



final report

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Prepared by: Fiona Ballantyne

Beak & Johnston

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Sizzle Steaks Project

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Abstract

- Beak and Johnston is a value adder which provides a combination of case-ready raw meat products and cooked products to food service and to supermarkets and is a major supplier to Woolworths.
- B&J identified the opportunity for a novel red meat offering for the Australian consumer which cooks in less than one minute as a steak on a pan or grill and that "will stir fry as quickly as the vegetables." In essence, the product is a thin sliced meat product, which any butcher can currently prepare given the time and a bacon slicer.
- Significant technical issues related to tempering, moulding and high speed slicing and packing have been overcome in production at large scale with uniform size and weight and maintained bloom during the shelf life required in supermarket distribution.
- Increased value to beef industry = \$9.25 million (approx) (\$6.50 per kg is a weighted average between trim price, corned silversides and export trim pricing that could be expected for the product).
- Sales of this product will be 1,500 tonnes per annum through one retailer, which will add considerable value to the Australian beef industry.
- Projected sales for 2009/2010 are on target to manufacture 1,500 tonnes of sizzle steak.
- The Sizzle Steak project has been deemed a great success for all concerned and with the assistance of the MLA B&J has been able to deliver to the market and the industry positive incremental value.

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1 Introduction

Overall Project objectives

- 1. to ensure that it will have a significant impact on the industry as a whole;
- 2. to confirm that there is sufficient technical difficulty to justify research funding; and
- 3. to assess the likelihood of success in terms of the ability of the applicant to deliver the promised outcomes.

Milestone 3 Objectives

Report to MLA on full description of :

- i) process;
- ii) raw materials specifications;
- iii) final product specifications; and
- iv) equipment and packaging specifications.

Success in achieving milestone

 Full description of process including specifications of raw materials and final product and equipment and packaging specifications - ACHIEVED

Overall progress of the project

Industry Impact:

- The Sizzle Steak process uses silverside, which currently goes to corned beef. The current wholesale price of silverside ex works is approximately \$7.33/kg (un-pumped).
- The new product ex works will be \$12.50/kg original silverside (un-pumped). This is a significant value add and represents \$51.10/carcase, which corresponds to a maximum potential impact on domestic sales of \$399m pa.
- The price point in the supermarket (\$6.50per 400g pack) for a very quick meal is seen to be an alternative to other protein sources such as chicken and other non protein snacks.
- Projected sales for 2009/2010 are on target to manufacture 1,500 tonnes of Sizzle Steak.

Recommendations

• It is recommended that the "Sizzle Steak" process developed in this jointly funded MLA & Beak & Johnston project be incorporated into their commercial processes.

At the conclusion of the agreed exclusivity period, MLA reserves the right to share technical and transfer process know-how related to the Sizzle Steak project to the wider industry.

2 Process & Product Specifications

Complete commercial product & process specifications are detailed below:

2.1 Raw Materials

Category	Outside Flat	
RM Code	600047	
Primal Ageing	5 - 21 Days	
Primal Weight	3.5 - 5.0kgs	
Storage Temp °C	-2 to 0°C	134
Primal Defects	Knife scores	
	Excessive selvage fat	CONTRACTOR OF THE PROPERTY OF
	Bruising	1000
	Dark cutters	

Note when supply of Outside Flat is limited, Topside Centre Cut can be used as an alternative

Raw Material Code 600113



2.2 Processing

Tempering	10 hours at-15 to -18°C	
Equalization	Overnight (min 8 hours) at	
	-3°C	
Press	Press tempered outside flat to give moulded primal Target	
	temp -2 to -3°C	
Slice	Slice tempered product on Unislicer at 4mm	
	Target temperature -2°C	
Shingle	Shingled automatically on conveyor exiting slicer	
Check Weigh		
	Correct weight passed for packing	
	Incorrect weight to be corrected manually	
Packing	Packed shingled in pack with fat to bottom	
Pieces Per Pack	5-9	
Tray Size	930b	
Soaker Pad	Yes	

2.3 Key Quality Parameters

Slice thickness	4mm
Fat levels	Up to 5mm except for seam of fat which can exceed 5mm
Steaks per pack	5-9
Fixed Weight	385g

2.4 Final Quality Parameters

Customer: Woolworths

Product Name: Beef Sizzle Steak

Product Thickness: 4mm

Fat Thickness: Up to 5mm except at

seam which will be more than 5mm

Number of Slices: 5-9

Weight: Fixed Weight of 385g

Tray Type: Black 270 x 170 x 40mm

MAP tray Soaker Pad: Yes

Film: Tray Lidding Film 1050

Carton: Open Top Cardboard Carton

Packs per Carton: 6

Use By Date: 9 Days From Pack

Cost Per Pack: \$4.99



2.5 Equipment

2.5.1 Trolleys for Tempering

Racks with moveable crates which allow airflow on all sides of the primals to allow the Tempering process to be efficient.

2.5.2 Meat Press

SFK Meat and Bacon Press which gives a uniform size and shape prior to slicing. This enables the weight to be more controlled and the yield to be maximised as the uniformity gives less waste. There are 2 moulds for the press. One for smaller primals and one for larger primals. The 2 moulds prevent the product from being over pressed if the primal is over 5 Kg

2.5.3 Slicing/Portioning

- i) CFS Unislicer which can vary the slice thickness to compensate for the weight of the portion. It cuts the steaks into portions of 5 to 9 steaks at approximately the correct weight.
- **ii) CFS Check 3000** weighing system which check weighs all the portions on a conveyor platform. The check weigher sends information back to the slicer to adjust thickness if required.
- iii) CFS Double Decker conveyor system. The check weigher puts the portion on the top or bottom conveyor dependant on the weight.

3 Final Note

• The Sizzle Steak project has been deemed a great success for all concerned and with the assistance of the MLA we have been able to deliver to the market and the industry positive incremental value.