

# High Pressure Processing in the Avocado Industry

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# Who We Are and What Our Mission Is



To champion a sustainable agricultural ecosystem for future generations by connecting responsible agricultural production with innovative technology to produce naturally healthy, delicious, real foods people love.

**WE MAKE HEALTHY DELICIOUS**

# Why we are expanding into processing and the problems we see facing Australian farmers

- ▶ Avocado Industry in WA to quadruple in the next 5 to 8 years.
- ▶ Limited export markets due to market access issues on fresh.
- ▶ Many horticultural and agricultural industries have a high percentage of waste, due to aesthetic blemish rather than nutritional integrity.

# What is High Pressure Processing

- ▶ High Pressure Processing is a cold pasteurisation technique by which products sealed in their final packaging are introduced into a vessel and subject to high level of isostatic pressure transmitted by water.
- ▶ Pressures above 400 MPa / 58,000 psi at cold (+4° to 10°) or ambient temperature inactivate the vegetative flora ( Bacteria, virus, yeast, moulds and parasites) present in the food, extending the products shelf life importantly and guaranteeing food safety.
- ▶ HPP respects the sensorial and nutritional properties of food, because of the absence of heat treatment it maintains its original freshness throughout its shelf life.



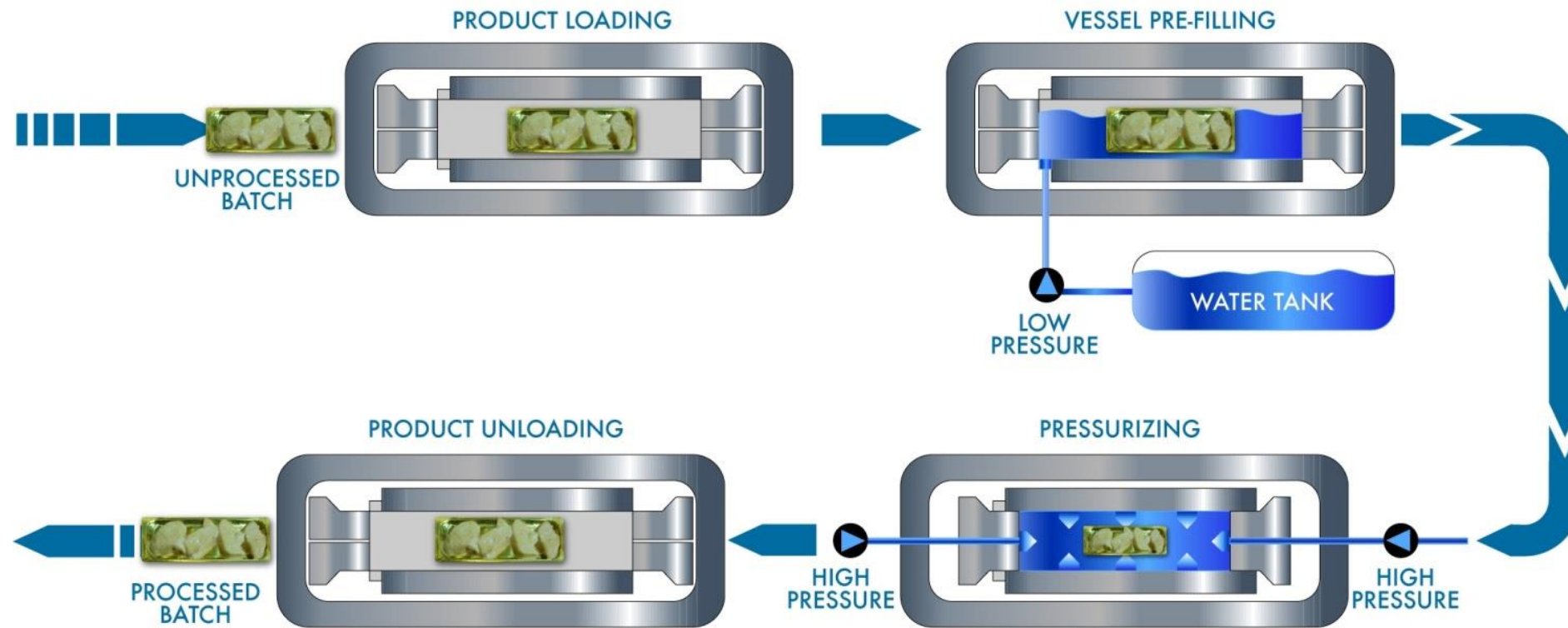
# Processing





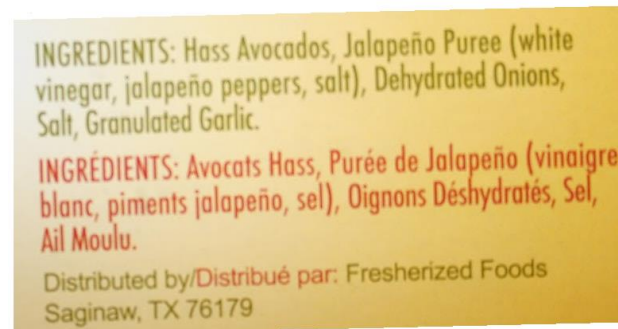
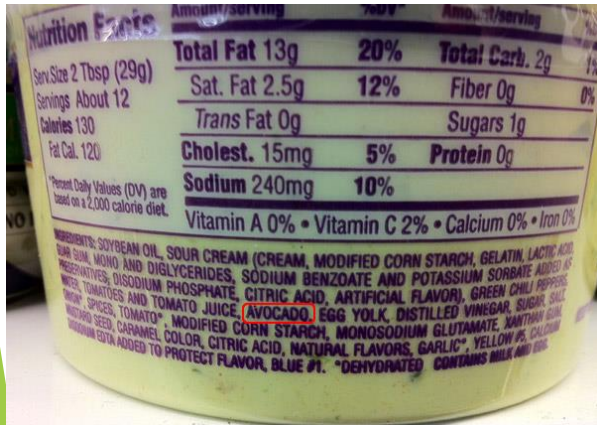
# How Does it Work.

Packed product is introduced into a chamber where is subjected to isostatic Pressure using water as pressure transmitting fluid.



# The Role of Emerging Technologies and the Value Proposition

- ▶ Natural Appeal
- ▶ Clean and Clear label
- ▶ No artificial ingredients: meet new standard of identity
- ▶ Create a point of difference against competitors
- ▶ Consumers associate natural with high value









# HIGH HYDROSTATIC PRESSURE

## Preservation

Sterilization

PATS  
LAF

Pasteurization

RTE  
meals

Shelf-life  
extension

Fruit and  
Vegetable  
Products

## Transformation

Meat  
Protein

## Value Added

Seafood



# The Role of Emerging Technologies and the Value Proposition

## FOOD SAFETY

- ▶ Destruction of pathogens - HPP is able to eliminate bacteria found in food, making food safe to eat.
- ▶ Brand/Consumers Protection - Consumer's health has to be the food manufacturer's first priority.
- ▶ Safest intervention for high risk products.

# The Role of Emerging Technologies and the Value Proposition

EXPLOIT CAPACITY, CREATE REVENUE OPPORTUNITIES, SUPPORT AUSTRALIAN FARMERS.

- ▶ Build a good story by vertically integrating your business
- ▶ Reduce risk by diversifying the business
- ▶ Adding value to fruit and vegetables that otherwise, would be rejected
- ▶ Create new value propositions



# The Role of Emerging Technologies and the Value Proposition

- ▶ EXPORTS
- ▶ Reach destinations the fresh cannot reach
- ▶ Extend shelf life on arrival (2 years frozen, 60+ days refrigerated)
- ▶ Gain market access to markets restricted to fresh due to market access protocols.
- ▶ Reduce the need for consumer education by creating product convenience and ease of use

# THANK YOU !!

