

Post-Harvest Processed (PHP) Oysters

What are post-harvest processed oysters?

After oysters are harvested, common food processing technologies may be used to reduce *Vibrio* bacteria in the oysters to non-detectable levels.

What are the benefits of PHP oysters?

In addition to reducing *Vibrio* and other bacteria to non-detectable levels, post-harvest processing kills spoilage bacteria, thereby extending shelf life and maintaining freshness and quality. Also, PHP oysters are shucked or abductor muscles (which keep the shells tightly closed) are weakened, making PHP oysters much easier to shuck and prepare for eating.

How are the oysters handled?

Three technologies are currently being utilized:

- **Individual quick freezing** involves rapid freezing of half shell oysters on trays, then adding a thin glaze of ice to seal in the natural juices before storing them frozen.
- **Heat-cool pasteurization** is a patented process whereby live oysters are placed in warm water for a certain time period and then immediately dipped in cold water to stop the cooking process. These oysters are packed for the half shell market or sent for further processing as shucked product.
- **High hydrostatic pressure** is also a patented process that subjects oysters to high pressures (35,000 to 40,000 pounds per square inch) for 3 to 5 minutes to kill spoilage bacteria and reduce microorganisms including *Vibrio* to non-detectable levels.

How can I find PHP oysters?

Restaurants that sell PHP oysters may mention on the menu that their oysters have been processed or treated to reduce *Vibrio* to non-detectable levels. If in doubt, ask.

Is it safe for high-risk consumers to eat PHP oysters raw?

Even though PHP oysters are processed to reduce *Vibrio* and some other microorganisms to non-detectable levels, they are still raw. Therefore, high-risk consumers (those with liver disease, cancer, diabetes, AIDS, or other conditions that weaken their immune systems) should eat them thoroughly cooked.

What else is the Gulf oyster industry doing to provide safer, better quality raw oysters?

The Gulf oyster industry increasingly evaluates and adopts solutions offered by modern technology to improve quality and safety, and extend shelf life of oysters. Other post-harvest processing technologies being considered and adapted for oysters include irradiation, high pulse magnetic fields, and value adding (i.e., smoked, char-grilled, steamed, pickled, marinated or pre-cooked convenience meals).

For information about *Vibrio vulnificus* bacteria, please visit www.SafeOysters.org.