Food Code Fact Sheet #2

What you should know about the Code

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FOODSAFETY

Reduced Oxygen Packaging without a Variance

OAR 333-150-0000, CHAPTER 3-502.12

(A) Except for a food establishment that obtains a variance as specified under § 3-502.11, a food establishment that packages potentially hazardous food using a reduced oxygen packaging method shall control the growth and toxin formation of *Clostridium botulinum* and the growth of *Listeria monocytogenes*.^P

(B) A food establishment that packages potentially hazardous 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}

(1) Identifies the food to be packaged;^{Pf}

(2) Except as specified under ¶¶ (C) - (E) of this section, requires that the packaged food shall be maintained at 5°C (41°F) or less and meet at least one of the following criteria:^{Pf}

(a) Has an aw of 0.91 or less,^{Pf}

(b) Has a pH of 4.6 or less,^{Pf}

(c) Is a meat or poultry product cured at a food processing plant regulated by the USDA using substances specified in 9 CFR 424.21, and is received in an intact package,^{Pf} or

(d) Is a food with a high level of competing organisms such as raw meat, raw poultry, or raw vegetables;^{Pf}

(3) Describes how the package shall be prominently and conspicuously labeled, with instructions.^{Pf}

(4) Limits the refrigerated shelf life to no more than 14 calendar days from packaging to consumption, except the time the product is maintained frozen, or the original manufacturer's "sell by" or "use by" date, whichever occurs first;^P

(5) Includes operational procedures according to rule,^{Pf} and

(6) Describes the training program according to rule.^{Pf}

(C) Except for fish that is frozen before, during, and after packaging, a food establishment may not package fish using a reduced oxygen packaging method.^P

PUBLIC HEALTH REASONS:

When followed as written, the ROP methods in this section all provide controls for the growth and/or toxin production of *C. botulinum* and *L. monocytogenes* without a variance.

Reduced Oxygen Packaging (ROP), is done in many ways. The most common restaurant use of ROP is to mechanically remove air from around food in a plastic bag to create a tight seal, called vacuum packaging. Packaging food in re-sealable zipper storage bags is **not** considered ROP.

There are many benefits to using ROP, such as reducing freezer burn, portioning product, prolonging shelf life. Unfortunately, by removing the oxygen from around a food, you are also creating an environment favorable to the growth of *Clostridium botulinum*. This can make a safe food into a potentially lethal food after packaging. It is because of this that there are many requirements around ROP.

You can ROP some foods without a variance because they have barriers to the growth of the botulism, but you must write a Hazard Analysis of Critical Control Points (HACCP) plan first and have it approved by your local Public Health Authority.

All packaged foods must be held below 41°F and:

- Have a water activity of .91 or less, or
- Have a pH of 4.6 or less, or
- Be a cured meat from a USDA-regulated facility from an intact package, or

- Have a high level of competing organisms, such as raw meat, raw poultry or raw vegetables.

Raw fish is more strict than other raw products because *C. botulinum* is found in all species. Fish is required to be frozen before, during and after being packaged, even if it is in the bag less than 48 hours.

ROP also includes the cook/chill and sous vide methods of bagging foods. See Fact Sheet #4 for specific information about cook/chill and sous vide processes.



Vacuum packaging is commonly used to portion raw meats for freezing

The Variance Fact Sheet has information about variances if you want to ROP cooked foods or other products not listed here.

If you only leave the food (except fish) in the sealed bag for ≤48 hours, then it is not considered ROP.