



### Parasite Destruction FAQs

#### 1. Why is parasite destruction necessary?

All living organisms, including fish, can have parasites. Parasites are a natural occurrence, not contamination. They are as common in fish as insects are in fruits and vegetables. Parasites are killed during the cooking process and therefore do not present a health concern in thoroughly cooked fish.

Parasites become a concern when consumers eat raw, undercooked or lightly preserved fish such as sashimi, sushi or ceviche. Freezing, as required under the FDA Food Code 2013, kills any parasites that may be present.

#### 2. What does parasite destruction apply to?

Parasite destruction is required for fish that are served or sold in ready-to-eat form, raw, raw-marinated, partially cooked or marinated-partially cooked.

Fish is defined in FDA 2013 Food Code §1-201.10(B) as:

(1) **“Fish”** means fresh or saltwater finfish, crustaceans and other forms of aquatic life (including alligator, frog, aquatic turtle, jellyfish, sea cucumber, and sea urchin and the roe of such animals) other than birds or mammals, and all mollusks, if such animal life is intended for human consumption.

(2) **“Fish”** includes an edible human FOOD product derived in whole or in part from FISH, including FISH that have been processed in any manner.

#### 3. Are there any exemptions for parasite destruction?

The following fish do not require parasite destruction:

- (1) Molluscan shellfish
- (2) A scallop product consisting only of the shucked adductor muscle;
- (3) 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)
- (4) Aqua cultured FISH, such as salmon, that:
  - (a) If raised in open water, are raised in net-pens, or
  - (b) Are raised in land-based operations such as ponds or tanks, and
  - (c) Are fed formulated feed, such as pellets, that contains no live parasites infective to the aqua cultured FISH.
- (5) Fish eggs that have been removed from the skein and rinsed.



#### 4. What are the requirements for parasite destruction?

Except for fish listed above (question 3), fish that are served raw or partially cooked must be subjected to parasite destruction by freezing. There are three acceptable time/temperature methods to accomplish parasite destruction. All methods require that documentation or records be kept (see question 5) on site and available for review during the food establishment inspection.

The three acceptable time/temperature methods are:

- 1) Frozen and stored at a temperature of -4°F or below for a minimum of 168 hours (7 days) in a freezer; or
- 2) Frozen at -31°F or below until solid and stored at -31°F or below for a minimum of 15 hours; or
- 3) Frozen at -31°F or below until solid and stored at -4°F or below for a minimum of 24 hours.

#### 5. What records do I need to keep?

**Fish that are treated for parasites (frozen) by the food establishment:** Records documenting the freezing temperature and time to which the fish were subjected must be maintained at the food establishment for 90 days beyond the time of service or sale of the fish.

**Fish that 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 § 3-402.11 may substitute for the records.

**Fish that are farm raised (not required to be treated for parasites):** A statement from the supplier stating that the fish were raised and fed as specified in Question 3 above shall be retained at the food establishment for 90 calendar days beyond the time of service or sale of the fish.

#### **The written statement or agreement provided by supplier or aqua culturist who delivers the product to the establishment must include the following information:**

- 1) Letter must be dated. Letter should be kept onsite and updated by the supplier on a yearly basis.
- 2) Names of the fish provided by the company
- 3) Type of destruction treatment method performed for every fish type
- 4) If fish is considered exempt, provide ample reasoning why the fish is exempt from parasite destruction.

#### 6. I serve salmon in my restaurant. What do I need?

If the salmon you are serving is fully cooked (to 145°F or above for 15 seconds), you do not need parasite destruction.

If you are serving raw or undercooked salmon (e.g. sushi), you are required to conduct parasite destruction process as described in Question 4 or provide records of parasite destruction as described in Question 5.

If the salmon is aqua-cultured, you may fall under the exemptions as described in Question 3. The records must indicate the following:

- 1) The fish if raised in open water, are raised in net-pens, or
- 2) The fish are raised in land-based operations such as ponds or tanks, and
- 3) The fish are fed formulated feed, such as pellets, that contains no live parasites infective to the salmon.

Note: Any statement that states that the fish should not to be used as ready-to-eat product shall void the parasite destruction and fish can only be used when fully cooked to 145°F or above for 15 sec.



## 7. Where can I get more information?

[2013 FDA Food Code 3-402.11 Parasite Destruction](#)

[2013 FDA Food Code 3-402.12 Records, Creation and Retention](#)

The FDA's [Fish and Fisheries Products Hazards and Controls Guidance](#) document contains detailed information regarding parasite destruction in chapter 5.

The FDA's [Fish and Fisheries Products Hazards and Controls Guidance](#) document contains tables with types of fish (vertebrate and invertebrate) and their associated hazards in chapter 3.



## Parasite Destruction Record Checklist

2013 FDA Food Code §3-402.11 requires that, prior to service or sale in ready-to-eat form, all raw, raw-marinated, partially cooked, or marinated-partially cooked fish shall be frozen at specific time/temperature parameters to destroy parasites that are commonly found in fish. 2013 FDA Food Code §3-402.12 requires that parasite destruction records be provided and maintained at food establishments that offer raw, raw-marinated, partially cooked, or marinated-partially cooked fish in a ready-to-eat form. The following must be provided in order to comply with § 3-402.12.

### **Fish that are treated for parasites (frozen) by the food establishment**

Records documenting the freezing temperature and time to which the fish were subjected must be maintained at the food establishment for 90 days beyond the time of service or sale of the fish.

### **Fish that 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 § 3-402.11 may substitute for the records.

1. Letter must be dated
2. Names of the fish provided by the company
3. Type of destruction treatment method performed for every fish type

### **Fish that are farm raised (not required to be treated for parasites)**

A written agreement or statement from the supplier or aqua culturist shall be obtained by the person in charge and retained at the food establishment for 90 calendar days beyond the time of service or sale of the fish. The written agreement or statement must include the following information:

1. The fish if raised in open water, are raised in net-pens, OR
2. The fish are raised in land-based operations such as ponds or tanks, AND
3. Are fed formulated feed, such as pellets, that contains no live parasites infective to the aquacultured fish

“Fish” means fresh or saltwater finfish, crustaceans and other forms of aquatic life (including alligator, frog, aquatic turtle, jellyfish, sea cucumber, and sea urchin and the roe of such animals) other than birds or mammals, and all mollusks, if such animal life is intended for human consumption. “Fish” includes an edible human food product derived in whole or in part from fish, including fish that have been processed in any manner. Per § 3-402.11(B), molluscan shellfish, tuna of the species *Thunnus alalunga*, *Thunnus albacares*, *Thunnus atlanticus*, *Thunnus maccoyii*, *Thunnus obesus* or *Thunnus thynnus*, aquacultured fish and fish eggs that have been removed from the skein and rinsed are exempt from freezing for destruction of parasites.