Conference for Food Protection
2020 Issue Form

Issue: 2020 II-035

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

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Late Breaking Issue Title: *(limited to 75 characters)*

Amend Food Code: clarify language for disinfection of food-contact surfaces (Amended)

Late Breaking Issue you would like the Conference to consider:

The 2017 Food Code does not address disinfection or the use of disinfectants on food-contact surfaces.

Retail food facilities have a need to use disinfectants to inactivate ~~kill~~ viruses on food-contact surfaces. Examples include disinfection following bodily fluid events, Norovirus or Hepatitis A illnesses or outbreaks, or COVID-19 cases. Most disinfectants are registered to inactivate ~~kill~~ viruses and other microorganisms on surfaces, whereas most commonly used food-contact surface sanitizers only reduce bacteria of food safety concerns and may not be effective and/or registered against viruses.

Due to the global SARS-CoV-2 pandemic, health orders from local and state regulatory agencies across the country have required disinfection in retail food facilities on a routine basis and/or in the event of any confirmed COVID-19 diagnosis(es) on the premises. These various orders and recommendations have resulted in confusion for facility operators and regulators on how to correctly use disinfectants, especially while simultaneously meeting sanitization requirements.

The intent of this Issue is to clarify in the FDA Food Code the use of EPA-registered disinfectants on food-contact surfaces when there is a need to prevent the spread of a virus in a retail food facility.

Concerns related to the use of disinfectants on food-contact surfaces include several considerations, as summarized above, from regulatory and industry perspectives. Should the Council wish to consider an alternative to the Recommended Solutions presented in this Issue, an additional option to establish a CFP Council committee to further study this topic is outlined in an attached supporting document (Supporting Attachment #3).

Public Health Significance:

The FDA Food Code is relied upon by food facilities and local and state regulatory agencies as the primary guidance for food safety requirements. The lack of clear guidance in the Food Code in relation to disinfectants has led to various interpretations from regulators and industry and the potential for misuse. If these products are not used as registered the residue could impact human health and/or adulterate food.

Retail food facility disinfection to stop the spread of Norovirus has been a challenge for many years. The global SARS-CoV-2 pandemic has underscored the need to ensure the correct use of chemical antimicrobials to inactivate viruses in addition to bacteria commonly targeted by sanitizers. When an outbreak of Norovirus occurs, local and state regulatory agencies will require or recommend disinfection within a food facility to inactivate viral pathogens on food-contact surfaces and throughout the facility. During the SARS-CoV-2 pandemic, regulatory agencies across the country have required disinfection in retail food facilities as needed and/or in the event of any confirmed COVID-19 diagnosis(es) on the premises. Additionally, the Centers for Disease Control and Prevention (CDC) issued their own recommendations for disinfection of food-contact surfaces within retail food facilities. CDC's recommendation following disinfection includes rinsing and sanitizing. See Example #3 below.

COVID-19 has shed a light on the retail and foodservice industry's misunderstanding of sanitization and disinfection. The definition of sanitization needs to be modified to include the term "bacteria" instead of "microorganisms". Efficacy tests for sanitizers are only performed against pathogenic bacteria, not other microorganisms (e.g., viruses, fungi, and parasites).

The Code of Federal Regulations (40 CFR 158.2203) states, "Disinfectant means a substance, or mixture of substances, that destroys or irreversibly inactivates bacteria, fungi and viruses, but not necessarily bacterial spores, in the inanimate environment."

Currently, there are two ways EPA-registered disinfectants are used on food-contact surfaces in retail food facilities:

1) Disinfectants that require a rinse step prior to resuming regular operations; and
2) Disinfectants that do not require a post rinse step. This group of disinfectants meets food-contact tolerance levels and, similar to food-contact sanitizers, do not require a rinse step prior to further use due to their conformity to 40 CFR 180~~.940~~ Tolerances and Exemptions for Pesticide Chemical Residues in Food.

Below are examples of FDA's Food Code sections and current guidance from the CDC which can lead to a misunderstanding of how retail food facilities should approach the use of disinfectants for food-contact surfaces.

Example #1
Section 4-702.11 of the 2017 Food Code states, "Utensils and food-contact surfaces of equipment shall be sanitized before use after cleaning." To comply with this section, it is unclear if washing, rinsing, sanitizing, and air-drying are required following the use of a disinfectant.

Example #2
Within the hand antiseptic narrative of the 2017 Food Code Annex 3, Section 2-301.16, it states, "Sanitizers used to disinfect food-contact equipment and utensils can easily achieve the 5-log reduction of microorganisms and often far exceed this minimum requirement." This statement indicates that sanitizers are used to disinfect food-contact surfaces, causing further confusion about the terms "sanitization" and "disinfection."

Example #3
The CDC has issued guidance on the use of disinfectants in a retail food facility. (*https://www.cdc.gov/coronavirus/2019-ncov/community/organizations/business-employers/bars-restaurants.html*). This guidance calls for rinsing and sanitizing following the use of a disinfectant on a food-contact surface (see excerpt in next paragraph) and it does not appear to align with Section 4-702.11 of the 2017 Food Code (see Example #1 above).

"If a food-contact surface must be disinfected for a specific reason, such as a blood or bodily fluid cleanup or deep clean in the event of likely contamination with SARS-CoV-2, use the following procedure: wash, rinse, disinfect according to the label instructions with a product approved for food-contact surfaces, rinse, then sanitize with a food-contact surface sanitizer."

This Issue submission does not include a request for scientific review, analysis, or approval of disinfectants or no-rinse disinfectants on food-contact surfaces since this evaluation by EPA is part of their registration process.

Recommended Solution:

~~The Conference recommends that letters be sent to the FDA and the CDC requesting they work together to develop final guidance on the use of disinfectants in a retail food facility to assure alignment between CDC guidance and FDA Food Code.~~

The Conference recommends that a letter be sent to the FDA requesting the following:

1. Add a requirement to use a disinfectant effective against a virus of a food safety/public health concern in section 2-501.11 Clean-up of Vomiting and Diarrheal Events.

2. Add a requirement that if a chemical disinfectant applied to food-contact surfaces is EPA-registered for food-contact surfaces, it shall be used in accordance with the EPA-registered label use instructions.

3. Explain the appropriate use of disinfection in ~~retail~~ food ~~facilities~~ establishments by adding narrative to the Food Code Annex or by posting an interpretation document to the FDA Food Code Reference System.

The Conference further recommends that a letter be sent to the FDA to request the following language be considered as amended language to FDA Food Code (added language underlined and italicized):

1. Amend Part 1-2 Definitions of the most recent edition of Food Code:
    a. ~~Add a definition for the term "DISINFECTION" for food-contact surfaces to align with the definition of "disinfectant" in the Code of Federal Regulations, 40 CFR 158.2203.~~
    a. Add a definition for the term "DISINFECTION" *means the application of a substance, or mixture of substances, that destroys or irreversibly inactivates bacteria, fungi, or viruses, but not necessarily bacterial spores on cleaned food-contact or other hard, non-porous surface that, when evaluated for efficacy, destroys or irreversibly inactivates bacteria, fungi, or viruses in accordance with EPA Product Performance Test Guidelines.*
    b. **"Poisonous or toxic materials"** means substances that are not intended for ingestion and are included in 4 categories:
        i. (1) Cleaners and SANITIZERS, *and DISINFECTANTS*, which include cleaning and SANITIZING agents and agents such as caustics, acids, drying agents, polishes, and other chemicals;
        ii. (2) Pesticides, except SANITIZERS *and DISINFECTANTS*, which include substances such as insecticides and rodenticides;
    c. **"Sanitization"** means the application of cumulative heat or chemicals on cleaned FOOD-CONTACT SURFACES that, when evaluated for efficacy, is sufficient to yield a reduction of 5 logs, which is equal to a 99.999% reduction, of representative disease ~~microorganisms~~ *causing bacteria* of public health importance.

2. Amend Chapter 7 of the most recent edition of the Food Code:
    a. 7-102.11 Working containers used for storing POISONOUS or TOXIC MATERIALS such as cleaner ~~and~~ SANITIZERS*, and DISINFECTANTS* taken from bulk supplies shall be clearly and individually identified with the common name of the material.

3. Amend Annex 3, 2-501.11 Clean-up of Vomiting and Diarrheal Events of the most current edition of the Food Code:
    a. Effective cleanup of vomitus and fecal matter in a food establishment should be handled differently from routine cleaning procedures. It should involve a more

stringent cleaning and disinfecting process. Some compounds that are routinely used for sanitizing food-contact surfaces and *other non-food-contact surfaces* ~~disinfecting countertops and floors, such as certain quaternary ammonium compounds~~, may not be effective against ~~Norovirus~~ *viruses*. It is therefore important that food establishments have procedures for the cleaning and disinfection of vomitus and/or diarrheal contamination events that address, among other items, the use of ~~proper~~ disinfectants *with a registered claim against viruses of concern in food establishments* at the proper concentration.

Attachments:

Content Documents: *(documents requiring Council review; approval or acknowledgement is requested in the recommended solution above)*

n/a

Supporting Attachments: *(documents submitted to provide background information to Council)*
Supporting Attachments #1-3 below can be accessed at the following CFP web address:
http://www.foodprotect.org/media/biennialmeeting/issue-2020-iii-035-corrected-w-attachments.pdf
Supporting Attachments #4-7 below can be accessed at the following CFP web address:
http://www.foodprotect.org/media/biennialmeeting/issue-2020-iii-036-with-attachments.pdf

1. Supporting Attachment #1: EPA-Registered Disinfectants June 2021
2. Supporting Attachment #2: Food Protection Trends published article.
   Sanitizers and Disinfectants: A Retail Food and Foodservice Perspective
   Angela M. Fraser, Jeffrey Anderson, Juan Goncalves, Elaine Black, Anna Starobin, David Buckley, Dale Grinstead, Chip Manuel, Jill Hollingsworth
   Bibliographic citation: Food Protection Trends, vol. 41, no. 3, pp. 358-367, May 2021
   Volume 41, Issue 3: Pages 358–367
   Permission granted by publisher (IAFP) to include article as an Issue supporting attachment.
3. Supporting Attachment #3: Alternative Recommended Solution for Consideration
4. Supporting Attachment #4: Leone, Cortney M., et al. "Prevalence of human noroviruses in commercial food establishment bathrooms." Journal of food protection 81.5 (2018): 719-728.
5. Supporting Attachment #5: Cheesbrough, J. S., et al. "Widespread environmental contamination with Norwalk-like viruses (NLV) detected in a prolonged hotel outbreak of gastroenteritis." Epidemiology & Infection 125.1 (2000): 93-98.
6. Supporting Attachment #6: Duret, Steven, et al. "Quantitative risk assessment of norovirus transmission in food establishments: Evaluating the impact of intervention strategies and food employee behavior on the risk associated with norovirus in foods." Risk Analysis 37.11 (2017): 2080-2106.
7. Supporting Attachment #7: Chang, Arthur, et al. "Cleaning and disinfectant chemical exposures and temporal associations with COVID-19—national poison data system, United States, January 1, 2020–March 31, 2020." Morbidity and Mortality Weekly Report 69.16 (2020): 496.

Submitter Information:

☒ I am a first time Issue submitter

NOTE: checking the "first time submitter" box will enable the assigned Council Chair to contact you in advance of the Biennial Meeting to answer any questions about the process involved in presenting an Issue to Council. Checking this box is for Council Chair information only and is NOT included in the final Issue document presented to Council.

Contact information entered below will remain with the final Issue submission posted and archived on the CFP website.

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