

3717-1-03.3

Food: destruction of organisms of public health concern.**(A) Raw animal foods - cooking.**

(1) Except as provided under paragraphs (A)(2), (A)(3), and (A)(4) of this rule, raw animal foods such as eggs, fish, meat, poultry, and foods containing these raw animal foods, shall be cooked to heat all parts of the food to a temperature and for a time that complies with one of the following methods based on the food that is being cooked:

(a) One-hundred forty-five degrees Fahrenheit (sixty-three degrees Celsius) or above for fifteen seconds for:

(i) Raw eggs that are broken and prepared in response to a consumer's order and for immediate service; and

(ii) Except as specified under paragraphs (A)(1)(b), (A)(1)(c), (A)(2) and (A)(4) of this rule, fish and meat including game animals commercially raised for food as specified under paragraph (G)(1)(a) of rule 3717-1-03.1 of the Administrative Code and game animals under a voluntary inspection program as specified under paragraph (G)(1)(b) of rule 3717-1-03.1 of the Administrative Code.

(b) One-hundred fifty-five degrees Fahrenheit (sixty-eight degrees Celsius) for fifteen seconds or the temperature specified in the following chart that corresponds to the holding time for ratites, mechanically tenderized, and injected meats; the following if they are comminuted: fish, meat, game animals commercially raised for food as specified under paragraph (G)(1)(a) of rule 3717-1-03.1 of the Administrative Code; and game animals under a voluntary inspection program as specified under paragraph (G)(1)(b) of rule 3717-1-03.1 of the Administrative Code; and raw eggs that are not prepared as specified under paragraph (A)(1)(a)(i) of this rule:

Minimum Temperature °F (°C)	Minimum Time
145 (63)	3 minutes
150 (66)	1 minute
158 (70)	< 1 second (instantaneous)

; or

- (c) One-hundred sixty-five degrees Fahrenheit (seventy-four degrees Celsius) or above for fifteen seconds for poultry, baluts, stuffed fish, stuffed meat, stuffed pasta, stuffed poultry, stuffed ratites, or stuffing containing fish, meat, poultry, or ratites.
- (2) A raw or undercooked whole-muscle, intact beef steak may be served or offered for sale in a ready-to-eat form if:
 - (a) The food service operation or retail food establishment serves a population that is not a highly susceptible population;
 - (b) The steak is cooked on both the top and bottom to a surface temperature of one hundred forty-five degrees Fahrenheit (sixty-three degrees Celsius) or above and a cooked color change is achieved on all external surfaces; and
 - (c) The steak is labeled to indicate that it meets the definition of "whole-muscle, intact beef" as specified under paragraph (A)(5) of rule 3717-1-03.1 of the Administrative Code.
- (3) A raw animal food such as raw egg, raw fish, raw-marinated fish, raw molluscan shellfish, or steak tartare; or a partially cooked food such as lightly cooked fish, soft cooked eggs, or rare meat other than whole-muscle, intact beef steaks as specified in paragraph (A)(2) of this rule, may be served or offered for sale upon consumer request or selection in a ready-to-eat form if:
 - (a) As specified under paragraphs (C)(1) and (C)(2) of rule 3717-1-03.7 of the Administrative Code, the food service operation or retail food establishment serves a population that is not a highly susceptible population;
 - (b) The consumer is informed as specified under paragraph (E) of rule 3717-1-03.5 of the Administrative Code that to ensure its safety, the food should be cooked as specified under paragraph (A)(1)(a), (A)(1)(b), (A)(1)(c) or (A)(4) of this rule; or
 - (c) The Ohio department of agriculture or the Ohio department of health grants a variance from the requirements of paragraph (A)(1)(a), (A)(1)(b), (A)(1)(c), or (A)(4) of this rule based on a HACCP plan that:
 - (i) Is submitted by the license holder and approved by the Ohio

department of agriculture or the Ohio department of health as applicable;

(ii) Documents scientific data or other information showing that a lesser time and temperature regimen results in a safe food; and

(iii) Verifies that equipment and procedures for food preparation and training of food employees at the food service operation or retail food establishment meet the conditions of the variance.

(4) Whole meat roasts including beef, corned beef, lamb, pork, and cured pork roasts such as ham shall be cooked:

(a) In an oven that is preheated to the temperature specified for the roast's weight in the following chart and that is held at that temperature:

	Oven Temperature Based on Roast Weight	
Oven Type	Less than 10 lbs (4.5 kg)	10 lbs (4.5 kg) or more
Still Dry	350°F (177°C) or more	250°F (121°C) or more
Convection	325°F (163°C) or more	250°F (121°C) or more
High humidity ¹	250°F (121°C) or less	250°F (121°C) or less
¹ Relative humidity greater than ninety per cent for at least one hour as measured in the cooking chamber or exit of the oven; or in a moisture-impermeable bag that provides one hundred per cent humidity.		

; and

(b) As specified in the following chart, to heat all parts of the food to a temperature and for the holding time that corresponds to that temperature:

Temperature F°(C°)	Time ¹ in Minutes	Temperature F°(C°)	Time ¹ in Seconds
130 (54.4)	112	147 (63.9)	134
131 (55)	89	149 (65)	85
133 (56.1)	56	151 (66.1)	54

135 (57.2)	36	153 (67.2)	34
136 (57.8)	28	155 (68.3)	22
138 (58.9)	18	157 (69.4)	14
140 (60)	12	158 (70)	0
142 (61.1)	8		
144 (62.2)	5		
145 (62.8)	4		
¹ Holding time may include post-oven heat rise			

; or

- (c) Using acceptable Ohio department of agriculture methods under Chapter 918. of the Revised Code or USDA methods as permitted through a variance granted by the Ohio department of health or the Ohio department of agriculture, as applicable.

(B) Microwave cooking.

Raw animal foods cooked in a microwave oven shall be:

- (1) Rotated or stirred throughout or midway during cooking to compensate for uneven distribution of heat;
- (2) Covered to retain surface moisture;
- (3) Heated to a temperature of at least one hundred sixty-five degrees Fahrenheit (seventy-four degrees Celsius) in all parts of the food; and
- (4) Allowed to stand covered for two minutes after cooking to obtain temperature equilibrium.

(C) Plant food cooking for hot holding.

Fruits and vegetables that are cooked for hot holding shall be cooked to a temperature of one hundred thirty-five degrees Fahrenheit (fifty-seven degrees Celsius).

(D) Raw animal foods that are cooked using a non-continuous cooking process shall be:

- (1) Subject to an initial heating process that is no longer than sixty minutes in duration;
- (2) Immediately after initial heating, cooled according to the time and temperature parameters specified for cooked time/temperature controlled for safety food under paragraph (D)(1) of rule 3717-1-03.4 of the Administrative Code;
- (3) After cooling, held frozen or cold, as specified for time/temperature controlled for safety food under paragraph (F)(1)(b) of rule 3717-1-03.4 of the Administrative Code;
- (4) Prior to sale or service, cooked using a process that heats all parts of the food to a temperature of ~~at least one hundred sixty five degrees Fahrenheit (seventy four degrees Celsius) for fifteen seconds~~ and for a time as specified under paragraphs (A)(1), (A)(2) and (A)(4) of this rule;
- (5) Cooled according to the time and temperature parameters specified for cooked time/temperature controlled for safety food under paragraph (E)(1) of rule 3717-1-03.4 of the Administrative Code if not either hot held as specified under paragraph (F)(1) of rule 3717-1-03.4 of the Administrative Code, served immediately, or held using time as a public health control as specified under paragraph (I) of rule 3717-1-03.4 of the Administrative Code after complete cooking; and
- (6) Prepared and stored according to written procedures that:
 - (a) Have obtained prior approval from the licensor;
 - (b) Are maintained in the food service operation or retail food establishment and are available to the licensor upon request;
 - (c) Describe how the requirements specified under paragraphs (D)(1), (D)(2), (D)(3), (D)(4) and (D)(5) of this rule are to be monitored and documented by the license holder and the corrective actions to be taken if the requirements are not met;
 - (d) Describe how the foods, after initial heating, but prior to complete cooking, are to be marked or otherwise identified as foods that must be cooked as specified under paragraph (D)(4) of this rule prior to being

offered for sale or service; and

- (e) Describe how the foods, after initial heating but prior to cooking as specified under paragraph (D)(4) of this rule, are to be separated from ready-to-eat foods as specified under paragraph (C) of rule 3717-1-03.2 of the Administrative Code.

(E) Parasite destruction - freezing.

- (1) Except as specified in paragraph (E)(2) of this rule, before service or sale in ready-to-eat form, raw, raw-marinated, partially cooked, or marinated-partially cooked fish shall be:

- (a) Frozen and stored at a temperature of minus four degrees Fahrenheit (minus twenty degrees Celsius) or below for a minimum of one hundred sixty-eight hours (seven days) in a freezer;
- (b) Frozen at minus thirty-one degrees Fahrenheit (minus thirty-five degrees Celsius) or below until solid and stored at minus thirty-one degrees Fahrenheit (minus thirty-five degrees Celsius) or below for a minimum of fifteen hours; or
- (c) Frozen at minus thirty-one degrees Fahrenheit (minus thirty-five degrees Celsius) or below until solid and stored at minus four degrees Fahrenheit (minus twenty degrees Celsius) or below for a minimum of twenty-four hours.

- (2) The provisions of paragraph (E)(1) of this rule do not apply to:

- (a) Molluscan shellfish;
- (b) A scallop product consisting only of the shucked adductor muscle;
- ~~(b)~~(c) Tuna of the species *Thunnus alalunga*, *Thunnus albacares* (yellowfin tuna), *Thunnus atlanticus*, *Thunnus maccoyii* (bluefin tuna, southern), *Thunnus obesus* (bigeye tuna), or *Thunnus thynnus* (bluefin tuna, northern); or

- ~~(e)~~(d) Aquacultured fish, such as salmon, that:

- (i) If raised in open water, are raised in net-pens; or

(ii) Are raised in land-based operations such as ponds or tanks; and

(iii) Are fed formulated feed, such as pellets, that contains no live parasites infective to the aquacultured fish.

~~(d)~~(e) Fish eggs that have been removed from the skein and rinsed.

(F) Records, creation and retention - freezing.

(1) Except as specified in paragraph (E)(2) of this rule, if raw, raw-marinated, partially cooked, or marinated-partially cooked fish are served or sold in ready-to-eat form, the person in charge shall record the freezing temperature and time to which the fish are subjected and shall retain the records at the food service operation or retail food establishment for ninety calendar days beyond the time of service or sale of the fish. If the fish are frozen by a supplier, a written agreement or statement from the supplier stipulating that the fish supplied are frozen to a temperature and for a time specified under paragraph (E)(1) of this rule may substitute for the records required by this paragraph.

(2) If raw, raw-marinated, partially cooked, or marinated-partially cooked fish are served or sold in ready-to-eat form, and the fish are raised and fed as specified in paragraph (E)(2)(c) of this rule, a written agreement or statement from the supplier or aquaculturist stipulating that the fish were raised and fed as specified in paragraph (E)(2)(c) of this rule shall be obtained by the person in charge and retained in the records of the food service operation or retail food establishment for ninety calendar days beyond the time of service or sale of the fish.

(G) Preparation for immediate service - reheating.

Cooked and refrigerated food that is prepared for immediate service in response to an individual consumer order, such as a roast beef sandwich au jus, may be served at any temperature.

(H) Reheating for hot holding.

(1) Except as specified under paragraphs (H)(2) and (H)(3) of this rule, time/temperature controlled for safety food that is cooked, cooled, and reheated for hot holding shall be reheated so that all parts of the food reach a temperature of at least one hundred sixty-five degrees Fahrenheit (seventy-four degrees Celsius) for fifteen seconds. Remaining unsliced

portions of meat roasts that are cooked as specified under paragraph (A)(4) of this rule may be reheated for hot holding using the oven parameters and minimum time and temperature conditions specified under that paragraph.

- (2) Except as specified under paragraph (H)(3) of this rule, time/temperature controlled for safety food reheated in a microwave oven for hot holding shall be reheated so that all parts of the food reach a temperature of at least one hundred sixty-five degrees Fahrenheit (seventy-four degrees Celsius) and the food is rotated or stirred, covered, and allowed to stand covered for two minutes after reheating.
- (3) Ready-to-eat time/temperature controlled for safety food ~~taken from a commercially processed, hermetically sealed container, or from an intact package from a food processing plant~~ that has been commercially processed and packaged in a food processing plant that is inspected by the food regulatory authority that has jurisdiction over the plant, shall be heated to a temperature of at least one hundred thirty-five degrees Fahrenheit (fifty-seven degrees Celsius) when being reheated for hot holding.
- (4) Reheating for hot holding as specified under paragraphs (H)(1), (H)(2) and (H)(3) of this rule shall be done rapidly and the time the food is between forty-one degrees Fahrenheit (five degrees Celsius) and the temperatures specified under paragraphs (H)(1), (H)(2), and (H)(3) of this rule may not exceed two hours.

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