



SEAFOOD NATURE AND THEIR PRESERVATION



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What is Quality?



- *Intrinsic quality:* There is the basic quality of fish while they are still in the water. Each species and run has its own characteristics.
- *Extrinsic quality:* There is the quality after the fish is caught, processed, and transported to market.

Factors Affecting Quality of Seafoods



Quality Assurance



- “Quality assurance” is minimizing all the bad things that can happen to fish from the time they hit gear until they reach the consumer.
- *Once quality is lost, you can't get it back.*
- How the fisherman care for the fish is vital to the quality the consumer eventually receives.



The Changes After Death

Physical Changing- Rigor mortis



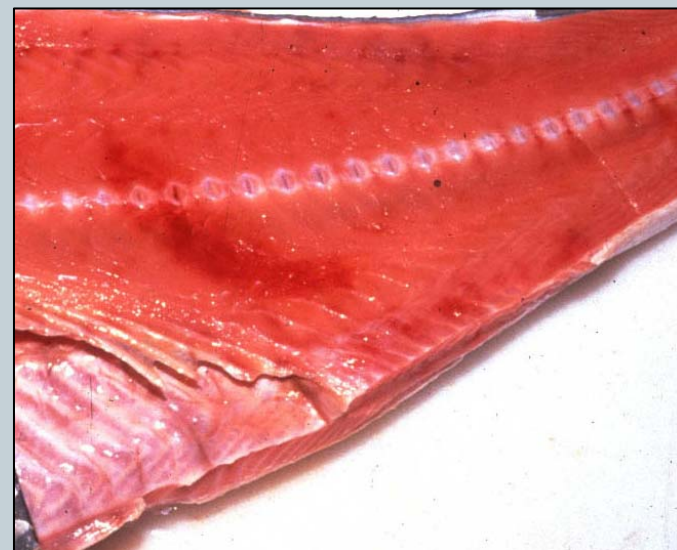
- When fish stiffen up after they die.
- Fish that go through rigor mortis at higher temperatures stiffen up so violently



Bruising



- Bruising occurs when fish are handled roughly...
- throwing fish...stepping on them ...banging them into hard objects
- Bruised fish deteriorates more rapidly, resulting in mushy texture , early onset of rancidity, and reduced shelf life...
- That means less value for the consumer, the retailer, the processor

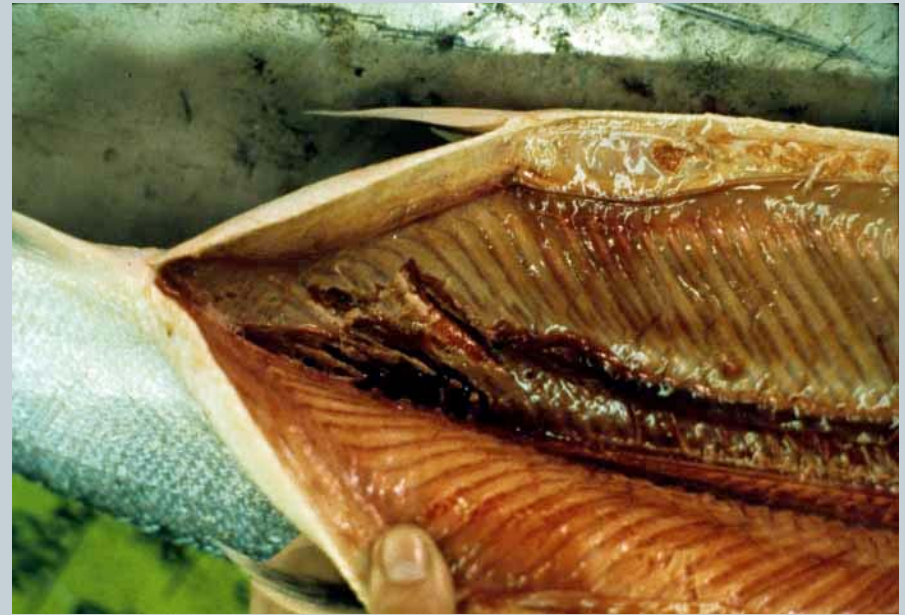


Chemical Changing-Autolysis

Enzymes are chemicals that are vital to the fish when it is alive, but...

- After fish die enzymes begin to breakdown the proteins of its flesh.

Enzyme activity is promoted by crushing and higher temperatures, so chilling and careful handling are key to controlling it.



Bacterial Changing-Putrefaction



- The flesh of live fish is sterile, but the exterior is not. Bacteria enter any exposed flesh after a fish dies.
- Bacterial spoilage can be help minimize by keeping your decks, fish hold, slush bags and totes clean and sanitary...
- and by chilling fish as soon as possible





CONSERVATION TECHNIQUES

Clean Up & Sanitizing

- Keep processing areas clean with plenty of rinse water, and regular periodic clean-up
- Apply plenty of the sanitizer to all working surfaces – processing area, fish hold, totes, etc.
- Remove viscera, head and gill
- Keep fish clean with washing fish from blood and dirt



Boxing & Unloading



- handle fish gently
- don't lift by the tail
- don't throw the fish
- sort for size
- never use unnecessary force on the blocks
- keep them cold while awaiting shipment



Chilling



- Retard spoilage
- Extend shelf life
- Preserve value



Packing



- pack fish carefully
- stop oxidation



