

**Conference for Food Protection
2016 Issue Form**

Issue: 2016 I-019

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

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Issue History:

This is a brand new Issue.

Title:

Clean in place (CIP) definition

Issue you would like the Conference to consider:

Clean-in-Place (CIP) is common in liquid food and beverage processing, but is poorly defined and understood in the retail and food service industries. New and novel dispensing equipment and systems being introduced to the industry both in the U.S. and internationally create the need to better define and characterize hazards and reasonable interventions for liquid food preparation and dispensing systems. The process involves more than just rinsing wetted surfaces; it is not just "cleaning" - as the current CIP acronym infers. Chemicals used to clean and sanitize require kinetics in one or many forms to improve efficacy. When food contact surfaces are cleaned and sanitized in a dishwasher, or a three compartment sink, kinetics are added in the forms of high pressure sprays, or scrubbing, or turbulent flows in a power wash type sink. Kinetics (in some form) is also required for plumbed systems that handle liquid foods. Cleaning and sanitizing are discrete sequential steps, where cleaning precedes the application of an approved food contact surface sanitizer on the food contact surface of the equipment. The process is better defined as clean *and* sanitize in place (CSIP), as one cannot sanitize an unclean surface. Pronounced "sea-sip" (two syllables instead of three), CSIP systems are plumbed systems that typically use valves, pumps and control logic to sequentially wash and then sanitize food contact surfaces that are essentially, plumbing lines for liquid foods and beverages.

Public Health Significance:

Due to their plumbing line form, their internal wetted surfaces cannot be readily accessed for inspection or for manual cleaning and sanitizing. This presents a unique hazard to food safety and requires focused safety criteria to ensure reasonable continuous food safety. Using an acronym that has the first letter for each critical sequential step, yet fewer pronounceable syllables can add clarity to its unique safety function without any additional cost to industry or consumers. Further, it is well known that you cannot effectively sanitize contaminated surfaces. Consequently, food contact surfaces must be cleaned before sanitizers are applied. In food and beverage processing, surfactants that may not be

categorized as detergents are often used for the initial cleaning step. Accordingly, instead of calling cleaners "detergents", it is more appropriate use the genus solutions that have reduced surface tensions, known to be more effective than water by itself; *surfactants*. Further, "rinsing" is only needed when the listing and or label instructions indicate it is needed. Some surfactants (and now sanitizers too) are GRAS and others have K1's or are secondary food additives or ingredients and accordingly, require no rinsing after use and before introduction of liquid foods.

References link: <https://www.yousendit.com/download/ZWJWR0IVNXZGR0V3anNUQw>
CSIP processes comprise a PRIORITY ITEM (P) risk categorization.

Recommended Solution: The Conference recommends...:

a letter be sent to the FDA requesting the 2013 Food Code be amended as follows (language to be added is underlined; language to be deleted is in strike through format):

Section 1-201.10

Clean and sanitize in place (CSIP)^P

(1) "CSIP" means cleaned and sanitized in place by the sequential circulation or forceful flowing by mechanical means through a piping system, of a ~~detergent~~ surfactant solution, water rinse (when required), and SANITIZING solution onto ~~or over~~ EQUIPMENT or through wetted food contact surfaces that require cleaning and sanitizing, such as the method used, in part, to clean and SANITIZE wetted liquid food contact surfaces of food equipment that feature liquid food plumbing lines such as dispensing freezers a frozen-dessert machine or milk or juice dispensers and similar equipment.

(2) "CSIP" does not include the cleaning of EQUIPMENT such as band saws, slicers, or mixers that are subjected to in-place manual cleaning without the use of a CSIP system.

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