TABLE 1: MINIMUM COOKING TEMPERATURES & HOLDING TIME AT SPECIFIED TEMPERATURES

<table>
<thead>
<tr>
<th>Temperature</th>
<th>Description</th>
<th>Time</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>165°F (74°C) for 15 seconds</td>
<td>7 log reduction in microorganisms (or 7D kill)</td>
<td>poultry; live caught or field dressed, wild game animals according to Law; STUFFED fish, meat, pork, pasta, poultry or ratters; and STUFFING containing fish, meat, poultry or ratters. Meat includes cattle, swine, sheep, goats, etc., except fish, poultry &amp; wild game animals</td>
<td></td>
</tr>
<tr>
<td>165°F (74°C) with a 2 minute post cooking hold</td>
<td>Microwave Cooking: for raw animal foods; covered, rotated or stirred throughout or midway through the cooking process, and held for 2 minutes covered.</td>
<td>7D kill</td>
<td></td>
</tr>
<tr>
<td>155°F (68°C) for 15 seconds or 158°F (70°C) for &lt;1 second</td>
<td>150°F (66°C) for 1 minute or 145°F (63°C) for 3 minutes</td>
<td>raw shell eggs prepared for immediate service; commercially raised game animals, exotic animals or rabbits; and other raw animal foods not otherwise specified in this table.</td>
<td></td>
</tr>
<tr>
<td>145°F (63°C) for 15 seconds</td>
<td>raw shell eggs prepared for immediate service; commercially raised game animals, exotic animals or rabbits; and other raw animal foods not otherwise specified in this table.</td>
<td>3D kill</td>
<td></td>
</tr>
<tr>
<td>145°F (63°C) or 144°F (62°C) for 5 minutes*</td>
<td>142°F (61°C) for 8 minutes* or 140°F (60°C) for 12 minutes*</td>
<td>WHOLE-MUSCLE, INTACT BEEF STEAK that is properly labeled as such may be served raw or undercooked as RTE if not serving a HSP</td>
<td></td>
</tr>
<tr>
<td>140°F (60°C)</td>
<td>PLANT FOOD COOKING FOR HOT HOLDING: fruits &amp; vegetables that will be hot held shall be cooked to the hot holding temperature of 140°F (60°C)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1. Relative humidity >90% for at least 1 hour as measured in the cooking chamber or exit (vent) of the oven, or in a moisture-impermeable bag that provides 100% humidity.
2. Except where stated, references are to refrigeration temperatures of 41°F (5°C); (45°F (7°C) may be substituted for existing, in use equipment not capable # 41°F (5°C); then product shelf life may not exceed 4 days; and equipment must be upgraded or replaced #5 years of adopting this Code, per 3-501.16(C).

REHEATING FOR IMMEDIATE SERVICE: cooked & refrigerated RTE foods for a consumer's order may be served at any temperature, ie, roast beef sandwich au jus.

REHEATING FOR HOT HOLDING: to be completed #2 hours. Leftovers shall be reheated to at least 165°F (74°C) for 15 seconds (microwave is 165°F (74°C) rotated or stirred, covered, held for 2 minutes), remaining unsliced portions of beef or pork roasts cooked as stated above may be reheated with the same initial cooking parameters listed in the table 1. Commercially processed, packaged, ready-to-eat (RTE) food shall be reheated to at least 140°F (60°C).

COLD² & HOT HOLDING: Cold foods #41°F (5°C). Hot foods #140°F (60°C), except beef & pork roasts cooked or reheated as stated above, may be held at 130°F (54°C).

COOLING² PHF’S: Hot foods: 140°F to 70°F (60°C to 21°C) within 2 hours, and 70°F to 41°F (21°C to 5°C) within 4 hours.

Ambient room temperature ingredients: cooled to 41°F (5°C) within 4 hours, ie. reconstituted foods, canned tuna

Cold receiving: laws allowing shipping temperatures #41°F (5°C) for certain products shall be cooled to 41°F (5°C) within 4 hours, except that time parameters need not apply to eggs if placed immediately in refrigeration at #41°F (5°C).

TIME AS A PUBLIC HEALTH CONTROL: Written procedures on site & available to the inspector. The PHF is marked or identified with the maximum 4 hour time period when removed from temperature controls. After 4 hours OR if the product is unmarked or mismatched per time, the food shall be discarded. Procedure may not be used with raw eggs in a HSP facility.

PARASITE DESTRUCTION: Freezing fish for parasite destruction: (1) -4°F (-20°C) or colder for 168 hours or 7 days; OR (except certain species of tuna) (2) -31°F (-35°C) or colder for 15 hours in a blast freezer

Includes written agreement if frozen by supplier or if frozen by the P/C, then records retained at facility for 90 days.

FROZEN FOOD: necessary temperature to keep product frozen "solid" varies per product.

SLACKING: moderating the temperature under refrigeration # 41°F (5°C), OR at any temperature if the food remains frozen.

THAWING²:
1. refrigerate #41°F (5°C);
2. cook or microwave as part of an uninterrupted cooking process;
3. use any procedure for thawing a RTE food for immediate service in response to a consumers order;
4. submerge under running water #70°F (21°C) with sufficient velocity & flow to float off loose particles in an overflow, and no portion of a RTE food rises above 41°F, OR any raw animal food that will be properly cooked and does not rise above 41°F for more than 4 hours (includes time exposed to running water, preparation & cooling to #41°F).

**RTE, PHF DATE MARKING:** Refrigerated RTE, PHFs prepared in the establishment and held over 24 hours shall be marked at the time of preparation with a "Consumed By Date" (CBD) which includes the day of preparation. RTE foods or ingredients subsequently combined with additional ingredients or portions shall retain the date marking of the earliest or first-prepared portion.
1. 7 days for foods held #41°F (5°C) and 4 days if held #45°F (7°C). Similar foods received from a processing plant are to be marked with the same time/temperature CBD once the original package is opened.
2. If these foods are subsequently frozen:
   2a. when the food is thawed, the food shall be marked that it shall be consumed within 24 hours; OR
   2b. marked at the time of freezing as to the days already held at refrigeration and upon removing from the freezer, the new CBD is the appropriate 7 or 4 days minus the time held before freezing.
3. Foods with expired "Consumed By Dates" (including vending machines) OR not consumed within 24 hours of thawing OR not marked OR inappropriately marked shall be discarded.
4. **EXCEPTIONS to date marking:**
   4a. individual portions repackaged from bulk containers to fill a consumer's request, or
   4b. whole unsliced portions of a cured & processed product with the original cellulose casing intact on the uncut portion, i.e. bologna, salami, and sausage.

**REDUCED OXYGEN PACKAGING (ROP):** produced in a food establishment shall have a HACCP plan as specified under 8-201.14(D) and provides a secondary barrier to "C. botulinum" in addition to refrigeration at #41°F such as:
- an aw of .91 (available water content),
- a pH of #4.6 (hydrogen ion concentration),
- a meat or poultry product cured at an USDA processing plant using substances specified in 9 CFR 318.7 and restricted in 9 CFR 381.147 and received in an intact package, OR
- a food with a high level of competing organisms such as raw meat or poultry, and
- conspicuously labeled: maintain at #41°F (5°C) [no exception to #41°F], and discard if not consumed within 14 days of packaging OR the original manufacturer's "sell by" or "use by" date of the product, whichever occurs first.

**HIGHLY SUSCEPTIBLE POPULATIONS (HSP):**
1. May not be offered or served: unpasteurized prepackaged juice or beverage containing juice; raw or partially cooked animal foods (includes meringue made from unpasteurized eggs); and raw seed sprouts.
2. Food in unopened original containers may not be re-served (includes condiments).
3. Pasteurized eggs & egg products shall be substituted for raw shell eggs in the preparation of:
   3a. RTE or partially cooked foods such as Caesar salad, hollandaise sauce, & egg nog, and
   3b. Recipes in which more than one egg is broken and combined; **EXCEPT** when combined immediately before cooking for one consumer's serving, such as scrambled eggs (no holding time permitted); before baking and the eggs are thoroughly cooked, such as a cake or muffin; or food preparation is conducted under a HACCP plan per 3-801.11(E)(3).

**SHELLSTOCK IDENTIFICATION:** Use 1 tagged container at a time (unless a variance is granted per 3-203.12). Shellstock may not be removed from the original container other than immediately before sale or preparation for service (unless the source on display is properly identified & recorded). Tags remain attached until the container is emptied, then retain tags for 90 days in chronological order from date(s) sold or served. Identification tags/labels are affixed by the harvester and/or each dealer. Containers may carry harvester & dealer tags. If both tags are present, the dealers tag is not required to carry harvest information. If the dealer's tag includes dealer & harvester information, then dealer's information shall be listed first.

**TAG INFORMATION IN THE FOLLOWING ORDER:**
Dealer's name, address & certification number; original shipper's certification number w/ name of state or county of harvest location; harvester's identification number, date of harvest, harvest location w/ name of state or county, type & quantity of shellfish; and "This tag is required to be attached until container is empty (or retagged) and thereafter kept on file for 90 days".

**National Shellfish Sanitation Program (NSSP) also requires the following label on tags:** "RETAILER INFORM YOUR CUSTOMERS. Thoroughly cooking foods of animal origin such as beef, eggs, fish, lamb, poultry or shellfish reduces the risk of foodborne illness. Individuals with certain health conditions may be at higher risk if these foods are consumed raw or undercooked. Consult your physician or public health official for further information". [http://www.issc.org](http://www.issc.org)

The Interstate Certified Shellfish Shippers List (ICSSL) can be found at [www.cfsan.fda.gov/~ear/shellfis.html](http://www.cfsan.fda.gov/~ear/shellfis.html)

**SHUCKED SHELLFISH:** Nonreturnable containers, **(may be removed from original containers for display/dispensing if the source on display is properly identified & recorded)**. **Labeled** with name, address & certification number of the shucker-pack or repacker; and “sell by” date for <½ gallon or “date shucked” for ≥½ gallon.

Source: U.S. Food and Drug Administration draft document   Food Spec Sheet, Page 2