



final report

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Reformed Portion Products

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PART 1

1) Abstract

The aim of this project was to develop a convenient, portion controlled beef based product suitable for the Retail and Food Service sectors.

An innovative product has been developed which comprises a beef outer casing with a centre composed of sauce and vegetables. This product has been launched nationally in retail form under the I & J "Caravelles" brand. Sales in supermarkets will commence in mid-October and good acceptance has been gained from the major retail chains.

The key parameters to the acceptance of this product have been the innovative nature of the product and the use of non-meat components to add value in the customers perception.

The development of these types of products allows red meat to compete with chicken type convenience products in the market place, and promotes beef as a value added product.

2) Summary

a) Objective

The development of an innovative, convenient portion controlled beef based product, and their commercialisation.

b) Main Results and Conclusions

A product was successfully developed, and has been commercialised in the retail market. Thus the objectives of the project were fulfilled.

The methodology was to develop the product by means of a coordinating and development role for the product Development team. thus suppliers were encouraged to contribute their expertise to the project to optimise the end product. This was very successful, and led to several novel solutions to problems encountered during development.

PART 2

1) Background and Industry Context

Over the past decade Beef has suffered from a poor image as a convenient value-added product. The market for this type of product has been dominated by chicken based products. This has contributed to the declining sale of Beef as a centre of plate protein source.

In order to address this situation a range of beef based products is required which are distinctly different from both the current smallgoods and chicken products.

2) Objectives

The objective was to develop an innovative concept which would form the basis for a range of products suitable for both the retail and Food Service markets. Once this was achieved the product was then to be commercialised in one or both market segments.

3) Methodology

The methodology here was for the Product Development team to function as the innovators of the process, but to utilise the resources of potential supplier companies to optimise the product.

The Product Development team thus had a central coordinating role in the process, but did not attempt to develop every major component of the product. Their role was thus distinctly one of application and combination of the components, and liaison with Marketing. The role of Market Research was critical to ensure that firstly, the concept was viable, and secondly that the variants to be finalised were the best alternatives.

Specifically the methodology involved the systematic investigation of:

a) Raw materials

The aim of the project was to use vegetables and sauces in combination with beef to add value to the product in the consumers perception. Thus the suitability of various vegetables for freezing, and their taste in combination the sauces was an important area for investigation. Technical investigations identified suitable vegetable combinations, and these were investigated by market research for consumer acceptance. The final combinations were then tested on a pilot scale to finalise their formulation.

b) Processing methods

The major focus in this area was on the flowability of the meat and the sauce/vegetable mix through the machinery. The meat

formulation required careful consideration, and addition of processing aids to reach the correct consistency, and still retain the correct texture.

Similarly the flowability of the sauce/vegetable mixture, and its viscosity after cooking were critical quality attributes.

c) Packaging

Various forms of packaging material were trialled, with respect to presentation and product protection. A simple polyethylene lined carton was found to be sufficient for product protection. Presentation work was performed by I&J, including graphics and colours.

d) Shelf life

These trials were conducted both under ideal conditions, and under simulated time acceleration. This showed the stability of the products under use conditions, and ensured that no adverse interactions occurred between any of the components.

4) Success

The success of the project is shown to date by the acceptance by I & J Foods of the product for retail launch, and the acceptance by the major retail supermarket chains.

5) Findings and Conclusions

Not Applicable

6) Progress in commercialisation

An important aspect of this project was the market research conducted. This involved two types of evaluation, firstly of the concept, and secondly actual usage in the home. These evaluations showed extremely positive responses to both the concept of the product and the convenience and value in the home situation. Consumers commented favourably on the convenience of having the Beef and sauce in combination, and not having to prepare either of the components themselves with the associated wastage and trouble.

From this research and internal evaluations I&J Foods made the decision to release the product commercially. This has been done under the "Beef Caravelles" name, to complement the successful fish "Caravelle" range. The two variants developed are on sale in the retail market in the major chains, and are in full commercial production.

New variants are currently under consideration as range extensions.

7) Funding

External funding was supplied solely by the Meat Research Corporation and totalled \$135,000. Internal funding matched this, and capital expenditure of some \$250,000 was also undertaken by Foodpartners.

8) Industry Impact

Whilst no single product is likely to revolutionise the industry it is believed that it has been demonstrated that a product can be developed which is comparable to any other on the market. It has thus been demonstrated that Beef is a viable convenient product in its own right. It is hoped that together with the development of products by other companies a strong presence can be built in both the Retail and Food Service markets.

9) Conclusions and Recommendations

It is strongly recommended that the funding of such projects be continued by the MRC to enable the industry to develop a critical mass of both products and development skills.

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SPECIAL CONDITIONS

Commercialisation of Products

1. The Research Organisation must:
 - (a) Use its best efforts to promote commercial sales of each of the products described in Part A of the Schedule (the "Products") including but not limited to meeting the requirements of the market by producing and offering for sale adequate quantities of the Products;
 - (b) Keep the Corporation indemnified on an actual indemnity basis against all claims made against the Corporation and against all liability, injury, loss, damage and expense suffered or incurred by the Corporation as a result of or arising out of the production, marketing, distribution or sale of any of the Products;
 - (c) At the end of each 6 month period, beginning with the period of 6 months commencing on 1 April 1992, pay a royalty to the Corporation on each of the products based on the total net turnover of each product. The sum of the royalty is to equal 3.25% of the total net turnover of the product sold in that 6 month period;
 - (d) The Research Organisation's obligation to pay the Royalty will cease when the aggregate Royalty received by the Corporation totals \$300,000.
 - (e) For the purpose of these Special Conditions "total net turnover" in respect of any period, means the net amount invoiced or billed by the Research Organisation to customers for sales of the Products effected during that period, whether or not that amount is actually received, less the amount of trade allowances and taxes based directly on sales but without making any adjustment to the amount invoiced or billed to take account of:
 - (i) the Royalty paid under this Agreement;
 - (ii) packaging, delivery or insurance; or
 - (iii) bad or doubtful debts.

Payment

2. (a) The Research Organisation must within thirty days of the end of each 6 month period referred to in sub-clause 1(c) provide to the Corporation:
- (i) a full statement in writing showing the total net turnover of Products sold by the Research Organisation for that 6 month period and the Royalty payable to the Corporation under this Agreement in respect of that 6 month period;
 - (ii) a certificate signed by a chartered accountant stating whether the statement is correct and whether the Royalty payable is calculated in accordance with this Agreement.
- (b) The Royalty must be paid to the Corporation by the Research Organisation at the time of furnishing the statement referred to in sub-clause 2(a)(i).
- (c) If the Research Organisation does not pay the Royalty to the Corporation on the due date, the Research Organisation will be liable to pay interest on the amount of the Royalty at a rate equivalent to the Westpac Indicator Lending Rate from time to time plus 2.0%, calculated from the date that the Royalty was due until the date the payment is received by the Corporation.

Accounts and Records

3. (a) The Research Organisation must keep true and accurate records at its usual place of business of all matters connected with the sale of the Products and also keep proper books of account relating to the Royalty payable to the Corporation under this Agreement containing such complete and accurate entries as are necessary to enable the volume of sales of the Products and the amount of the Royalty to be conveniently ascertained.
- (b) The Corporation will have the right on reasonable notice during business hours to inspect the accounts and other records kept by the Research Organisation for the purpose of ascertaining the total net turnover of the Products and the amount of the Royalty.
- (c) The Corporation has the right at its own expense to have the books of account and records of the Research Organisation audited for the purpose of verifying the Royalty payable under this Agreement and, in such event, the Research Organisation must provide to the Corporation or its representative such assistance, facilities and information as are reasonably necessary.