

# Foodsafety BYTES

Number: 16

## High-pressure processing IV

Your own reference source on food safety

### Construct your own digital library on food safety

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Hiperbaric

Livestock Malaysia

Even though the benefits of HPP make it a viable option for manufacturers, it requires a lot of planning and testing to achieve the desired results.

## Shelf life

Following HPP treatment, bacterial cells may either be unaffected and healthy and able to grow post treatment or stressed/injured and if given favourable environmental conditions can recover and grow again, or inactivated without being able to recover.

It is important that injured/stressed bacterial cells are unable to recover and grow during the shelf life of the food product.

For this reason, it is crucial to undergo shelf life studies and to include a culture isolation procedure during the validation process that will detect stressed/injured bacterial cells.

## HACCP

The next step is regulatory. A Hazard Analysis and Critical Control Point (HACCP) plan is an essential tool to ensure that ingredients entering the process have low counts of pathogens and spoilage microorganisms. Additionally, since HPP is typically a CCP (Critical Control Point), transfer labels, date coding and other supply chain issues need addressing.

## Benefits

HPP offers multiple benefits; it improves food safety and quality, it protects brand equity with its ability to destroy pathogens without altering a food's taste and texture, it helps manufacturers to keep products fresh and provides them with clean label products, it also expands opportunities for new product development.