MARKETING SCOTTISH BEEF AND THE PROBLEM OF THE CHANGING CONSUMER

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Abstract

Demand for beef has been declining over the past decade and European consumers have been evolving rapidly over this time. Changes in lifestyle have reduced the time people spend on food purchase and preparation and markets for pre-prepared foods are expanding. Understanding what motivates consumers to buy quality beef and to which cues they respond, is critical if the beef production, processing and retailing sectors are to survive. Initial results of a consumer survey on purchasing quality beef in Scotland are examined.

Introduction

This paper is based on interim results from a European research project looking at extending options for marketing quality red meat[1] within the European Union[2]. It focuses on 'quality' in relation purchasing of beef and beef products by a sample of Scottish consumers.

At the time of purchase, successfully marketed products have to be perceived by consumers to meet their requirements on a number of fronts. Consumers subjectively prioritise demands: "Is it organic?", "Will my children like this?", "Can I afford this and ...whiskey?" Understanding consumer motivation and attitude towards purchasing is now highly developed, while targeting consumers for particular products is approaching an exact science (Kotler, 1994; Lancaster and Massingham, 1993).

Beef like other food commodities, faces many problems and these are multifaceted in that it is a declining part of a declining sector. It cannot change its form or content dramatically and, while it's component parts have different end-uses, each of these faces stiff competition from other meats. The attributes of beef that appeal to consumers need to be capitalised on and beef, in all its forms, must attempt to deliver to a moving target market - the evolving consumer.

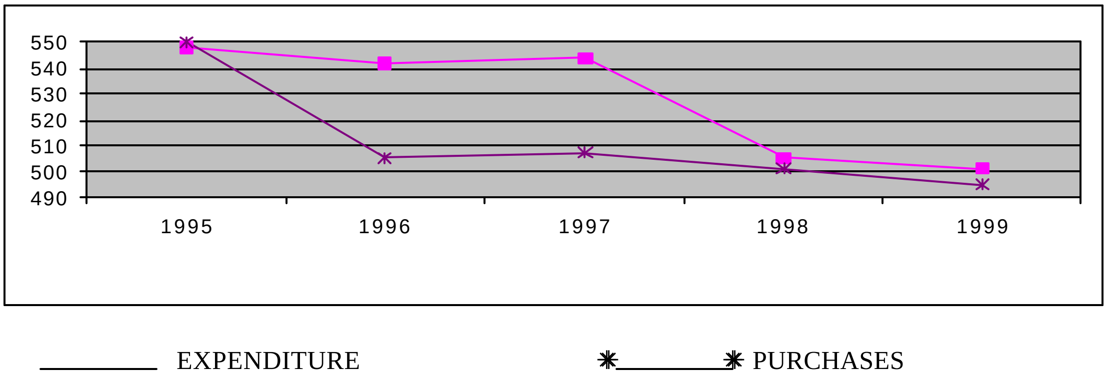
Reasons for the decline in red meat consumption are well-documented (Rifkin, 1992; Cannon, 1999). Consumer concerns about diet, sustainable food policies, animal welfare, and health scares etc. have contributed to the decline (Tansey and D'Silva, 1999). At the same time intensive production of poultry and pork in the UK have

[1] beef and lamb
[2] The European red meat marketing project: "Marketing red meat in the European Union: extending the Options"

enabled consumers to substitute 'white' meat for red at a lower price so that new consumption patterns have now become established.

Figure 1 puts the trend in UK beef consumption and expenditure (1995-1999) into context and references the blip that was the 1996 UK BSE crisis.

Figure 1: Trend in expenditure* and purchases of beef in the UK, 1995 - 1999 ('000 tonnes)



NOTE: Value in £million for tonnage scale

*550,000 - £2,150m, 535,00 - £2,100m, 520,000 - £2,050m, 505,000 -£2,000m, 490,000 -£1,950m

Source: Taylor Nelson Soffres for the MLC, Feb. 2000

Today, consumers are evolving rapidly in response to social, cultural, economic and ethical changes. Socially for example, changes in household structures and busy working lifestyles have reduced the time people spend on food purchase and preparation. On average people in the UK now spend between 10 to 15 minutes preparing the evening meal. Other major lifestyle developments include a rise in consumption of convenience foods and food consumed away from home (Park and Capps, 1997). Both trends have had both dietary and social implications. Cooking skills are not being passed on to the younger generation, many of whom already think that preparation of a meal involves putting a TV dinner into a microwave oven. Table 1 shows the trend in consumption of meat and meat based products in the UK (1994 and 1998).

Table 2. Consumption of selected meat based foods eaten out, 1994 - 1998
(grams per person per week)

	1994	1995	1996	1997	1998
Meat and meat products	**109**	**108**	**99**	**107**	**110**
Steak (beef)	**5**	**5**	**3**	**4**	**4**
Hamburger (beef)	**16**	**17**	**13**	**15**	**16**
Pies (beef or lamb based)	**21**	**19**	**15**	**15**	**16**
Roast beef, lamb, pork	**5**	**4**	**4**	**4**	**4**
Meat based lasagne (beef)	**19**	**17**	**12**	**15**	**14**
Bacon, gammon, ham	**5**	**6**	**6**	**7**	**7**
Sausage/ sausage rolls	**19**	**19**	**19**	**19**	**21**
Roast chicken/ turkey	**15**	**16**	**21**	**22**	**23**
Sandwiches and rolls	**61**	**63**	**59**	**81**	**73**
Of which were meat based:	**22**	**22**	**22**	**29**	**26**

Source: Nelson Taylor Soffres for the MLC, Feb. 2000

Culturally, foreign travel and improved communications have encouraged people to experiment and access a range of non-traditional foods. Furthermore, improved economic stability and higher levels of disposable income in Europe now allow consumers to choose which foods they buy, which quality they prefer and which purchasing influences they wish to indulge in. Niche markets for quality meat products have been developing where consumers satisfy subjective needs in areas such as ethics, health, animal welfare, natural processing, environmentally friendly, local origin etc. (Sylvander and Melet 1992; Grunert 1996; Nienhaus 1996).

Beef in its basic form, remains a traditional product in a world where tradition now has limited value. How long cuts of beef must be cooked for and how they are prepared cannot be significantly altered to fit with consumer demands. The problem for beef is how the product in its basic and value-added forms can satisfy consumer priorities and allow those operating in the supply chain to stay in business? Looking at initial summary results of a consumer survey, a number of options for increasing use and consumption are discussed.

The consumer survey

The data discussed are a subset of the consumer survey carried out in Scotland as part of the European red meat marketing project. Similar surveys were carried out in locations in Spain, England, Italy and France. The issue of 'quality' in beef is a key element of the project and the theme running through the interview questionnaire. A sample plan was designed for the 32 regions of Scotland and the survey carried out (Kumar, Aaker and Day, 1999).

The survey sample was random and stratified by percentage population living urban Vs rural locations, and by those buying from supermarket Vs butcher. Sample diversification was made by sex and by age group of respondent i.e. the household manager responsible for food purchasing decisions. 500 beef questionnaire interviews were carried out across Scotland during November 1999 - January 2000. Consumers were randomly selected one in five. The interviews lasted around 7-10 minutes and were carried out either inside or outside pre-selected retail outlets. Only questionnaires from 'beef-eaters' were valid. Vegetarians and non-beef eaters were asked a short questionnaire to elicit their reasons for not consuming beef. Training was given to interviewers to ensure that interviewing consistency was maintained. Interviewer bias was checked for.

The sampling error 'e', was calculated to be 4.2% with a confidence interval of 95% (or k=1.96) for the 500 sample.
The error was calculated using:

$$e = \sqrt{\frac{K^2 * p\,(1-p)}{N}}$$

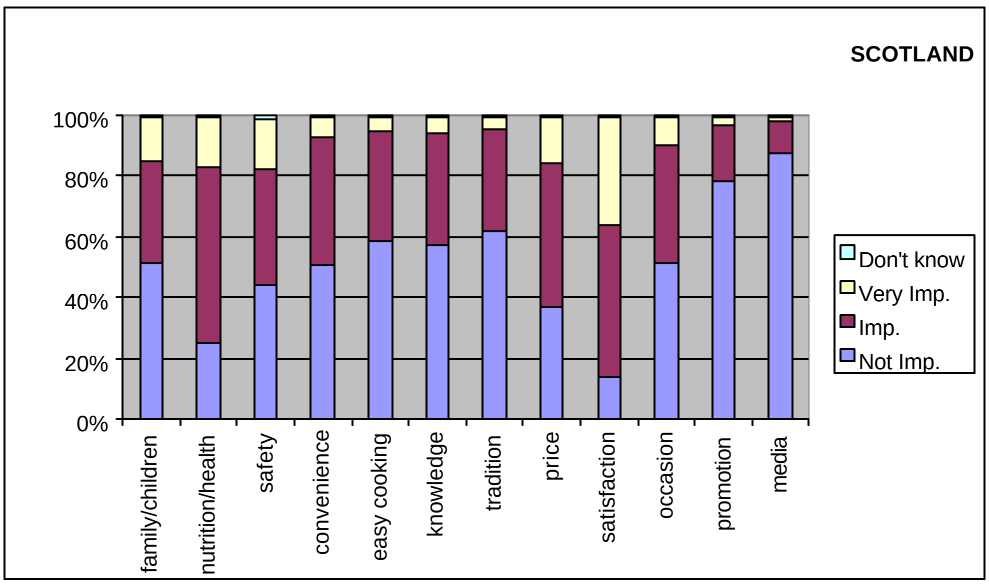
(Miquel *et al*., 1997):

Where K is the parameter for non-normal distribution, K=2 is the confidence interval of 95%; p is the proportion of individuals that demonstrate the characteristic being studied, and when this unknown, maximum heterogeneity is assumed, p=0.5; e is the sampling error; and N is the sample size. An initial pilot survey of 5% was carried out ahead of the main survey to check for question integrity and consistency.

Responses to issues of quality

The scope of this paper will not permit all categories shown in Figures 2-4 to be discussed in detail but these are retained for interest. Taking responses to a range of influences on 'purchase choice', Figure 2 shows how Scots rate ‘satisfaction’ as the most important influence when they come to buy (85.4%) with 50% rating it important and 35.4% very important.

Figure 2: How important are the following when choosing to purchase?



Source: The European Red Meat Marketing Project, 1999/2000

Consumers who are satisfied with a product are saying that the product has met with their expectations. A high rating for 'satisfaction' suggests that consumer ability is good in positively predicting ‘eating experience’ and that the product has been consistent in terms of meeting their expectations in the past. Becker (1999) describes satisfaction and prediction of eating quality, and outlines the importance of extrinsic and intrinsic cues as part of this process.

Table 2 shows which cues are important in indicating quality and where these come from. For Scots the importance of 'direct' assessment of potential purchases (30.4% important, 52.2% very important) is likely to reflect the view of those purchasing from supermarkets rather than butcher shops. In supermarkets consumers assume greater responsibility for assessing quality themselves and carry out subjective evaluations based on intrinsic cues and perceived credence quality attributes. Intrinsic cues include colour, leanness and marbling in beef for example. Credence quality attributes cover issues such as safety, animal welfare or freedom from hormones where the consumer has to believe what is declared to be true or not.

At focus group discussions[3] held prior to the consumer survey, consumers declared trust in 'their' butchers to both identify and supply quality on their behalf (Table 2).

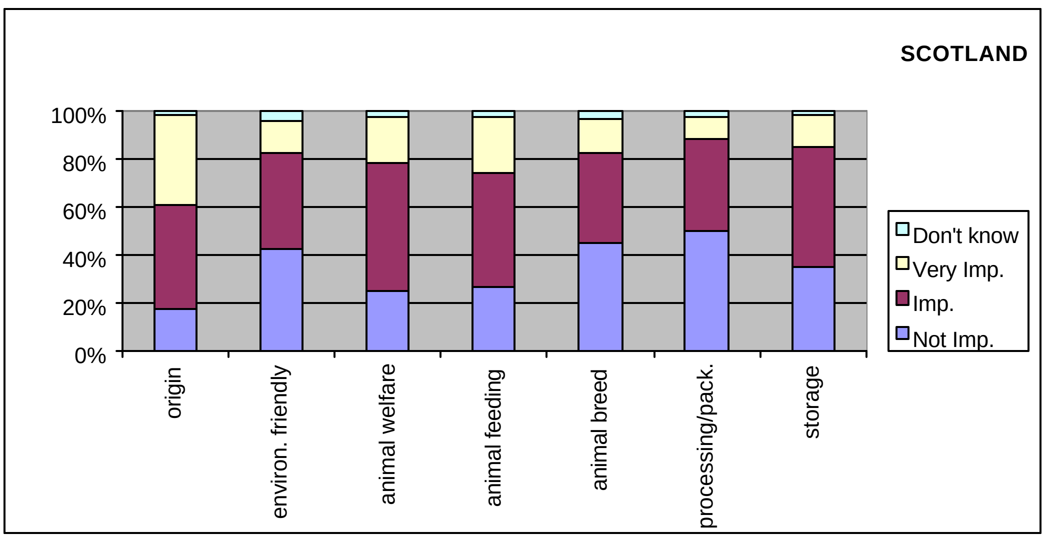
Table 2: Where do quality signals come from?

How much do you rely on the following to give an indication of quality?	Not imp/ don't know.	Imp.	Very imp.	Imp/ very imp
Direct or own assessment of quality - intrinsic quality cues such as colour or leanness	*17.4%*	*30.4%*	*52.2%*	*82.6%*
Your retailer/ supplier – extrinsic quality cue: e.g. reputation or experience	*15.2%*	*28.4%*	*36.4%*	*68.8%*
Price- extrinsic quality cue: a high price can indicate better quality or better cut	*48.0%*	*38.6%*	*15.8%*	*54.4%*
Label/ brand- extrinsic quality cue: Premium brands or PGI[4] label for example	*53.8%*	*30.2%*	*16%*	*46.2%*

Source: The European Red Meat Marketing Project, 2000

Trust in the retailer was high (24.4% imp., 36.4 v.imp.%) suggesting there is a degree of apportionment of responsibility for certain quality attributes assigned to the retailer. Responsibility for safety at the point of purchase for example, over which consumers have no control is passed back to the retailer.

Figure 3: How important are the following factors in achieving quality in beef?



Source : Consumer survey: European meat marketing project, 1999/2000

Safety was rated fourth most important influence on purchasing choice (37.8% imp. 16.2% v.imp.), see Figure 2. The position of safety suggests that credence quality issues such as food safety (e.g. BSE or E.coli), are no longer at the forefront of

[3] Focus Group discussions took place ahead of the consumer survey. Issues arising from these discussions went forward to the consumer questionnaire
[4] Protected Geographic Indicator: EU mark of quality of process or content related to a specific geographic area of production

consumers' minds in Scotland. Food safety assurance schemes instituted and promoted by the agriculture and food sectors following the BSE crisis, appear to have had a positive effect in restoring consumer confidence. This is in spite of on-going conflicting media reporting, for example: *The Scotsman*, January 20th, 2000 -"New CJD death toll may hit 500,000" and again on 29th April 2000 – "CJD epidemic fears recede as tests on tissue draw blank". UK food safety is now perceived to be a baseline quality attribute by consumers, to be delivered by the producer, verified and assured by the retailer and at no extra cost to the consumer. From the focus group discussions in Scotland, proliferation of assurance schemes now in operation in the industry, has been felt to diminish their impact and objectiveness.

High consumer confidence is a prerequisite for intra-European and international trade. Consumers want and expect to be offered 'safe' meat, assured by the supply chain and validated externally. Where safety in food for human consumption has been, or is contentious, foods must achieve certified third party approval that can be seen to be impartial. At a European level EU legislation exists to guide and control food safety in the form of the Communication on Consumer Health and Safety and labelling, the EU Directive (79/112/EEC) and the 1997 Green Paper on Food Law. Although mainstream UK consumers are again consuming beef, schemes to assure the product from birth to plate need to be unquestioning if this basic 'quality' is to underpin market development.

After satisfaction, nutrition and health was rated second most important contributor to quality by 74% of respondents in a country pilloried for its national diet (Figure 2). Price was rated third (47.2% imp., 14.8% v.imp.) most important consideration. Convenience, easy to cook, knowledge of preparation, promotion and media coverage were not rated very highly as positive influences on choice by the Scots surveyed.

'Origin' was perceived to be a major contributor to the provision of quality (Figure 3) and was felt to be the most important cue given on the label (Figure 4). 'Scotch' in itself provides a range of quality cues to consumers. It can simultaneously imply 'grass fed' finished cattle, 'safe meat' with a low occurrence historically of BSE and quality assured with the Specially Selected Scotch Beef[5] assurance scheme covering 90% of Scottish production. Becker (1999) suggests that women, who account for 70% of meat purchases in the UK, give higher importance to country of origin than men (MLC, 1997).

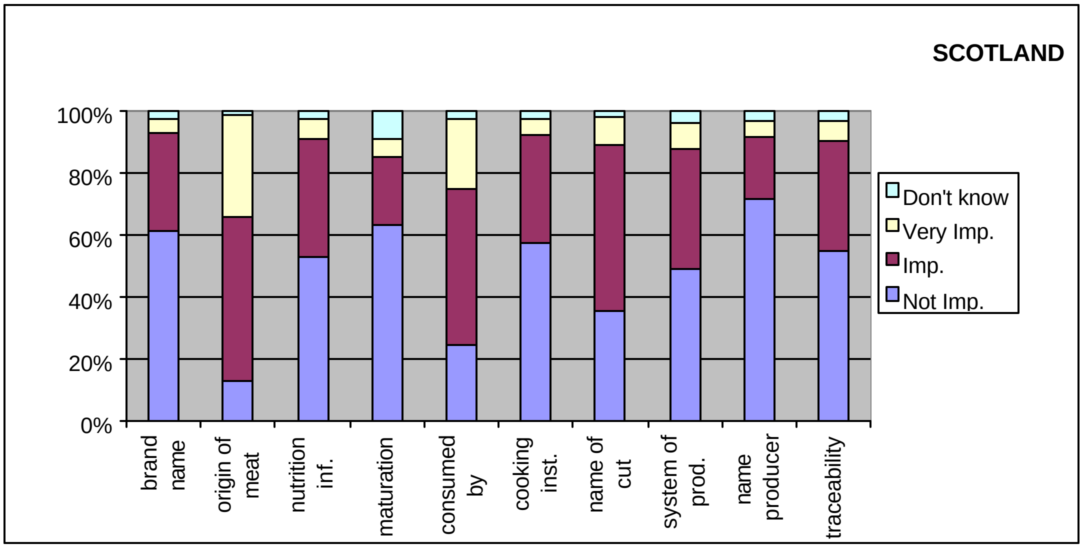
Animal welfare and animal feeding were important to around three-quarters of respondents. Interestingly 'environmentally friendly' was not important as a contributor to quality for 42% of respondents. Scots rated storage, processing and packaging least important contributors to quality. These also are likely to be seen to be the responsibility of the retailer.

The relative importance of cues on labels to indicate quality is shown in Figure 4. 'Consumed by' was the second most important item Scots thought important on the label (50.4% imp., 22.6% v.imp.). This high placement of the 'deadline' cue could be the result of the process of shifting responsibility for safety back to the retailer or reflect the loss of ability to make the deadline decision on the part of the consumer.

[5] Scotch Quality Beef and Lamb Association

Greater levels of supermarket shopping and loss of culinary expertise may also account for the low importance associated with carcasse maturation information on labels (21.8% imp., 5.8% v.imp.) although 'name of cut' was higher at (53.8% imp., 5.8% v.imp.).

Figure 4: What label information is important to indicate quality in beef?



Source: European Red Meat Marketing Project, 2000

Nutritional information, cooking instructions, system of production, producer name and traceability information were rated important label quality cues by half to a third of those surveyed.

Finally, Table 3 gives the breakdown by 'meat type' of routine beef purchases by respondents in the consumer survey. These data reference fresh meat cuts to added-value products consumed.

Table 3. Frequency of consumption of different 'types' of Beef in Scotland

Meat Type	Never	<1/ month	<1/ week	1/ week	>1/ week
Roast/ Steaks	*5.2%*	*23.6%*	*23%*	*40.8%*	*7.4%*
Stewing meat	*16.2%*	*22.8%*	*23.6%*	*33.2%*	*4.2%*
Mince	*5.4%*	*10.6%*	*21.4%*	*54%*	*8.6%*
Pre-prepared foods using beef	*32.6%*	*20%*	*13.6%*	*29.6%*	*4.2%*

Source: Red meat marketing project, 2000

Steaks, roasts and stewing meat are steadily consumed while mince (ground beef) is consumed more frequently at once a week by 54% of respondents, and more than once a week by 8.6%. Pre-prepared beef or beef meals show the highest proportion who never consume them (32.6%).

Discussion

Market segmentation for differentiated beef products is now highly developed and markets targeted by segmentation of consumer variables are big business for food processors and distributors (Park *et al*, 1997). Looking at the consumer survey, some opportunities for increasing or expanding existing markets are now discussed.

- **Pre prepared and ready meals**

Table 3 illustrated the low uptake of pre-prepared food by the survey sample and the potential to expand this market. The development of prepared meals is one of the factors shaping the modern food industry in the US and as a phenomenon linked to lifestyle changes, its impact is likely to increase in Europe in the future. Already leisure time is at a premium in developed countries and opportunity costs associated with time spent buying and preparing food are discussed at length by both Prochaska and Shrimper, (1973), and Park and *et al*, (1997).

The value of the ready meal sector in the UK was estimated to rise from £1.63 billion in 1998 to 2.0 billion in 2005. Pre-prepared and ready meals are the fastest growing sector of the meat products sector with growth in the chilled ready-meal sector outperforming that of the frozen sector. Frozen meals are considered by UK consumers to be a stock cupboard stand-by, while chilled meals are usually part of a planned purchase plan. Today, eating occasions involving chilled pre-prepared meals are frequently driven by "International Cuisine" (MLC,1999 Nov). In Scotland this market has great potential to develop further (Table 3) with 65.6% of the sample eating pre-prepared food less than once a week and almost a third never consuming any.

- **Food eaten away-from-home**

Food not prepared at home takes in food eaten-away-from home. This covers restaurants; institutional catering establishments; fast food outlets; sandwich businesses and vending machines for example. Scope for product innovation exists linked to the origin, nutrition, health and 'satisfaction' cues highlighted by the survey. Already smoking and flavouring roast beef for slicing in sandwiches has found an added-value niche in the ready-made sandwich sector. Meat processing is expected to continue to rise (up by 29% by 2005) at the expense of fresh meat sales which as seen, are in structural decline (Figure 1). Beef and veal presently account for 30% of total usage in the UK processing sector (MLC, 1999 Nov).

- **Direct sales opportunities**

Unique costs face UK beef producers such as compliance costs with welfare and environmental legislation. This coupled with the strength of sterling means that British beef cannot compete with exports from outside the European Union in the non-premium grades. The UK's National Beef Association is pushing to persuade farmers to develop added-value niche markets for beef. Recognising that imports cannot meet quality standards for food safety, welfare, or environment, this is an area with potential for development. New markets need to be market oriented rather than product oriented.

Mail order niche markets have been developing for some time particularly in the organic sector. The real potential for small producers or producer groups would appear to lie with e-commerce. Examples are 'Scotsbeef.com' - a small web-site set up to market crofter's[6] beef and butchers developing Internet retail businesses to promote Scottish quality beef. Already one butcher in Perthshire, Scotland employs 25 people selling to the top end of the market.

- **Farmer's markets**

Farmers can benefit by differentiating their products from those in the conventional market systems and by marketing them directly to consumers through farmer markets (Festing, 1998). Consumers relate well to direct contact with producers and credence quality attributes of wholesomeness can be exploited. Similarly horizontal co-operation between producers marketing directly to consumers in Belgium, is described by Vannoppen, Van Huylenbroeck and Viaene, (1999).

- **Strategic alliances**

Opportunity exists for alliances between production, processing and retail sectors of the supply chain that can benefit all parties. An alliance between farmers in Fife, Scotland and Asda supermarkets (Wal-Mart) has resulted in a drive to promote local produce in a region with 270,000 consumers. Cattle grazing in the fields in the region will wear coats to promote the supermarket's logo in exchange for the supermarket promoting the local "Kingdom of Fire" brand for milk, beef and lamb in their stores, together with other sponsorship deals.

Potential exists for more symbiotic relationships between producers and the retail sector. The pre-prepared ready meal markets and catering sector are ready to be tapped into. Beef, the product, needs to continually re-invent itself to exploit niche markets meeting specific consumer demands and segments of the market. E-commerce allows these segments to be courted and the right cue buttons to be pushed. For producers today, staying 'ahead-of-the-game' is both the 'name-of-the-game' and probably the reason for being able to remain 'in-the-game' in the long term.

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ACKNOWLEDGEMENTS

This study is being funded by the CRAFT Programme of the European Commission (Research Project: FA-S2-98-9093).

For further information on the project contact http://helios.bto.ed.ac.uk/ierm/qualityredmeat or contact corcoran@SRV0.bio.ed.ac.uk or abernues@aragob.es

The authors would like to acknowledge the input to the research made by other partners on the project: -

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