

# Moisture/Protein Levels in Sea Scallops

Due to current sea scallop availability, the relative weak U.S. dollar and other market factors, the export potential for sea scallops to France is favorable. The relatively strict product requirements with regard to water or moisture content in scallops may present some obstacles in developing the French market. The French regulation governing allowable moisture level is based on the relationship between moisture and protein in scallop muscle. This relationship is expressed as a ratio (percent moisture/percent protein) and is referred to as an HP value. French regulations require an HP value no greater than 4.9.

For the last 12 months, moisture and protein levels of freshly shucked sea scallops from the mid-Atlantic area have been monitored. The derived HP values throughout this period ranged from 4.15-4.40, with an average of 4.29.

From additional research, data indicates that an 8% increase in weight, either due to handling and stowage at-sea or shoreside processing, will result in an approximate HP value of 5.0, which exceeds the French HP tolerance level. An 8% weight gain at sea, utilizing normal handling practices, can be considered average, and not unusual.

Consequently, individuals who wish to pursue the French export market may want to consider the option of shellstock harvesting operations or modifying scallop handling procedures at sea on dredge vessels to minimize weight gains. Shellstocked scallops should have an HP value well below 4.9, which would allow for adequate shoreside processing.

We are actively pursuing additional research which should better clarify the issue of HP levels and subsequent compliance with French regulations.

At-sea handling techniques are detailed in *An Evaluation of At-Sea Handling Practices: Effects on Sea Scallop Meat Quality, Volume and Integrity*, a publication available through the Virginia Sea Grant Marine Advisory Program. For additional information, contact:

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