

**Conference for Food Protection
2014 Issue Form**

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Council Recommendation:	Accepted as Submitted _____	Accepted as Amended _____	No Action _____
Delegate Action:	Accepted _____	Rejected _____	

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Title:

TPHC 3 - Foods Needing More Research for Using TPHC

Issue you would like the Conference to consider:

FDA Model Food Code (hereafter Food Code) Section 3-501.19 requires ready-to-eat ambient temperature FOODS that become time/temperature control for safety food (TCS) during preparation to undergo cooling before Time As A Public Health Control (TPHC) is allowed. To determine if TPHC can be used safely for certain foods at ambient temperatures (without initially cooling to 5°C (41°F) the Time as a Public Health Control Committee reviewed the following products: retail prepared chopped garlic and oil mixtures, hummus made from non-commercially prepared ingredients, and opened canned products used as an ingredient in a formulation.

Public Health Significance:

The relationship between time and temperature is recognized as an effective means to control the growth of many foodborne pathogens. Food Code provides science based requirements for safe food preparation, cooking, cooling, reheating, and implementation of time as a public health control (TPHC) where Potentially Hazardous Food/ Time/Temperature Control For Safety (PHF/TCS) food will be exposed to temperatures above 5°C (41°F) and below 57°C (135°F).

Food Code (section 3-501.14(B)) allows for food taken from ambient temperatures (such as foods in hermetically sealed containers) to be cooled to 5°C (41°F) within 4 hours. These products are considered Ready-to-Eat and safe for consumption as long as they comply with date marking provisions contained in Food Code (section 3-501.17).

There is currently no provision in Section 3-501.19 to allow for ambient temperature foods that become PHF/TCS during preparation to be held under TPHC without first cooling to 5°C (41°F). However, there are scenarios (e.g. opening a hermetically sealed container, and mixing chopped produce with oil) in the flow of food preparation wherein PHF/TCS foods may be taken from ambient temperatures and served to the public within the time frame allowed for proper cooling. Further evaluation and research is needed to determine if these products can be held without cooling to 5°C (41°F).

Retail prepared chopped garlic and oil mixtures may support the growth of *C. botulinum* bacteria. Typically this type of product is held near the cooking area and there is a lack of awareness that it is a PHF/TCS food. Outcomes from ComBase pathogen growth modeling

and research suggest that this food item can be stored for 10 hours at ambient temperature before a 1 log growth of *Clostridium botulinum* and toxin formation. However, although this time period is longer than the 4 hours allowed by TPHC requirements, many food handlers may not perceive the product as PHF/TCS which may lead to prolonged periods of storage at ambient temperatures, beyond what ComBase modeling suggests is safe.

Similar to chopped garlic and oil mixtures, ComBase modeling outcomes for freshly prepared hummus made from non-commercially prepared ingredients suggest that this food item can be stored up to 9 hours at ambient temperature before 1 log growth is expected for salmonella. Although this time period is longer than 4 hours allowed by TPHC, there is concern regarding documented food borne illness outbreaks involving hummus that trace back to ingredients used in its preparation, specifically sesame seed paste/tahini.

Opened canned products used as ingredients in a formulation create multiple product variables such as changes in pH, microbial load, and other environmental risk factors. Recognizing these factors, the need for additional research is necessary to gain a more holistic understanding of the risks associated with these products.

References:

See TPHC Committee Final Report (attached to Issue titled: "*Report-Time as a Public Health Control (TPHC) Committee*") for documents and references reviewed by the committee.

Recommended Solution: The Conference recommends...:

that a letter be sent to the FDA recommending further evaluation and research to determine if the following products can be held without cooling to 5°C (41°F) prior to using time as a public health control (TPHC):

1. Retail prepared chopped garlic and oil mixtures
2. Hummus made from non-commercially prepared ingredients
3. Opened canned product used as an ingredient in a formulation

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