HACCP Process Validation: I. Supporting scientific documentation

Validation is the process of demonstrating that the HACCP system as designed can adequately control identified hazards to produce a safe, unadulterated product. There are two distinct elements to validation: 1) Scientific or technical support for the HACCP system and 2) Initial practical in-plant demonstration proving the HACCP system can perform as expected. Some of the common controls that would need validation in a poultry processing plant are Critical Control Points (CCPs), pre-requisite program interventions (GMPs, SOPs, and SSOPs) preventing a hazard from being likely to occur, purchase specifications, product formulations where the formulation contributes to the safety of the product, and cooking instructions. There are five primary types of scientific supporting documentation:

- Published processing guidelines that achieve a stated reduction of a pathogen.
- A scientific article from a peer-reviewed journal that describes the process and level of reduction or process stabilization to provide adequate supporting documentation. The study being used needs to relate closely to the process with regards to species, product characteristics, and equipment.
- A challenge or inoculation study that is designed to determine lethality or stabilization of a process. These studies can be performed in an external laboratory or pilot plant by a processing authority or expert.
- Data gathered in-house can also be used to validate a process as part of a research study or other study.
- Regulatory performance standards as defined in the Code of Federal Regulation that outline specific prescribed procedures such as time/temperature combinations, product storage conditions, or product reconditioning procedures.

For more information on how to use scientific documentation for validation of process controls visit the USDA-FSIS document at: [http://www.fsis.usda.gov/regulations/Compliance_Guides_Index/index.asp](http://www.fsis.usda.gov/regulations/Compliance_Guides_Index/index.asp)

Contact: M. Singh, PhD.

Phone: (334) 844-2599  
E-mail: mzs0004@auburn.edu  
Poultry Science Department  
Auburn University, Auburn, AL 36849-5416  
[www.ag.auburn.edu/dept/ph/](http://www.ag.auburn.edu/dept/ph/)