

Curing Meats with Nitrite/Nitrate for Extended Shelf Life Hazard Analysis of Critical Control Points (HACCP) Checklist for Operators

When thinking about your HACCP plan, a good place to start is by writing out your entire process as if you were explaining it to a new employee and the plan was all they had to make your product correctly from start to finish. Which steps are critical to making a safe process (critical control points and critical limits)? What should they do if something goes wrong at one of these steps (corrective actions)? How will you know they did it correctly (records)? And who will ensure they did it correctly (verification)?

Before a plan may be approved a food establishment must have a satisfactory inspection history for the past year

Please include:

- Variance request application form
- Copies of your last two semi-annual inspections
- Name of each food product(s)
- A list of all ingredients. Include a copy of commercial cure and instructions
- Explanation of designated work area for special processing
- Information on how the product will be tracked (batch number) until used in the facility
- An accurate, step-by-step description (the food flow) of how each product is formulated, prepared, mixed, measured, cooked, cooled, etc.
- Laboratory analysis will be required to verify process and final product is within the parts per million (ppm) limits specified in 21 CFR 172.170 and 175.
- Mandatory requirements in your HACCP plan:
 - All meat products and cure must be weighed for accuracy
 - A scale with a resolution of 1 gram or less with approved test weights is required. Test weights of 1 gram and 1 pound are recommended
 - Use of commercial cure
 - Ingoing amount of nitrite within USDA specifications (156 ppm for chopped meat, 625 ppm for dry cure, 120 ppm for bacon with 547 ppm erythorbate)
- Appropriate Standard Operating Procedures (SOPs) including, but not limited to; procedures minimizing bare hand contact with ready-to-eat foods, handwashing protocols and how cross contamination between raw and ready-to-eat foods will be prevented and where the processing will occur. Also include a list of equipment

and materials used in the process. Describe how equipment is cleaned and sanitized. Explain how often in the process equipment is cleaned (before beginning, between types of foods, etc.). Outline how new staff will be trained on proper procedure for your process. There are templates available at: <http://sop.nfsmi.org/HACCPBasedSOPs.php>

- Identification of the most important food safety control(s) for each process. Each of these important food safety controls is called a Critical Control Point (CCP). CCPs for use of commercial cure usually include; ppm of nitrite/nitrates used, cooking, cooling, reheating. More complicated processes will have more CCPs.

For Each Critical Control Point:

Identify acceptable levels. These levels are called Critical Limits (CLs). Critical Limits must be things you can measure. Examples are amount of commercial cure added, cooking bacon to 145F, etc...

Describe how the CLs will be measured. Include who will measure, how they will measure and when they will measure.

Who will verify that the measurements and procedures are correctly documented and followed? How often will this be done?


What are the actions taken by the person in charge if the critical limits for each critical control point are not met? Corrective actions need to be specific to the critical limit. For example, what will you do when the scale was not calibrated prior to making a batch? What will happen if the meat is not at the proper cooking temperature when tested?

Include samples of the logs that will be used to keep track of the measurements, verify the procedures are correct, and record corrective actions when critical limits are not met. A single form could be used for all.

Provide a food safety training program that shows employees and supervisors know how to perform the steps in this plan, how to use necessary equipment and how to implement corrective actions.

Provide a refrigeration temperature log to assure your refrigeration units can hold at 41F or less. Cooling verification charts and final cook temperature verification charts will also be required.

Include a statement that an approved, signed copy of the plan will be kept on the premises for review by the regulatory authority. Also a statement that the regulatory authority will be informed in advance of any significant changes in the process that may affect the accuracy or effectiveness of the plan.



***This checklist must
be complete before
submission to OHA***

Sample Nitrite Usage Food Flow – Link Sausage

