

## Pickling and Fermentation in Retail Food Establishments

Cold brining, hot brining and natural fermentation are commonly used to make pickled products. All three processes are allowed without additional regulation in the 2013 ODA Retail Food Code as long as the options below are followed. Examples of these types of products are: traditional cucumber pickles cold brined in salt, dill pickles, bread and butter pickles, dilly beans, sauerkraut, and vegetable kimchi. Be sure to contact your local ODA inspector prior to beginning any type of special processing.

If you choose to go outside of these parameters set in the regulations then a variance and/or HACCP plan would be required. For example any hermetic sealing, canning of a pickled product, or going beyond the 7-day date mark of hot brined pickled products would require a variance and may fall under the federal rules as an acidified food. Visit our ODA Food Safety webpage for more information on variances, our Acidified Foods Step by Step Guide, and to get a variance application.

Other fermented products such as: yogurt, milk kefir, tempeh and meat products like sausage are not allowed without an approved variance and HACCP plan.

## **Option #1: Cold Brine**

Raw, non-potentially hazardous vegetables that are covered with cool brine. Allowed to be held for use indefinitely without refrigeration or date marking because there is no heat treatment of the vegetables.

## **Option #2: Hot Brine**

Vegetables treated with hot brine are considered to be potentially hazardous foods. This can be done under the 2013 ODA Retail Food Code by cooling the product properly and storing them at or below 41°F with a 7-day date mark.



## **Option #3: Natural Fermentation**

Natural Fermentation is the process where vegetables (including cabbage) undergo natural lactic acid fermentation at room temperature. The finished products are subject to refrigeration (at or below 41°F) and the final pH is required to be 4.6 or less. Retail facilities shall use a pH meter (or pH test strips if 4.0 or less) to ensure the fermentation process was successfully completed. Finished product pH records for each batch shall be maintained on site for at least 180 days, and for at least 2 years at a reasonably accessible location.

