



Seafood Health Facts: Making Smart choices Balancing the Benefits and Risks of Seafood Consumption *Resources for Healthcare Providers and Consumers*

Raw Molluscan Shellfish [1]

Bivalve molluscan shellfish like clams and oysters are commonly eaten raw or partially cooked. Because of where they live, how they feed, and how they're eaten, these shellfish can contain bacteria or viruses that can cause illness. Bivalves live close to the shore in waters which may be contaminated with bacteria and viruses from runoff or from land or sewage discharges. These shellfish obtain food by pumping water through their system and filtering out small organisms. As a result, their digestive system, which is one of the parts that we eat, can contain bacteria and viruses from the waters in which they live. These microorganisms can then be ingested if the shellfish are eaten raw. For this reason, certain people should avoid eating raw or partially cooked shellfish including: young children, females who are pregnant or nursing, immune-compromised individuals, and older adults.

Shellfish Safety Programs

The FDA and coastal state governments oversee the National Shellfish Sanitation Program that sets standards for shellfish growing waters and the harvesting, handling, processing and distribution of clams, oysters, mussels and whole scallops. This system is designed to ensure that shellfish are harvested from certified waters that meet safety standards. It also requires that all shellfish be properly tagged and that all firms who handle shellfish be licensed and that their facilities and operations meet appropriate sanitary standards. This program has helped protect consumers for many years, and large amounts of raw clams and oysters are consumed without incident.

Tips to Minimize Risk

The following tips can help those who choose to eat raw or partially cooked shellfish, including clams, oysters and mussels, manage or reduce potential risks associated with this unique type of seafood product. These tips do not necessarily apply to other types of crustacean shellfish like shrimp, crabs or lobsters, which are usually cooked before they are eaten.

Buying: Always buy clams, oysters, and mussels from a reputable dealer.

Use caution if you harvest bivalve shellfish yourself. Obey posted warnings and check with local authorities to verify that the waters are certified for shellfish harvesting before you harvest them or decide to eat them.

Don't eat dead shellfish whose shells don't close tightly when tapped or agitated. (Some shellfish like soft-shell clams can't completely close their shell, but should move when touched.)

Handle and store shellfish properly. Keep live shellfish cool and damp in the refrigerator. Rinse when necessary to remove dirt or debris, but avoid prolonged contact with fresh water, drastic temperature changes, and airtight containers. Don't allow other foods, containers, utensils, or food handlers to contaminate or drip on them during storage, and when preparing or serving them.

High risk individuals who are more likely to become seriously ill from bacteria and viruses should avoid raw or partially cooked shellfish. This includes pregnant women, young children, older adults and people with compromised immune systems that have conditions like: cancer (especially during chemotherapy), liver disease, diabetes, chronic kidney disease, HIV infection and people with decrease stomach acidity or disorders of the digestive system.

Cook shellfish properly to further reduce potential risks. Oysters, clams, and mussels should be cooked in small batches so that those in the middle are cooked thoroughly. To cook live shellfish properly follow these suggestions. When steaming, cook for 4 to 9 minutes after the start of steaming. When boiling, after the shells open boil for another 3 to 5 minutes. Shucked products

should be boiled for 3 minutes, or fried at 375°F for at least 3 minutes or baked at 450°F for 10 minutes.

Adapted from: Seafood Savvy by Ken Gall, New York Sea Grant and Cornell University



© Copyright 2020. Project partially funded through a grant from from the National Aquaculture Extension Initiative of the National Sea Grant Program (Grant No. NA13OAR4170203), NOAA, U.S. Department of Commerce and the National Integrated Food Safety Initiative (Grant No. 2007-51110-03815) of the National Institute of Food and Agriculture, U.S. Department of Agriculture. This website is owned and maintained by Delaware Sea Grant.

Source URL:

<https://www.seafoodhealthfacts.org/seafood-safety/general-information-patients-and-consumers/seafood-safety-issues-specific-products-0>

Links

[1]
<https://www.seafoodhealthfacts.org/seafood-safety/general-information-patients-and-consumers/seafood-safety-issues-specific-products-0>