

# High pressure processing (HPP)

## Principles

High pressure processing (HPP) is the isostatic pressure increase in a fluid due to compression of the fluid which relies on the application of pressures in the range from 100 to 700 MPa in the food processing context.

## Benefits



Process independent of product size and geometry



Product processed within their package



Consumer acceptance as a physical process



Preserve freshness



No use of additives or preservatives



Most food products can be HP



## Challenges

- Preheating step for pressure-assisted thermal processing (PATP) required
- Not suitable for products containing dissimilar compressibility materials such as foams
- Variable efficacy in enzyme inactivation
- Cost higher than for traditional heat preservation processing.
- Dry foods cannot be HPP.