

**Conference for Food Protection  
2010 Issue Form**

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<b>Council Recommendation:</b>	Accepted as Submitted _____	Accepted as Amended _____	No Action _____
<b>Delegate Action:</b>	Accepted _____	Rejected _____	

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**Title:**

4-501.19 Manual & Mechanical Warewashing Equipment, Wash solution Temp.

**Issue you would like the Conference to consider:**

Manual warewashing in retail food establishments has been dependent on a number of variables to assure effective cleaning. Temperature is but one variable that is dependent on the cleaning agent used, the type of manual washing processes, the volume of wares being washed as well as the type and where they originate (i.e., hot or cold environments). Additionally, the temperature variable has been a challenge in warewashing in refrigerated environments such as meat markets. To overcome this variable, food retailers have worked with their chemical suppliers to provide cleaning agents (detergents) that work in a variety of environments as well as in warm versus hot water with consistent results. Force applied to the surface of wares via brush and/or spray devices have proven very effective in removing soil that can easily be rinsed prior to being sanitized. It is for this reason that 77% of the CFP 2006-2008 Criticality Committee recommended that this section be classified as a "Core <sup>C</sup> item." The 2009 Food Code classified this section as a "Priority Foundation <sup>Pf</sup> item." Due to the variables inherent in manual warewashing this section should be classified as "C" versus "Pf". In addition, water temperatures referenced within other areas of the 2009 Food Code allow for lower water temperatures used in conjunction with hand washing which suggests the water temperature can be lowered for all detergents, regardless of the cleaning task. The end result is not the temperature of wash water solution but the application of all the variables that apply to proper washing so that the items being cleaned are visually free of soil prior to the sanitization step.

**Public Health Significance:**

Retail food establishments have adjusted methodologies in manual warewashing processes to assure wares and utensils are properly cleaned prior to rinsing and sanitizing. Temperature is but one variable that can be compensated with proper scrubbing, water pressure spray devices, low temperature detergents among others. This is similar to FDA lowering the handwashing temperature requirements in the Food Code from 110°F to 100°F without increasing risk. If one reviews the definitions of Core <sup>C</sup> items and Priority Foundation <sup>Pf</sup> items, this section would fall under the general sanitation, operational controls, or Sanitation Standard Operating Procedures (SSOP) rather than those defined under Priority Foundation <sup>Pf</sup>. By requiring the wares/equipment being cleaned are visually

free of soil prior to sanitization makes the temperature but one variable that may need adjustment.

**Recommended Solution: The Conference recommends...:**

that a letter be sent to FDA requesting that section 4-501.19 be revised to remove the minimum wash solution temperature and be classified as a Core <sup>C</sup> item by removing the "P" and substituting "C" at the end of the section as indicated below AND requests that the Annex 3 entry for this section be amended as stated below.

4-501.19 Manual Warewashing Equipment, Wash Solution Temperature.

The temperature of the wash solution in manual warewashing equipment shall be maintained at ~~not less than 43°C (110°F) a temperature to effectively remove visible soil. or the temperature specified on the cleaning agent manufacturer's label instructions.~~ <sup>C Pf</sup>

Further, the Annex 3 reference to Manual and Mechanical Warewashing Equipment, Wash solution Temperature be revised to address the importance of controlling the variables that help remove soils from the wares or utensils during washing and rinsing to assure effective sanitizing. An example change by replacement of the existing section is as follows:

4-501.19 Manual Warewashing Equipment, Wash Solution Temperature.

The wash solution temperature is important for removing organic matter along with other variables. If the temperature is too low, the performance of the detergent may be adversely affected, e.g., animal fats that may be present on the dirty dishes would not be dissolved unless detergents are adjusted to work at lower water temperatures or other variables like power spraying, turbo washing, or heavy scrubbing are used. The manufacturer's label instruction should be consulted and followed for the correct application pertaining to cleaning agent. The items being washed should be visually cleaned by noting the absence of soil prior to sanitization.

~~The wash solution temperature in mechanical warewashing equipment is critical to proper operation. The chemicals used may not adequately perform their function if the temperature is too low. Therefore, the manufacturer's instructions must be followed. The temperatures vary according to the specific equipment being used.~~

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