

Seafood processing at retail

Listed below are criteria and guidelines for processing various seafood products in retail stores.

Smoked fish

A. Water Phase Salt (WPS)

- 2.5 % aerobic package
- 3.5 % reduced oxygen package w/o nitrites
- 3.0 % reduced oxygen package w/ 100-200ppm nitrites

Testing for WPS shall be done quarterly (Seafood HACCP Rule).

Items to be monitored influencing WPS:

- Brine concentration (using salometer)
- Time in brine
- Maximum piece size
- Minimum drying time in smokehouse

The firm shall have a record on file of WPS for each kind of product smoked and monitoring records for items listed above.

B. Time/Temp. in Smokehouse

Minimum 145 degrees F. for 30 minutes (internal product temperature of largest piece in coldest part of smokehouse).

The firm shall maintain a temperature recording chart, a data logger, etc. to verify each batch met critical limit. Firm also shall have thermometer calibration records on file.

C. Cooling

Product shall meet internal product temperature cooling curve of 135 degrees F to 70 degrees F in 2 hours and 70 degrees F to 40 degrees F in 4 more hours and keep a record on file of the cooling phase.

Note: If firm receives farmed salmon, a record that the potential chemical hazard has been dealt with shall be on file. If firm receives product subject to a histamine hazard (tuna) a record that the potential hazard has been dealt with must be on file. If the firm places smoked product in refrigerated storage, a

record of the continuous storage temperature shall be kept on file. All thermometers used in these processes shall have calibration records on file. All labeling rules apply if applicable.

Cooking crab

A. Receiving:

Live crab for whole cooking - monitor notification from authority for domoic acid acceptability in a record on file.

B. Cooking:

Cooker vessel shall reach a rolling boil after raw product is put in and maintain boil for a minimum of 20 minutes. Internal product temperature of crab in coldest part of vessel shall be a minimum of 165 degrees F. Keep a record of cook temperature on file.

C. Cooling:

Product shall meet internal product temperature cooling curve of 135 degrees F to 70 degrees F in 2 hours and 70 degrees F to 40 degrees F in 4 more hours and keep a record on file of cooling phase.

Note: All thermometers used in the process shall have calibration records on file. If firm places cooked crab in refrigerated storage a record of continuous storage temperature shall be kept on file. If firm processes (picks meat from shell) this product at room temperature, this time/temperature must be monitored. All labeling rules apply if applicable.

Pickled fish (refrigerated at all times)

Pickling Process:

Develop a standardized process for recipe, ingredients, size of pieces, time in solution, etc. and keep records of each batch on file.

- Keep laboratory data on file that verifies each different product tests at pH of 4.6 or less.
- Keep product refrigerated at all times and tell customers that product must be kept refrigerated.

Note: If product is held in refrigerated storage a record of continuous storage temperature shall be on file and have thermometer calibration on file. All labeling rules apply if applicable.

Sushi

General requirements:

- The hand wash facilities shall be located in the sushi preparation area. Employees shall comply with retail Good Manufacturing Practices. No bare hand contact is allowed for ready to eat foods.
- The food preparation sink (culinary sink) shall be dedicated for preparation of ingredients such as cucumbers and carrots.
- Sushi ingredients such as fresh cut vegetables should be kept refrigerated at 41 degrees F or less and should not exceed the projected use of the day.
- All ingredients shall be date marked.
- All sushi ingredients shall come from approved sources. A copy of documentation from a supplier is required for seafood products, if identified in the Seafood HACCP Hazard Guide as a parasite hazard. For parasite destruction, the supplier must freeze the product to -4 degrees F (-20 degrees C) or below for seven (7) days in a freezer or -31 degrees F (-35 degrees C) or below for 15 hours in a blast freezer.
- If the species is identified as a histamine producer such as tuna, documentation from the supplier shall show that temperature control from harvest through delivery was sufficient to prevent decomposition.
- All food contact surfaces and utensils shall be maintained in accordance with established Good Manufacturing Practices. All utensils and equipment shall be cleaned and sanitized every 4 hours.
- Bamboo mats used for product formation shall be wrapped in plastic wrap and re-wrapped within 4 hours or between contact with different species of raw fish. Different color bamboo is recommended for raw fish.
- **Cooling cooked rice is an important hazard that must be controlled in the preparation of sushi.** The fish and other ingredients used in sushi with rice concoction are not homogeneous enough to consider it acidified as an approved process. The critical factors need to be controlled using other approved means. Monitoring time and temperature during cooling, and after preparation, is an important step. Use an accurate metal stem digital thermometer. Cooked rice shall be placed into a container that is NSF approved or equivalent and of such

- depth (less than 2") and size to promote rapid cooling of product. Sushi processing and cooling should not take more than 4 hours.
- Provide written procedures on calibrating metal stem thermometers, personal hygienic practices, cleaning and sanitizing practices, preventing cross-contamination between raw seafood and cooked and ready to eat ingredients. Train your employees in proper food handling practices. Maintain time and temperature logs during preparation, cooling, and displaying.
 - All cooled sushi packages must be below 41 degrees F, before displaying.
 - Labels shall inform customer of proper handling procedures. A consumer advisory may be required.
 - Labels shall also indicate shelf life of product.
 - Labels shall include ingredients.