REDUCE

Reducing canning losses in the abalone industry

The challenge

The Australian abalone sector is a low volume, high value industry. Australian abalone is generally sold in live, frozen or canned/pouch formats. Approximately 30% of Australia's abalone production volume is currently retorted (pack into cans/pouches and thermally processed), yielding 340 tonnes per annum of drained meat weight.

Abalone lack a clotting mechanism and lose weight during thermal processes through the release of haemolymph from the tissue. This reduction in product yield during existing canning operations is typically between 12-30% (equivalent to a loss of 40-102 tonnes per annum).

Our plan

This project will provide robust scientific evidence to allow the abalone industry to reduce the thermal process requirements for wild-caught and farmed abalone, and therefore reduce shrinkage food waste, whilst enabling the industry to continue to meet the regulatory requirements by providing a safe, commercially sterile and shelf-stable product.

"... less abalone will be required per can for the same drained weight."

FIGHT FOOD WASTE
Cooperative Research Centre
REDUCE - TRANSFORM - ENGAGE

Australian Government
Department of Industry, Innovation and Science

Business
Cooperative Research Centres Program

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Favourable results from this project will allow the industry to adopt reduced thermal processing requirements by identifying and targeting the site of microbiological concern.

The abalone industry expects that the modified thermal process will reduce processing (haemolymph) losses by at least 1-2%. Less abalone will be required per can for the same drained weight. On current canning production levels, this would equate to an increased annual export tonnage of at least 3.4-6.8 tonnes, worth approximately AUD $0.7-$1.4M per annum.

The project will work with Australian regulators and stakeholders to help gain international acceptance and ensure that market access to key export destinations will not be adversely affected.

Timeline

August 2019 - January 2022

Project leader

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Participants

Abalone Association of Australasia Inc.

Abalone Council Australia Ltd

FRDC

Government of South Australia
Primary Industries and Regions SA

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