

Preparing Safe Raw and Undercooked Fish

- Purchasing fish that is frozen properly to kill parasites is only the first step in ensuring a safe product.
- Pathogens might be introduced by: raw animal food touching or dripping onto other foods, contaminated hands, contaminated equipment or utensils.
- Temperature abuse of fish ingredients will allow any bacteria contaminating the fish to grow rapidly.

Avoiding cross-contamination and temperature abuse during storage and preparation is also highly important in preventing foodborne illness with undercooked potentially hazardous foods.

Why We Care about Parasites Found in Fish

In rare cases, swallowing *Anisakis* worms, also known as herring worms or cod seal worms, can result in severe gastric upset if the parasitic larvae attach to or penetrate the human intestinal lining.

- ◆ The patient may vomit or cough up worms.
- ◆ The larvae may also penetrate through the intestinal wall and lodge in the human muscles.
- ◆ Serious cases can be very painful and require surgery.

See: www.fda.gov Bad Bug Book
www.cdc.gov

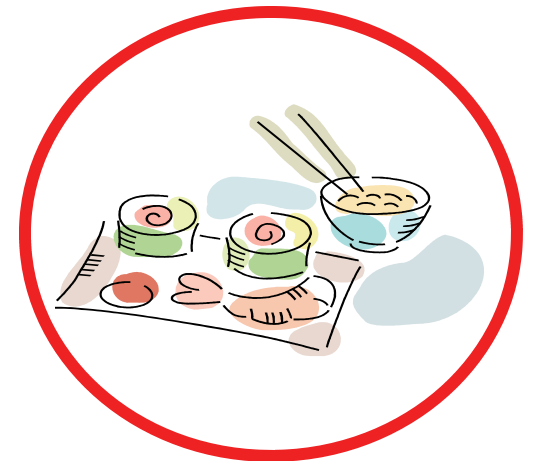
For further information or questions concerning food safety:

Bureau of Food Protection
788 East Woodoak Lane (5380 S.), Ste 130
Murray, UT 84107
385-468-3845

www.slvhealth.org



Safe Sashimi, Ceviche, and Other Undercooked, or Raw-Marinated Fish



Rules for Raw or Undercooked Fish

Foods served raw or undercooked pose a unique risk to the consumer. Fish, in particular, can carry parasites in their muscles. Customers who eat raw fish may become ill from parasitic diseases such as Anisakiasis or tapeworm infection. Certain safety measures can be taken to protect people from parasites. SLVHD Food Sanitation Regulation # 5 requires certain species of fish that are served raw, partially cooked or raw-marinated to be frozen at a minimum of - 4 °F or lower for 7 days in a freezer; or - 31°F for 15 hours in a blast freezer, or frozen at - 31°F or below until solid and stored at - 4 °F for at least 24 hours.

Records must be maintained to document that fish are being properly frozen. If the freezing is done at a restaurant, the freezing temperatures and times must be recorded. These records must be retained at the food establishment for 90 calendar days beyond the time of service or sale of the fish. If the fish are frozen by a supplier, the supplier's written statement stipulating that the fish supplied are frozen to the correct temperatures and times specified above is required to be on file.



Other Requirements...

The restaurant must inform consumers of the significantly increased risk associated with eating raw or undercooked animal products offered as ready-to-eat food, or as an ingredient in other ready-to-eat-foods. An asterisk symbol , * , must be placed by each menu item containing any of these ingredients that are raw or under-cooked. The consumer advisory statement on the menu must read:

*“ *Thoroughly cooking foods of animal origin such as beef, eggs, fish, lamb, pork, poultry, or shellfish reduces the risk of foodborne illness. Consult your physician or public health official for further information.”*

Raw and undercooked fish such as ceviche and sashimi are considered ready-to-eat foods, because these foods will not be cooked before serving to the customer. Bare hand contact with RTE (ready-to-eat food) is not allowed. Use tongs, utensils, gloves, or deli tissues, or other effective means when handling these foods.

Handwashing must occur frequently to prevent cross-contamination. If gloves are worn, they must be changed when contaminated or damaged.

Exemptions...

Certain species are exempt from the special freezing requirements, and may be served or sold in raw ready-to-eat form:

- ◆ Molluscan shellfish (oysters)
- ◆ Tuna of the species:
- ◆ *Thunnus alalunga*,
- ◆ *Thunnus atlanticus*
- ◆ *Thunnus albacares* (Yellowfin tuna),
- ◆ *Thunnus thynnus maccoyii* (Bluefin tuna, Southern),
- ◆ *Thunnus obesus* (Bigeye tuna), and
- ◆ *Thunnus thynnus* (Bluefin tuna, Northern).
- ◆ Some aquacultured fish such as salmon that are raised and fed under certain approved conditions.

