

Raising awareness of GFSI scheme audit requirements with regard to cleaning tool and utensil selection and maintenance

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INTRODUCTION ▶

Food industry cleaning tools and utensils have long been identified as a major source and vector of cross-contamination. UK Government funded study data, used to establish food industry guidance on microbiological sampling¹ showed that:

47% of cleaning tools tested were positive for *Listeria monocytogenes*.

In 2017 Schäfer² determined that:

67% of equipment and utensils used in a poultry processing plant were contaminated with *L. mono*, even after cleaning.

FDA³

- Oct 2020 warning letter issued to food manufacturer highlighting critical food safety violations including the improper movement and use of an unclean broom from a wet cooler passageway to a ready-to-eat (RTE) food production area.
- Whole genome sequencing traced *L. mono* found in the RTL area back to the broom.
- FDA concluded that food manufacturer did not clean and disinfect their utensils and equipment in a manner that protected against contamination of food, food-contact surfaces, or food-packaging materials.

Despite this cleaning tools and utensils are rarely considered in relation to food safety. Fortunately, GFSI approved food safety schemes, including those operated by BRCGS, ISO (FSSC 22000), SQF, and IFS now each draw attention to them specifically.

PURPOSE AND METHOD ▶

To review GFSI food safety schemes, with regard to the selection and maintenance of cleaning tools and utensils; to summarise this information; and to share it with those involved with food safety through the production of written articles and training/information presentations.

RESULTS ▶

*BRCGS⁴



- **4.11.6** Cleaning equipment shall be:
 - hygienically designed and fit for purpose
 - suitably identified for intended use (e.g. colour coded or labeled)
 - cleaned and stored in a hygienic manner to prevent contamination.
- **8.5.3** Equipment used for cleaning in high-care and high risk areas shall be:
 - visually distinctive and dedicated for use in that area.
 - hygienically designed and fit for purpose
 - cleaned and stored in a hygienic manner to prevent contamination

FSSC⁵



ISO/TS 22002-1:2009 Prerequisite programmes on food safety – Part 1: Food manufacturing:

- **11.2 Cleaning and sanitizing agents and tools**
 - Tools and equipment shall be of hygienic design and maintained in a condition which does not present a potential source of extraneous matter.
- **11.3 Cleaning and sanitizing programmes:**
 - Cleaning and sanitising programmes shall be established and validated by the organisation to ensure that all parts of the establishment and equipment are cleaned and/or sanitised to a defined schedule, including the cleaning of cleaning equipment.
- **11.5 - Monitoring sanitation effectiveness:**
 - Cleaning and sanitation programmes shall be monitored (and verified) at frequencies specified by the organisation to ensure their continuing suitability and effectiveness.

SQF Code⁶



- **Section 10.2.9.2 & 10.2.9.8**
 - Equipment and utensils shall be designed, constructed, installed, operated, and maintained so as to meet any applicable regulatory requirements and not pose a contamination threat to product.
 - All equipment, utensils and protective clothing shall be cleaned after use or at a frequency to control contamination and stored in a clean and serviceable condition to prevent microbiological or cross-contact allergen contamination.

How Vikan supports Equipment Storage

Stored on wall brackets/shadow boards to minimise equipment damage, trips, and cross-contamination.



IFS⁷



- **4.10.7** The intended use of cleaning and disinfection utensils shall be clearly identified. Cleaning and disinfection utensils shall be used in a way that avoids contamination.
- **4.12.1** The products being processed shall be protected against physical contamination. Special consideration shall also be given to product contamination risks caused by
 - Equipment and utensils
- **4.17.2** For all equipment and utensils with direct food contact, a certificate of conformity shall be in place, which confirms compliance with legal requirements.

IFS definition of Equipment:

Machines, instruments, apparatus, utensils or appliances used or intended to be used in or in connection with food handling and includes equipment used or intended to be used to clean and disinfect food premises or equipment.

Outputs



Materials produced to raise awareness of and aid compliance with GFSI audit scheme requirements.

- Articles on the hygienic design and food contact compliance of cleaning tools and utensils have been published^{8,9,10}
- Two training and information presentations^{11,12} have been developed.
- Two White Papers^{13,14} and an information booklet¹⁵ have been produced.
- The presentations, White Papers and booklet have been made available at various food industry exhibitions and food safety conferences, and the White Papers are available via the Vikan website, www.vikan.com
- The cleaning tool maintenance White Paper has also been published online¹⁶ and appeared in New Food¹⁷.



SIGNIFICANCE ▶

The use of cleaning tools and utensils is ubiquitous in the food industry. Given their proven role as a major source and vector of contamination, knowledge sharing of ways in which they can be controlled is essential to promote food safety.

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