

Parasite Destruction Explained

What are parasites?

A parasite is an organism that lives on or in a host and gets its food from or at the expense of its host. Parasites can cause disease in humans. Some parasitic diseases are easily treated and some are not.

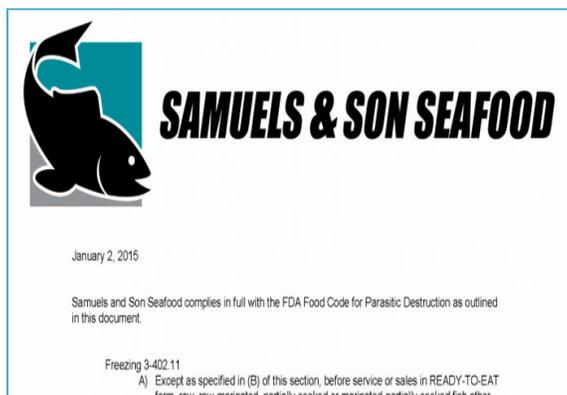
Why is parasite destruction important in food service?

The larval stage of parasites consumed in raw or undercooked fish can present a health hazard in humans. Most of these parasites cause mild to moderate illness such as nausea, vomiting, diarrhea, and abdominal pain, but more serious problems such as central nervous system and organ damage can occur. These parasites are usually killed by cooking the fish to a temperature of at least 145°F for fifteen seconds. The Food Code and the Texas Food Establishment Rules require that fish that are to be consumed raw or undercooked be frozen at a temperature and time guaranteed to kill parasites.



Anisakis worm in cod filet. Photo courtesy of Dr. Bobbi Pritt

Example of parasite destruction letter from a manufacturer. Courtesy of Samuels & Son Seafood.



Where do I find parasite destruction records?

You may choose to freeze your own fish at the time and temperature required to kill all parasites. In this case, you will be required to document the freezing temperature and time to which the fish are subjected and retain the record for at least 90 days for each lot of fish. Here are the freezing temperatures and times required to kill parasites in raw fish:

- Fish are frozen and stored at a temperature of -20°C (-4°F) or below for 168 hours (7 days) in a freezer
- Fish are frozen at -35°C (-31°F) until solid and stored at -35°F (-31°F) for 15 hours.

Most restaurants depend on their fish supplier to ensure parasite destruction. In this circumstance, the restaurant is required to retain the certificate of parasite destruction provided by the supplier for at least 90 days for each lot of fish used.

Who needs to worry about parasite destruction?

Any restaurant serving raw or undercooked (less than 145°F) fish must maintain and provide documentation of parasite destruction. This includes restaurants serving sushi, ceviche, and gravlax.

Are there any types of fish that do not require parasite destruction verification?

Yes. Parasite destruction verification is not needed for molluscan shellfish or for particular species of tuna as specified on page 56 of the Texas Food Establishment Rules.

Parasite Destruction Tips

- Buy all seafood from approved, reputable suppliers only.
- We highly recommend you purchase your fish from a purveyor that sells fish previously frozen and obtain certification that the seafood was frozen for a time and temperature adequate to destroy all parasites.
- Follow the guidelines for parasite destruction. If you choose to freeze in-house, a daily freezer log must be kept, and the fish must be clearly marked with temperature and the date and time freezing began.