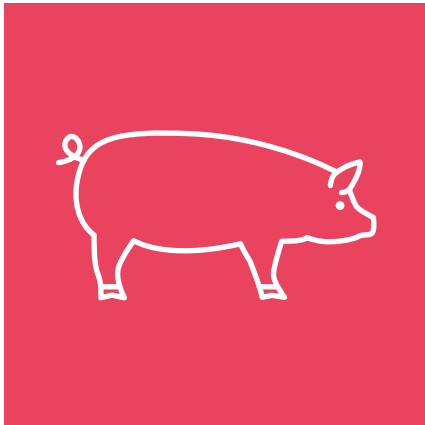# Predicted shelf-life model for vacuum-packed pork

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Problem

The Australian pork industry is continually faced with the need to reduce the loss of product shelf-life across its supply chains, whilst also meeting the wide range of shelf-life related specifications required by the market. There is currently a lack of published data available on the current shelf life of Australian vacuum-packed pork products, therefore managing cold chains to maintain product quality and reducing wastage is challenging. A tool to predict shelf life is needed to address this gap.

Project

The project aimed to achieve two goals, to determine the shelf life of Australian vacuum-packed pork at different storage temperatures, and to develop a tool to predict shelf life of vacuum-packed pork.

Value for producers

Development of an accurate predictive shelf-life model for vacuum-packed pork products, will enable the Australian pork industry to manage the flow of products through its diverse supply chains. The tool will allow for improved decision making on product movement to reduce wastage and premature quality loss. A predictive tool can also be used in market access negotiations, and to support the Australian pork industry's shelf-life claim.

Outcomes

The project identified the varying shelf-life of various vacuum-packed pork products across different storage temperatures, it was confirmed that all products achieved longer a shelf-life with a decreased storage temperature. A shelf-life of up to 82 days for a vaccuum-packed rindless leg was achieved at storage temperatures of approximately -0.5°C.

Using the data collected, a predictive shelf-life tool has been successfully created. The initial indications are that this new tool may outperform the current DMRI tool for predicting the shelf life of vacuum-packed pork products.

The development of this new predictive shelf-life tool for vacuum-packed pork products will allow for better management of the pork industry's supply chains and reduce wastage and loss of products, providing value to the pork supply chain.

Before the tool can be adopted, further research by conducting field trials is required to evaluate its performance across

More information

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