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## **Labelling of beef: a consumer perspective based on empirical research**

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# Labelling of beef : a consumer perspective based on empirical research

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## *Abstract*

*This study investigates consumer attitude to and associations with beef quality labels.. Labels were introduced as part of the marketing response strategy by the beef industry aiming at restoring the declining beef image and regaining consumer confidence. The objective of this paper is to add insights and empirical evidence to the discussion about the potential role of quality labels in meat marketing. The research methodology focuses on consumer surveys with two comparable samples : 157 respondents in 1996 and 303 respondents in 1998. Significant differences in consumer attitude toward and associations and beliefs with beef quality labels across time and across buyer status and claimed attention to television are discovered. The research indicates that quality labels are a valuable tool in response strategies by the beef sector to negative media coverage. Important hurdles to overcome include establishing a waterproof traceability and control system, as well as setting up effective marketing communication.*

## **INTRODUCTION**

During recent years, the European and Belgian meat and beef sector have been confronted with consecutive crises pertaining to product safety incidents, scandals and accidents. Fresh meat consumption in general and beef in particular decreased heavily. Several attempts at European, national and regional level were set up with the aim to counteract the negative consumption trend and to restore consumer confidence (Verbeke, 1999). Quality labelling is increasingly considered as a useful instrument for policy makers and the industry in an era when health authorities and mass media warn consumers about potential health risks. "European Quality Labelled (EQB)" - beef was introduced in early 1996 on the Belgian market. Besides aiming at consumer reassurance, the idea was also to shed light on the situation with the presence of a vast number of unofficial and dubious labels in the beef

market those days. The objectives of the research were twofold. First, adding empirical insights to the discussion about the potential role of quality and origin labels in restoring the beef sector image was envisaged. Second, identifying and analysing the specific set of assets linked in the mind of Belgian meat consumers to beef labels was aimed at.

## **LABELLING : THEORETICAL AND EMPIRICAL INSIGHTS**

Being a part of product management, the most critical element of marketing management for frequently purchased food products, labels might perform four functions : they may identify, grade, describe and promote the product (Kotler, 1996). Altmann (1997) adds to these functions that branding and labelling of food products aims at differentiating products from those

of competitors, at enlarging product attractiveness and at assuring the consumer of a certain level of product quality. Issanchou (1996) states that labels or stamps of quality are heavily needed for food products. The reasons for this are that consumers know less and less how foods are produced and controlled, and that there is less and less consensus about what is good and bad to eat, what in the end increases uncertainty. Von Alvensleben (1995a ; 1995b) on the other hand questions the potential impact of quality assurance and labelling schemes to improve the image of the beef sector. The reason behind is that the loss of image of the meat industry, as well as the creation of greater consumer confidence, are not directly problems of applicable quality and safety standards, but above all problems of communication. From the marketing viewpoint, food labels and media advertising are closely linked in order to produce a consistent product image. Awareness of the label is a necessary condition and has to be created in the real world by marketing communication (Van Trijp and Steenkamp, 1998).

Wagner and Beimdick (1997) indicate that the major objective of branding and labelling meat is to regain consumer confidence. As soon as this objective is realised, economic benefits automatically follow for all partners in the labelling program. Caswell and Padberg (1992) also stress the potential impact of labels on consumer confidence in food quality. Labels used to transmit information on health and safety issues are considered as an item of direct consumer information. As such, labels are a part of the information set used by consumers in making product decisions.

Empirical evidence of the impact and potential benefits of meat quality labelling is presented by several authors. Van Trijp et al. (1997) examined whether and how an IKB (integrated chain management) label adds value to pork in the eyes of the consumer. The research focused on investigating the assets associated with quality labelling (Aaker, 1991). These assets include awareness, perceived quality and associations. The results suggested that quality differentiation using a quality label may be viable strategy for agricultural products since it provides added value to the raw material. Van Trijp and Steenkamp (1998) show that consumers' quality perception of pork may be influenced by extrinsic cues such as a quality label. Support for the potential of meat quality labelling to add value to the product, as

perceived by the consumer, is also found in earlier research by Steenkamp (1986) and Oude Ophuis (1994). Evidence of the potential impact of meat quality labels is also reported from France. Touraille et al. (1985) indicate that poultry with a quality label was perceived more firm and more flavourful and preferred to other chickens. Siret and Issanchou (1996) found that a quality label evoking a traditional way of production induced high expectations for a large proportion of consumers. They further observed a positive assimilation effect on ratings after visual examination and after tasting.

Wagner and Beimdick (1997) identify three problems or challenges related to meat labelling. The first deals with the fact that the products include natural variability, which imposes limits on the ability of the industry to deliver homogeneous and constant quality products. The second problem is that a vast amount of meat is sold in small portions in supermarkets and butcher shops, complicates to attach a label to every single piece of meat. Also Lesser (1993) indicates that the opportunity for branding fresh meat products is limited because the retailer or butcher does the final preparation and packaging, thus eliminating the supplier label. The third problem is related to communication. Although Goldberg (1992) considers food labels as a powerful source of communication, the situation for meat requires some specific attention. Fresh meat is namely seen as a difficult product to advertise since only a limited number of quality improvements is communicable and since a lot of issues addressed in meat advertising relate to and aim at opposing negative associations in consumers' minds.

## EMPIRICAL RESEARCH

### Research methodology

Primary quantitative data were gathered through two questionnaire-based surveys with meat consumers in Belgium. During the first survey in April 1996, 165 respondents were questioned. A second survey with 320 respondents was organised in March 1998. Target population and sample characteristics were similar for both surveys. Respondents were selected by means of quota sampling. Through the inclusion of the 1996-questions in the 1998-questionnaire, a comparison of label perception between the pre- and post-BSE-crisis was enabled. Details of both samples are included in Table 1.

**Table 1 : Demographic profile of the 1996 and 1998, sample n and %**

	1996 n=157		1998 n=303	
	Male n=70 or 44.6%	Female n=87 or 55.4%	Male n=129 or 42.6%	Female n=174 or 57.4%
Age groups				
< 30 years	26.5	27.6	27.1	25.3
31 - 40 years	23.0	24.2	24.8	23.0
41 - 50 years	22.8	25.6	21.7	27.6
> 50 years	27.7	22.6	26.4	24.1
Total	100.0	100.0	100.0	100.0

## Main findings

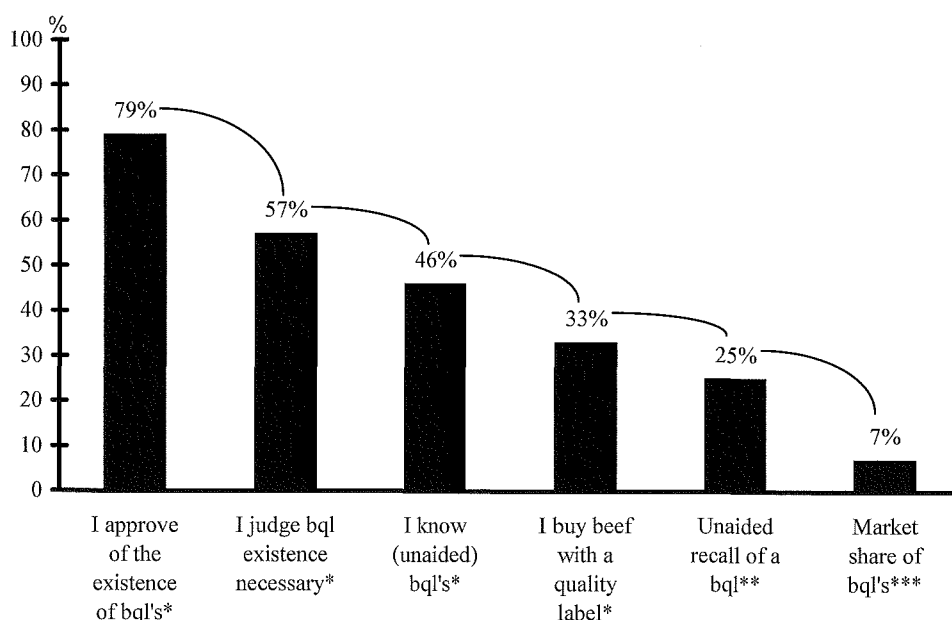
Significant shifts in consumer perception and attitude towards beef labels across time and differences between consumer groups were found. First, response patterns indicated a shift from a more price orientation in 1996 to a more quality orientation in 1998 when purchasing beef. From the 1998 survey, 70% of the respondents indicated to experience difficulties in evaluating the beef quality in the shop, and 75% indicated to be willing to pay a premium price for guaranteed quality beef. Despite increased health concerns, product safety concerns and quality consciousness, the willingness to pay more for guaranteed and labelled beef has not grown increased during the BSE- and post-BSE crisis period.

Second, beef consumers appeared to have become more critical to beef labels. Over time, labels have become significantly less associated with the actual features they stand for, namely 'natural' production methods, 'government controls' and a 'residue-free' status. Oppositely, promising shifts were seen in that labelled beef was less associated with 'a cheat to consumers' and with 'more tender' and 'more lean', two features that labelled beef does not possess.

Third, buyer status (previous experience with labelled beef) and claimed attention to mass media were found to largely shape attitude and beliefs associated with labelled beef. Buyers significantly more agreed than non-buyers with the statements 'Beef with a quality label is needed on the market' ( $p=0.000$ ), 'Beef with a label guarantees better quality' ( $p=0.000$ ), 'Beef with a label may have a higher price' ( $p=0.015$ ), and 'Beef with a label guarantees a natural production' ( $p=0.001$ ). Respondents who claimed to have highly attended mass media coverage of beef issues indicated significantly stronger risk perception of consuming beef when compared to respondents who paid few attention to media coverage ( $p=0.002$ ).

Fourth, discrepancies between claimed knowledge, ability to recall labels and factual label characteristics, as well as between claimed and overt consumer behaviour were found. These discrepancies are illustrated in Figure 1, where the cascade of participation (agreement) percentages ranging from approval of labels' existence, over need recognition, beef quality label knowledge and buying, until the actual market share of quality labelled beef in Belgium.

**Figure 1 : Participation Waterfall  
1998, %, bql = beef quality label**



Sources : \*1998 survey (n=303), \*\*VLAM (1998) (n=1,000), \*\*\*GfK (1999)

#### 4. CONCLUSIONS

Beef image, perceived quality and consumption have suffered from consecutive crises and negative media coverage during recent years. The research indicates that strategies based on labelling with the aim to regain consumer confidence are promising and valuable, but still have a long and difficult way to go. Consumers recognise problems when evaluating beef quality, lack sufficient knowledge of label features, and indicate a need for reliable labels. Moreover, consumers seek for some kind of rational support when making choices under uncertainty. This support can be offered through a label that is backed up by a waterproof system of identification, traceability and control (Viaene and Verbeke, 1998 ;

Verbeke and Viaene, 1999).

Being a necessary condition, traceability and control systems are clearly neither the sole nor sufficient condition for success. Effective marketing communication around the realisations, features and benefits to the consumers is the next hurdle to take. Within the discussion about labels, it has to be kept in mind that quality labels remain just one source of information to consumers among many, including advertising, education, extension, government and consumer advocacy group programs. Carefully-planned campaigns, integrating different communication tools and involving all actors within the beef chain, should hence be realised and followed up.

## BIBLIOGRAPHY

- AAKER D. (1991). *Managing brand equity*. Free Press, New York.
- ALTMANN M. (1997). Product policy. In : Padberg D., Ritson C., Albisu L. (eds.) "Agro-Food Marketing", Wallingford, CAB International, pp. 279-294.
- CASWELL J., PADBERG D. (1992). Toward a more comprehensive theory of food labels. *American Journal of Agricultural Economics*, 74 (2), pp. 460-468.
- GfK (1999). *Meat Consumption Statistics*. GfK (Gesellschaft für Konsumforschung), Brussels.
- GOLDBERG J. (1992). Nutrition and health communication: The message and the media over half a century. *Nutrition Reviews*, 50 (3), pp. 71-77.
- ISSANCHOU S. (1996). Consumer expectations and perceptions of meat and meat product quality. *Meat Science*, 43, pp.5-19.
- KOTLER P. (1996). *Marketing management: Analysis, planning, implementation and control*. Prentice-Hall International, Englewood Cliffs.
- LESSER W. (1993). *Marketing Livestock and Meat*. The Haworth Press, Binghamton.
- OUDE OPHUIS P. (1994). Sensory evaluation of free range and regular pork meat under different conditions of experience and awareness. *Food Quality and Preference*, 5 (3), pp. 173-178.
- SIRET F., ISSANCHOU S. (1996). *Agoral 96 : Production industrielle et qualité sensorielle*. Lavoisier, Technique et Documentation, Paris.
- STEENKAMP J.B. (1986). *Kwaliteitsbeoordeling van vleeswaren* (Quality perception of processed meat products). Rijswijk: Produktschap voor Vee en Vlees (Commodity Board for Livestock and Meat).
- TOURAILLE C., LASSAUT B., SAUVAGEOT F. (1985). *Viandes et Produits Carnés*, 6, p. 67.
- VAN TRIJP H., STEENKAMP J.B. (1998). Consumer-oriented new product development: principles and practice. In : Jongen W., Meulenberg M. (eds.) "Innovation of food production systems: Product quality and consumer acceptance", Wageningen Pers., pp. 37-66.
- VAN TRIJP H., STEENKAMP J.B., CANDEL M. (1997). Quality labeling as instrument to create product equity: The case of IKB in the Netherlands. In: Wierenga et al. (eds.) "Agricultural Marketing and Consumer Behavior in a Changing World", Kluwer Academic Publishers, Dordrecht, pp. 201-215.
- VERBEKE W. (1999). Factors influencing the consumer decision-making process toward meat. Ph.D. dissertation, University of Ghent.
- VERBEKE W., VIAENE J. (1999). Beliefs, attitude and behaviour towards fresh meat consumption in Belgium: Empirical evidence from a consumer survey. *Food Quality and Preference*, 10 (6), pp. 437-445.
- VIAENE J., VERBEKE W. (1998). Traceability as a key instrument towards supply chain and quality management in the Belgian poultry meat chain. *Supply Chain Management*, 3 (3), pp. 139-141.
- VLAM (1998). *Analysis Tracking Beef*. Wave 8, January 1998. VLAM, Brussels.
- VON ALVENSLEBEN R. (1995a). Das Image von Fleisch: Eine Analyse und ihre Konsequenzen für das Marketing. *Fleischwirtschaft*, 75 (4), pp. 356-360.
- VON ALVENSLEBEN R. (1995b). Die Imageprobleme bei Fleisch: Ursachent und Konsequenzen. *Berichte über Landwirtschaft*, 73, pp. 65-82.
- WAGNER P., BEIMDICK E. (1997). Determinanten des Erfolgs von Markenfleischprogrammen. *Berichte über Landwirtschaft*, 75, pp. 171-205.