



COLORADO

Department of Public Health & Environment

Dedicated to protecting and improving the health and environment of the people of Colorado

PROGRAM:	RETAIL FOOD
EFFECTIVE REGULATION:	<i>Colorado Retail Food Establishment Rules and Regulations, July 1, 2013</i>
INTERPRETIVE MEMO NO.:	17- 05
DATE:	December 19, 2017
SUBJECT:	Requirements for Fermentation of Specific Foods

Questions have been raised regarding the requirements for retail operations producing fermented foods. Fermentation is a microbial process using beneficial fermentation bacteria such as Lactobacillus and Bifidobacterium spp. and other lactic acid bacteria (LAB) (commonly known as probiotics), which thrive in an anaerobic environment. The beneficial "fermentation" bacteria out compete the pathogens and produces lactic acid during fermentation and reduces the pH of the product making it safer as the process continues. The following information is provided to clarify regulatory requirements.

Due to the safety factors that are built into the fermentation process associated with fermentation, the department does not recognize the making of kimchi, kombucha, crème fraiche, yogurt, kefir and sauerkraut as food processes that would be considered a specialized processing method under section 3-606 of the *Colorado Retail Food Rules and Regulations*, if the following processes are in place and documented:

1. A standardized recipe is used. A "standardized recipe" means that the batch size, ingredient list, amounts of each ingredient, and the mixing/fermentation time remain the same for each batch.
2. pH monitoring (lab or batch tested) verifying the pH is below 4.2,
3. product is maintained at 41° F or below following the fermentation process, and
4. product is date marked and disposed of 7 days after being placed in cold holding.

Deviations from the original standardized recipe or any of the elements identified above may result in the product being disposed of and require a HACCP plan or additional pH testing requirements to ensure product integrity. This memo only applies to the making of kimchi, kombucha, crème fraiche, yogurt, kefir and sauerkraut

25-4-1601 C.R.S. provides CDPHE's authority for the uniform statewide administration, implementation, interpretation, and enforcement of The Colorado Retail Food Establishment Rules and Regulations. This interpretive memo is issued in accordance with this authority and CDPHE expects its contents to be implemented uniformly.

All previous interpretive memoranda issued pertaining to this subject are hereby superseded as of the effective date above.

Jeff Lawrence, Director
Division of Environmental Health and Sustainability

