

Cook-Chill and Sous Vide



PUBLIC HEALTH REASONS:

Both processes depend on time or temperature alone as the only barrier to pathogenic growth. Therefore, monitoring critical limits including those established for cooking to destroy vegetative cells, cooling to prevent outgrowth of spores/toxin production, and maintaining cold storage temperatures to inhibit growth and/or toxin production of any surviving pathogens are essential. Since there are no other controlling factors for *C. botulinum* and *L. monocytogenes* in a cook-chill or sous vide packaging system, temperature control must be continuously monitored electronically and visually examined twice daily to verify that refrigeration temperatures are adequate.

FOOD CODE, OAR 603-25-0030, CHAPTER 3-502.12 (D)

COOK-CHILL

A process where hot foods are sealed in plastic bags and quickly chilled. This is most commonly done in an ice/water bath, but there are other options. The process of cooking drives off oxygen and leaves a reduced oxygen level in the food, even though the plastic bag may be sealed with a large amount of air at the top of the package. This process is commonly used for large batches of soups and sauces.

SOUS VIDE

A French phrase meaning "under vacuum", this method of food preparation is gaining in popularity among chefs. With this method, fresh, raw ingredients or partially cooked ingredients are vacuum-sealed in an impermeable plastic bag. The bag is then cooked at relatively low temperatures in a water bath.

Sous vide and cook-chill packaging may also be referred to as reduced oxygen packaging (ROP). Because the food is packaged in a reduced oxygen atmosphere, the main concern is the growth of, and toxin formation by, *Clostridium botulinum* and the growth of *Listeria monocytogenes*. Both of these organisms can grow at refrigeration temperatures, so strict time/temperature combinations are required to ensure safety.

To use either of these processes a Hazard Analysis and Critical Control Points (HACCP) plan must be submitted to the Food Safety Program and approved prior to starting the process.

Food packaged using cook-chill or sous vide processing methods cannot be distributed outside of the food establishment doing the packaging.



**OREGON
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