

# Recent Advances In Shrimp Technology

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## Abstract

About 90 per cent of the breaded shrimp in the United States is produced under the continuous inspection of the Department of the Interior. Inspectors are stationed in 14 plants producing breaded shrimp. Although final inspection is made on the frozen product, the inspector must check on the quality of the incoming shrimp and other raw materials to insure the proper use of the Grade A label. The freshness of the shrimp is determined organoleptically at the present time. Our technologists are studying the chemical characteristics of shrimp spoilage with hopes of devising simple objective means of evaluating freshness. At present, the Nessler's test and the newly developed Picric Acid Turbidity Test appear promising.

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## Factors Affecting Yield of Meat From The Blue Crab<sup>1</sup>

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### Summary

Steam-boiling crabs at 212°F. for 15 minutes, in contrast to steaming at 15 pounds per square inch (p.s.i.) (250°F.) for ten minutes, resulted in an increase of crabmeat, such that a monetary savings of over one dollar per barrel (100 lbs.) live crabs can be realized.

One hundred pounds of picked meat will consist of approximately 53 per cent regular white, 25 per cent of backfin lump, and 22 per cent of claw meat.

Chesapeake Bay crabs in Maryland showed highest yields of crabmeat in summer, followed in decreasing order by spring, fall and winter crabs.

When steaming crabs at 15 p.s.i. (250°F.), in general, a ten minute cook produced more picked meat than did either shorter or longer cooks.

Choptank River crabs, mainly male crabs, gave higher yield than did Chesapeake Bay female crabs.

Cooking crabs ten-fifteen minutes at 212°-227°F. resulted in maximum crabmeat yield; but with temperatures of 239°-250°F. maximum yield occurred at five-ten minutes, with marked reduction in yield at fifteen minutes.

Study made of two methods of post-cook handling: namely deback and refrigerate before picking versus whole crabs held at room temperature, showed a tendency for the former method to result in higher yields.

### Introduction

If a processor is producing crabmeat of the highest quality, with good storage characteristics, he will surely be interested in any factors which might increase his yield. With this thought in mind, the following research results are pointed out. Yield of picked crabmeat is affected one way or another by such factors

<sup>1</sup>Contribution from the University of Maryland Seafood Processing Laboratory, Crisfield, Maryland. This is a revised version of the paper read at the Institute and was presented at the Fourth Atlantic Fisheries Technological Conference, Halifax, N.S., March 7, 1960.

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