

How to Eat a Raw Fish

By Clare Lattimore, ANP

Life in Unalaska provides great opportunities to eat exquisitely fresh fish. Many local residents enjoy spending a day on the water, followed by a dinner featuring the catch of the day. The meal will provide a healthy and delicious source of protein, but if you like your fish raw, there are some risks you should know about.

Raw fish is a traditional delicacy in many cultures. Sushi, sashimi, ceviche, gravlax and cod livers are some examples. Unfortunately, there are two types of worms present in local fish that can cause illness in humans. One of these is a little roundcoiled worm called Anisakis. The other is the long and hungry parasite known as Diphyllbothrium, or broad fish tapeworm.

Cooking and freezing fish render the parasites harmless. It is the raw and lightly pickled products that may carry live parasites that infect humans.

Anisakis is found in saltwater fish such as cod, halibut, pollock and salmon. If a person ingests a live worm it is likely to cause intense abdominal pain and vomiting. In most cases, this reaction serves to get rid of the parasite. If the worm is not expelled, it can cling to a human intestinal wall and embed itself, creating continued abdominal disturbances. In rare cases, a worm penetrates the intestinal wall and causes a life threatening infection called peritonitis.

The Diphyllbothrium tapeworm causes a subtler problem. Some people carry these worms for years without knowing it. The parasites can grow to a length of ten meters, and will rob their host of nutrition, causing weakness and anemia. Tapeworms infect many species of fresh water fish, including trout and salmon.

Prevention of parasitic infections from fish is easy. You can still enjoy your fish, cooked or raw, if you follow the following rules:

Clean your fish right away. The parasites live in the fish's digestive tract, so if you remove the guts immediately, you will minimize your risk.

Cook or freeze your fish before you eat it. Fish cooked to a temperature of 140° will not have live parasites in it. Fish that is frozen to -35° C (-31°F) for fifteen hours will be free of live worms. Most household freezers do not get this cold, but you can freeze your fish for seven days at -20°C (-4°F).

Before serving raw fish, inspect it closely. Cut it into thin pieces and illuminate the flesh over a bright light. Anisakis worms are tightly coiled, clear, and about half an inch long. Tapeworm larvae resemble a grain of white rice.

Sushi chefs are trained to handle and inspect fish. Most cases of parasitic illness come from eating raw fish at home. Recently, a patient came to the local clinic with severe abdominal pain that started after eating raw salmon. When he recovered he said: "I learned something. Go to a restaurant. You may think it's expensive, but it's not as much as the clinic."