

Joint Committee on Food Equipment

August 18, 2025

Proposed revisions and new language to NSF/ANSI:

• 6 – Dispensing Freezers (6i24r1)

Revision 1 of NSF/ANSI 6, issue 24 is being forwarded to the Joint Committee on Food Equipment (JCFE) for consideration. Please review the proposal and submit your ballot by **September 8, 2025** via the <u>NSF Online Workspace</u>.

Please review all ballot materials. When adding comments, please include the section number for your comment and add all comments under one comment number whenever possible. If additional space is needed, you may upload a MS Word or .PDF version of your comments directly to the NSF Online Workspace.

Purpose

The purpose of this ballot is to affirm proposed revised and new language regarding the performance testing of the CIP method in Standard 6.

Background

Issue paper *FE-2025-09 – E. Coli CIP NSF 6* highlighted the importance of all food contact surfaces being exposed to a minimum density, positive control sample of the test organism.

The concept was first presented to the JC during the in-person meeting in October 2024 whereby the group agreed an issue paper proposing revisions should be submitted for consideration. These proposed updates are presented here as revision 1.

If you have any questions about the technical content of the ballot, you may contact me in care of:

Michael Perez

Chair, Joint Committee on Food Equipment

c/o Allan Rose

Joint Committee Secretariat

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[Note – the recommended changes to the standard which include the current text of the relevant section(s) indicate deletions by use of strikeout and additions by grey highlighting. Rationale Statements are in red italics and only used to add clarity; these statements will NOT be in the finished publication.]

NSF/ANSI Standard for Food Equipment –

Dispensing Freezers

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6 Performance

6.1 Cleaning and sanitization procedures

6.1.1 Performance requirement

The cleaning and sanitization procedures recommended by the manufacturer shall effectively clean and sanitize the food contact surfaces of the dispensing freezer.

NOTE — This requirement applies to manual cleaning and sanitizing procedures used in conjunction with mechanical sanitization and to CIP procedures recommended by the manufacturer.

6.1.2 Test method

Microbiological methods for stock culture preparation, and enumeration / analysis *Escherichia coli* (ATCC * #11229), shall be performed as specified in Annex N-1.

6.1.2.1 The equipment shall be filled with the *E. coli* and product mix suspension.

If a remote product supply system is being tested, the product supply lines shall be configured to the manufacturer's recommended installation restrictions (see Section 7.3) indicated in the manual prior to testing.

6.1.2.2 The equipment shall be operated so that food contact surfaces are exposed to the *E. coli* and product mix suspension. If a remote product supply system is being tested, the remote line set shall be filled with *E. coli* and product mix suspension so that all food contact surfaces are exposed (i.e., no air in remote line set). *E. coli* and product mix suspension shall be dispensed through the equipment, collecting three 200-mL positive control samples from the dispense point to ensure the entire food contact flow path is exposed to sufficient challenge. The average of the positive control samples shall serve as the initial inoculum density (Ni).

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6.1.2.3 The equipment shall then be CIP cleaned in place according to the manufacturer's instructions and refilled with sterile buffered dilution water (SBDW). The SBDW shall be dispensed and five 4200-mL samples shall be collected at intervals from the start of the dispensing until the unit is empty. When adequate sample volumes cannot be realized, more SBDW shall be added accordingly. The equipment shall then be operated so that food contact surfaces intended for CIP are exposed to the SBDW. Sufficient SBDW shall then be dispensed. The challenge organisms present in each sample shall be collected and enumerated using the Standard Total Coliform Membrane Filter Procedure in accordance with APHA Standard Methods for the examination of Water and Wastewater.⁶

6.1.3 Acceptance criteria

For each sample, the total counts on the initial inoculum density (Ni) of at least 1,000,000 (1 × 10⁶) and the total counts on the colony-forming units (cfus) recovered (Nf) shall demonstrate a reduction equal to or greater than 99.999% (6 log). The log reduction, R, is calculated from the following equation:

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R = \log 10 (Ni / Nf)
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where

Ni = initial inoculum density (cfu/mL)

Nf = the number of cfu recovered in each sample(cfu/mL)

If Nf < 1, the samples shall be considered acceptable.

Rationale: this revision ensures all food contact surfaces are exposed to the minimum density positive control samples during the performance testing.

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