



Ohio Department of Agriculture
and
Ohio Department of Health



Mike DeWine
Governor

Jon Husted
Lieutenant Governor

Dorothy Pelanda
ODA Director

Amy Acton, M.D.
ODH Director

To: Health Commissioners, Directors of Environmental Health, Food Program Sanitarians and Interested Parties

From: Ohio Department of Agriculture, Division of Food Safety
Ohio Department of Health, Food Safety Program

Date: March 21, 2019

Re: Letter of Opinion 2019-01

Time as a Public Health Control for Batters Mixed with Water

Ohio Administrative Code (OAC) 3717-1-03.4(I), Time as a Public Health Control, requires ready-to-eat, Time/Temperature Controlled for Safety (TCS) foods to have an initial temperature of 41°F or less when removed from temperature control if the food will be held or displayed using time as a public health control. This section of code also requires food service operations (FSO) and retail food establishments (RFE) to prepare written procedures in advance that specify the method of compliance and marking system the FSO or RFE will use to monitor the time at which the food must be consumed or discarded. However, the code does not address using time as a public health control to hold or display a non-TCS food that is at ambient temperature at the time it becomes a TCS food. This includes batter mixes that contain dried milk and/or eggs, such as waffle, pancake and muffin batters, that are prepared with room temperature ingredients and only become TCS upon mixing with water.

In 2018, the Conference for Food Protection (CFP) submitted a recommendation to the United States Food and Drug Administration (FDA) that the FDA Model Food Code be amended to allow batters to begin at 70°F rather than 41°F when using time as a public health control. CFP provided the following information to support the modification to the food code:

- The FDA Food Code Annex section 3-501.19 states: For food refrigerated at 41°F or 45°F then transferred to an ambient temperature of 75°F for 4 hours, the growth rate of *Listeria monocytogenes* remains slow enough to ensure that the critical limit of 1 log growth is not reached. Published values at 68°F and 70°F in egg and milk products confirmed slow *Listeria monocytogenes* growth at room temperatures.
- The United States Department of Agriculture (USDA) Pathogen Modeling Program (PMP) states: the growth of *Listeria Monocytogenes* is less than 1 log at 68°F-70°F in egg and milk products.
- Pathogen modeling of batter mixes conducted by Rutgers University indicates that minimal bacterial growth occurred when the batter begins above 41°F and are held at 70°F or lower for up to four hours.

The FDA responded to CFP that they “conceptually agree with CFP’s recommendation and anticipates making changes to the food code and its annexes related to this issue”.

Summary Response:

Since studies indicate that the growth of *Listeria Monocytogenes* is minimal at room temperatures, ODH and ODA have determined that it will not pose a significant public health risk for batters mixed with water to have an initial temperature above 41 °F.

Therefore, non-TCS batter mixes that contain dried milk and/or eggs and become TCS upon mixing with water such as waffle, pancake and muffin batter mixes may be held using time as a public health control for up to 4 hours and may have an initial temperature above 41°F. To comply with this Letter of Opinion, the initial temperature of the prepared batter shall be at 70°F or lower and shall remain at 70°F or lower for the duration of the time the batter is held using time as a public health control. FSO’s and RFE’s that wish to hold prepared batters using time as a public health control must also comply with the following:

- Written procedures that specify the methods of compliance with OAC 3717-1-03.4(I) shall be prepared in advance, maintained in the FSO or RFE and made available to the licensor upon request.
- The prepared batter shall be marked or otherwise identified to indicate the time that is four hours past the point in time when the batter was mixed with water.
- The prepared batter shall be cooked and served or discarded within four hours from the point in time when batter was mixed with water.
- The prepared batter shall be discarded if the temperature of the batter exceeds 70°F while being held using time as a public health control.

As specified in Revised Code 3717.041, this letter of opinion provides a detailed interpretation of Administrative Code 3717-1-03.4(I). Unless rules are adopted that override the interpretation expressed in this letter, the interpretation shall be binding and applied uniformly throughout the state.

This “Letter of Opinion” was reviewed and recommended by the Retail Food Safety Advisory Council at their March 12, 2019 meeting.