

Delaware Sea Grant Project:

The influence of growth conditions on pressure resistance and recovery of *Vibrio parahaemolyticus* (R/CT-5)

Investigators:

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Project Abstract:

Several recent outbreaks of *Vibrio parahaemolyticus* associated with oysters and clams have heightened the concern with the safety of consumption of these foods. Recently high pressure processing has been implemented commercially in the United States for processing of raw oysters. This processing technology is considered as an effective means to eliminate pathogens in oysters. In studies evaluating the effectiveness of high pressure processing on inactivation of *V. parahaemolyticus* in oysters, the influence of prior growth conditions (growth temperature) on their pressure resistance and the effect of incubation/storage conditions (incubation temperature and atmosphere) on their recovery are often not taken into consideration; however, these factors are critical in determining the effectiveness of high pressure processing. Therefore, previous studies might have overestimated the lethal effect of high pressure processing. This study is aimed to address these factors. Results obtained from this study will provide guidance for the seafood industry to process shellfish.