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Consumer attitudes to British-made food: a means-end chain analysis and laddering interviews

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Consumer attitudes to British-made food: a means-end chain analysis and laddering interviews

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EXECUTIVE SUMMARY

For a country to maintain a domestic market for the goods it produces, in a time of increasing international trade, it is necessary to understand what consumers actually think about the products their country produces. Food is no longer limited by the traditional geographic and climatic constraints of a country. For British consumers, food from all over the world is available in any large supermarket. The purpose of this research is to assess the importance of British origin for food consumers.

In continuation from an initial set of focus groups, a series of Laddering interviews were conducted in the summer of 1999 with the aim of discovering why a British origin is important for fresh fruit and vegetables.

Laddering interviews were used to gather the data necessary to conduct a means-end chain analysis. Means-end chains is based upon the theory that consumers' demand for particular product attributes can be explained by their expectation that these attributes will lead to positive consequences for the consumer and the fulfilment of personal values.

Forty interviews were conducted with individuals responsible for at least half of their household's food shopping. The data collected were then analysed using the Laddermap software. A number of areas that motivated consumers to choose British fruit and vegetables were identified. In brief, these related to maintaining the health of the individual and their family, establishing a sense of national identity, trusting British producers, maintaining financial security, creating feelings of nostalgia through consumer familiar British foods, and supporting one's own country.

CONTENTS

1. INTRODUCTION

As a result of the growth in international trade there has been an increasing interest in the factors that affect competitiveness, one of which is country of origin (Al-Sulaiti and Baker, 1998). Consumers adjust their attitudes towards a product according to its country of origin (Sauer *et al.,* 1994). Thus, at a time when there is concerted action within the food industry to encourage consumers to buy foods produced in Britain, it is important to understand what consumers actually think about British food.

The focus of this research, therefore, is the attitudes of British consumers towards British food products. More specifically, it explores consumer perceptions of British food products and aims to identify those consumers with positive/negative attitudes with respect to British food and the impact these attitudes have on their purchasing behaviour. During the course of this three-year project the research is employing a number of techniques, both qualitative and quantitative in nature, to gather information from consumers. The first phase of primary data collection involved a series of focus groups conducted in the autumn of 1998 (Groves *et al.,* 1999). A summary of these focus groups follows in section 2. The main aim of the groups was to provide information referring to the first question, that is, how a British origin is conveyed and perceived by consumers. For the second phase, a means-end chain analysis, as this report discusses, was used to uncover why British origin is important. Finally, in the third phase, a quantitative survey will provide information for all of the research questions. Information about actual purchase choice will also be given by the survey in order to reveal which of the country of origin concepts are the most appropriate predictors of choice. In order to structure the research the following research questions were developed:

1. How is the county of origin of a British food product conveyed to consumers?
2. How do consumers form perceptions of the origin of a British food product?
3. Why is the country of origin important for British made food products?
4. What effect does the country of origin have on actual purchase choice?
5. Is there any variation in the effects of country of origin between product categories?

2. PREVIOUS DATA COLLECTION: FOCUS GROUPS

Focus groups are a way of gathering insights and ideas (Churchill, 1995). Moreover, they are a method of qualitative research, using guided group discussions to generate a richer understanding of the beliefs and opinions of those who take part (Morgan, 1998). Furthermore, focus groups incorporate three strengths of qualitative research: explanation and discovery; contexts and depth; and interpretation (Morgan, 1998). Thus, as the area of attitudes to British food, when taken from the current perspective, needs a great deal of exploration and clarification with regards to what are perceived to be British foods and why a British origin may be important for specific food products, focus groups are a suitable initial method of data collection.

2.1 Aim of the Focus Groups

With reference to the literature review and the overall aims of the research, the main objective of the focus groups was to uncover the following:

1. what are seen as British made food products?
2. for which products is being associated with Britain important with regards to perceptions of overall quality?
3. what are the elements/dimensions of Britishness when associated with food product? and
4. which dimension of country of origin has the greatest effect on perceptions of an authentic British food product?

As the topic of study is British food, focus groups have been conducted in more than one area. The aim of this was to obtain an indication of British consumers' attitudes towards British food products, not just, for example, the attitudes of English consumers. Groups, therefore, were held in Reading and Edinburgh.

Recruitment for the focus groups took place in the main shopping areas in each location. The main criterion was that all participants were primary food shoppers, being responsible for half or more of their household's food shopping. Five groups in total were conducted; each consisted of between seven and nine individuals, and varied by age and gender, encompassing a range of income and education levels. Participants were told during recruitment that the aim of the groups was to discuss food choice; only on attending the group were they made aware that the topic was specifically British food. All participants were given an incentive payment on completion of the group in appreciation of their co-operation.

2.2 Results of the Focus Group

Verbatim transcripts produced from an audio recording of each group have been analysed using QSR NUD*IST, a software package designed for the analysis of qualitative data. Qualitative data analysis software has the ability to improve the most tedious parts of qualitative research by removing the drudgery of copying, highlighting, cutting and pasting etc. Consequently, an analogy can be made with using a computer to calculate the statistics used in quantitative analysis as opposed to completing them long hand (Durkin, 1997). The computer, therefore, does not do the analysis; it should be more accurately thought of as a powerful indexing and cross-referencing tool (Morgan, 1998), that provides assistance only in the theoretical thinking. The results gathered are summarised in the section below.

2.3 Characteristics used to Identify a Product as British

Participants used a number of product characteristics when identifying a British product. These can be grouped as follows: style of the product; brand name; actual place of origin; established over time; and unique to Britain, thus, reflecting the importance of national cuisines, not just the place of origin, when considering a country and its food.

2.4 The Importance of Brand Origin

The concept of brand origin was prominent in the data, through not only consumer perceptions of the origin of the brand, but also the packaging features incorporated into the brand. This research, therefore, supports the concept of brand origin theorized by Thakor and Katsanis (1996). Furthermore, once it had been established that a brand was not British, participants did not substantially change their opinion, stating that the brand had been available in Britain long enough to make it British. This, consequently, supports Thakor and Katsanis's (1996) view that consumers may consider the origin of the product to be the same as the brand origin, even when they know the actual origin of the product.

2.5 Products for which a British Origin is Important

An actual British origin appeared to be more important for fresh products, whereas a British brand origin would seem to be more important for processed products. The reasons, however, why some form of British origin was important for both product categories can be related to the country image, ethnocentrism and authenticity, as will be discussed in the sections below.

Again, the importance of a traditional association was prominent. In particular, for those products that can be, and traditionally have been produced in Britain, a British origin was considered important. Three main reasons existed for this: firstly for economic reasons, secondly, as a matter of national pride, as to accept an import would be to admit inferiority, and finally, as the product would be authentic and, therefore, of a superior quality.

2.6 Reasons for Purchasing British Food

2.6.1 Characteristics of the product

Investigating reasons to and barriers against purchasing a British product revealed both positive and negative specific product attributes of country image. The same format as that used by Parameswaran and Pisharodi (1994) to measure country image was applied to the data; consequently specific product attributes of country image were formed. The positive product attributes that were linked specifically to British food products were: taste; safety; and from a more cultural perspective, familiarity; and authenticity. The negative attribute that was uncovered was price, as British products were perceived to be too expensive.

The authenticity of a product was also included as a product specific country image attribute. This represents the presence of a traditional and cultural association between Britain and a specific food product, where the food product is perceived to originate from Britain. A number of factors affected perceptions of the authenticity of a product, as will be discussed in more detail below.

2.6.2 Ethnocentrism

Consumer ethnocentrism relates to the beliefs about the appropriateness and morality of buying foreign products (Shimp and Sharma, 1987). The notion of purchasing a British product in order to support the national economy and Britain as a country was prominent in the findings. This idea was stronger, however, when considering local products, supporting the findings of Elliot and Cameron (1994). Furthermore, as mentioned above, for products that could be produced in Britain, and especially those that traditionally have been produced in Britain, British origin was particularly important, as accepting an import would be admitting inferiority. This reflected both national pride, as well as basic economic support.

2.7 Authentic British Food

It is revealed that authenticity of British food products is both an objective and subjective concept, classified using external product characteristics and also existing internal information (Littrell *et al.,* 1993). Findings were consistent with the product, personal, and situational factors proposed by Kuznesof *et al.* (1997). However, product related factors are the focus of the current research, expanding the work by Kuznesof *et al.*. Consequently, it can be concluded that there are six dimensions of an authentic British food product upon which consumers' perceptions are based, and these are consistent with the dimensions outlined by Shenhav-Keller (1993), and Litrell *et al.* (1993): uniqueness to Britain; cultural and traditional associations; characteristics of the production process; the presence of an authority; extrinsic product attributes; and origin. Although variation exists between these dimensions and those of Shenhav-Keller (1993) and Litrell *et al.* (1993), this can be accounted for by the different products studied, and particularly, the product specificity of the current study.

2.8 Summary of Findings

The main findings of the focus groups can be summarised as follows:

- A British origin is more important for fresh products than for processed products.
- A British origin is important because the product is perceived to taste better and to be fresher.
- A local origin is of greater importance than a more general British origin.
- British food products are perceived to be too expensive.
- Authentic British food products are perceived to be both traditional and unique recipe based products, and also genuinely British brands.

The data gathered through the focus groups was used to direct and develop further phases of data collection. The focus groups were followed by a series of Laddering interviews and a means-end chain analysis.

3. THE ROLE OF VALUES AND THE THEORY OF MEANS-END CHAINS

3.1 The Role of Values in Consumer Behaviour

A consumer's decision of whether to purchase a given product may be influenced by a number of factors. These influences can be grouped together as: environmental influences, such as culture, purchase situation, family and household, and the individual's reference group; psychological influences, for example, information processing and learning; and individual influences, including knowledge, attitudes, personality and values (Engel *et al.,* 1995). Values are defined by Rokeach (1973) as "an enduring belief that a specific mode of conduct or end-state of existence is personally or socially preferable to an opposite or converse mode of conduct or end-state of existence." Values can be either social or personal; "social values define 'normal' behaviour for a society or group, whereas personal values define normal behaviour for an individual" (Engel *et al.,* 1995). Social values are transmitted through cultures and subcultures within society (Wilkie, 1994). Personal values reflect the choices an individual makes from the range of social value systems to which they are exposed (Engel *et al.,* 1995). Although social values are unlikely to have an effect on sensory preferences for different foods, differences in the purchase and use of some foods may affect deeply held beliefs about valued end states and modes of behaviour (Goldsmith *et al.,* 1997).

When describing a value, it is an individual's beliefs concerning desirable modes of conduct or desirable end-states of existence that are being discussed. These two forms of values can be identified respectively as instrumental and terminal values (Rokeach, 1973). Thus, an individual's most abstract beliefs, such as instrumental and terminal values, can be considered elements of the core self, which in turn give an individual a "sense of unity and identity and influence behaviour across a wide variety of situations" (Walker and Olson, 1991). A list of the terminal and instrumental values proposed by Rokeach (1973) is given in Table 3.1.

Table 3.1 Instrumental and terminal values

Terminal	Instrumental
A comfortable life	Ambitious
An exciting life	Broad minded
A sense of accomplishment	Capable
A world at peace	Cheerful
A world of beauty	Clean
Equality	Courageous
Family security	Forgiving
Freedom	Helpful
Happiness	Honest
Inner harmony	Imaginative
Mature love	Independent
National security	Intellectual
Pleasure	Logical
Salvation	Loving
Self-respect	Obedient
Social recognition	Polite
True friendship	Responsible
Wisdom	Self controlled

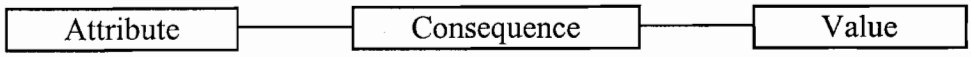
Source: Rokeach (1973).

3.2 The Theory of Means-End Chains

Means-end theory is based upon the assumption that a consumer's motives for demanding specific product attributes can be explained by his or her expectations of whether they will

lead to the attainment of positive consequences and to the consumer's personal values (Bech-Larsen *et al.,* 1996). Thus, as products go beyond functional properties, as the marketing concept establishes (Kotler and Armstrong, 1994), consumer preferences may be explained in terms of a chain, from attributes, to consequences, to values (Perkins and Reynolds, 1988). The means-end chain model can be illustrated as follows (Valette-Florence *et al.,* 1998; Bech-Larsen *et al.,* 1996):

Figure 3.1 The means-end chain model



Source: Bech-Larsen *et al.,* (1996).

Attributes are considered to be the concrete characteristics of the product, which are important for the formation of a consumer's preferences. Consequences are the expected functional and psychological implications of the consumer's purchase, use, or disposal of a product. Values, finally, are the consumer's existential goals, which guide the consumer's attitudes and behaviour (Bech-Larsen *et al.,* 1996). A means-end chain represents a consumer's cognitive structure, from how a product characteristic is linked to consequences of consumption, which in turn may be linked to the attainment of life values (Grunert, 1995). Means, therefore, are objects (products) or activities in which people engage, and ends are valued states of being such as happiness, security or accomplishment. Thus, a means-end chain is a model that seeks to explain how a product or service selection facilitates the achievement of these desired end states (Gutman, 1982).

The means-end chain model by Gutman (1982) is based upon two underlying assumptions concerning consumer behaviour: "1. that values, defined here as desirable end-states of existence, play a dominant role in guiding choice patterns, and 2. that people cope with the tremendous diversity of products that are potential satisfiers of their values by grouping them

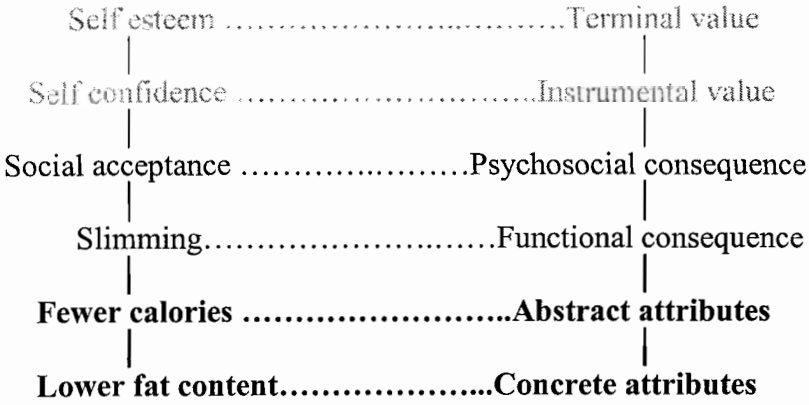
into sets or classes so as to reduce the complexity of choice". Furthermore, it is also taken that all consumer actions have consequences, and that individuals will associate specific consequences with specific actions (Gutman, 1982). Values, therefore, define what consequences a person sees as desirable, and consequences in turn define which attributes are important (Perkins and Reynolds, 1988).

In order to realise these desired consequences, it is necessary for an act of consumption to occur. The consumer must learn which product attributes will produce the desired consequences in order to make such a purchase choice. This is represented by the attribute consequence link in the Gutman model (1982). In addition, the central aspect of the model by Gutman (1982) is that consumers choose actions that produce desired consequences and minimise undesired consequences. This is based upon the proposition by Rokeach (1973), that values give consequences positive and negative valences. The value-consequence link is critical to the model (Gutman, 1982). Although values influence consumer behaviour, their existence may not be evident to consumers, as it is likely that reaching preferred end-states of existence is not in the forefront of consumers' minds (Gutman, 1982). Additionally, it was found by Perkins and Reynolds (1988), that values add significantly to explaining preferences for products, but not, the perceptual differences. Consequently, it can be contended that in the context of country of origin, ethnocentrism has a value orientation,(Han, 1988). Indeed, Han (1988) proposes that ethnocentrism influences choice and preference for countries' products, whereas country image affects perceptual variations between the quality of different countries' products.

Alternatively, the elements of a means-end chain can be considered to form a goal hierarchy, having goals at lower levels that are linked to important personal goals at higher levels (Gutman, 1987). Thus, a goal hierarchy is the way consumers break up a complex problem into shorter, more manageable units. Means-end chain theory can be applied to a food product showing a ladder, with the relevant links between attributes, consequences and values.[1] (Fig 3.2)

[1] A Ladder is the term used to represent the link between attributes, consequences and values, each at higher levels of abstractness.

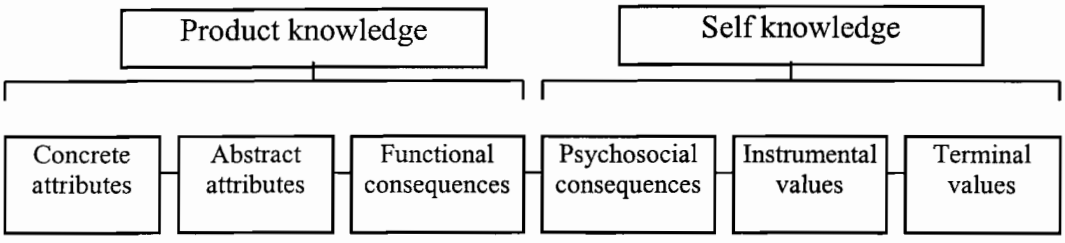
Figure 3.2 An attribute, consequence, value ladder



Source: Grunert, 1995

Means-end chain models, however, can also be more broadly be viewed as representing the relationship between products and self, "where the means represent aspects of product knowledge, and the ends represent aspects of consumer self-knowledge" (Walker and Olson, 1991, p. 112). (Fig 3.3)

Figure 3.3 The relationship between products and self



Source: Walker and Olsen, 1991

Thus, a means-end chain is a cognitive representation of the link between an individual's knowledge about a product (salient attitudes and beliefs) and their self-knowledge (important psychological and social consequences and values); the end results of some means-end chains can, therefore, be quite abstract (Mulvey *et al.,* 1994). Furthermore, although the core self is relatively stable, different aspects may be activated in different situations (Walker and Olson,

1991). Indeed, in empirical work by Walker and Olson, the decision situation was not found to affect the particular attributes thought to be important, but did affect the means-end chain relationship that was activated. The meanings of attributes differed across situations. Thus, "it is not the attribute *per se*, but what the attribute means to the consumer, that influences consumer decision-making" (Walker and Olson, 1991).

3.3 Applications of Means-End Chains

Building values into market planning creates, according to Gutman (1982), the potential to target products and messages more closely to valued states or goals considered by consumers to be of prime importance by consumers. Indeed, through the use of means-end chains, managers are able to develop a consumer-orientated marketing strategy (Audenart and Steenkamp, 1997).

3.3.1 Segmentation

One possible application of means end chains is segmenting consumers with respect to their value orientations. This can be based upon individuals' values and how these values relate to lower level distinctions (Gutman, 1982). Alternatively, segmentation can be based upon the connections individuals make between attributes and values (Reynolds and Gutman, 1988). Clearly, this is of considerable value when determining product markets from a consumer perspective (Gutman, 1982).

An additional outcome of segmentation is the ability to identify competitors' products through the analysis of beneficial consequences and values (Gutman, 1982). Furthermore, segmentation based upon means-end chains is not restricted to a single level of abstraction or linkage. The decision of the basis for segmentation is dependent upon the objectives of the research (Botschen *et al.,* 1999). In addition, investigating at what level in the hierarchical value map competing products are first categorised together provides further information about why consumers may favour competing products (Gutman, 1982). If products are first

grouped together at the attribute level, the products have a basic physical similarity. Alternatively, if consumption of the product provides the same advantages for the consumer, then the products are grouped at the consequence level, and so on to the value level.

3.3.2 Product planning

The use of means-end chain data can also be used in product planning. Understanding the links between product attributes, the benefits they provide and the personal values they fulfil is essential when highlighting areas for new product development (Gutman, 1982). Identifying which product attributes consumers use to infer desired consequences, and eventually personal values, allows for a clearer product specification to use in the development of new products (Gutman, 1982). Simply, managers are able to translate product attributes into consumer needs, and also understand why specific characteristics of a product are important to consumers (Audenant and Steenkamp, 1997). Laddering allows the respondent to use their own terminology when revealing preferences. This makes it possible, therefore, to ascertain if preferences are based upon attributes, consequences and values rather than where the respondent is asked to rate pre-determined attributes.

3.3.3 Advertising assessment and development

A further application of means-end chains is in the development and assessment of promotional and advertising strategy (Gutman, 1982; Reynolds and Gutman, 1988). According to Gutman (1982), "if an advertiser knew what key distinctions consumers made, how these distinctions were used to establish product/brand groupings, he/she would be better able to position advertising against the fundamental value orientations of target consumers". Thus, the perceptual constructs that are identified in the hierarchical value map can be used as the basis for the development of an advertising strategy that will appeal to consumers with specific orientations towards a product (Reynolds and Gutman. 1988).

4. COLLECTING AND ANALYSING MEANS-END CHAIN DATA

4.1 Laddering Interviews

Laddering refers to the method of one-to-one interviewing, which is used to develop an understanding of how consumers translate product attributes into meaningful associations with self (Gutman, 1982). A Laddering interview consists of a series of directed probes, typified by '*why is that important to you?*', with the aim of uncovering the linkages between the range of attributes, consequences and values (Reynolds and Gutman, 1988). The probing itself is based upon previously mentioned distinctions between and among specific brands or products (Valette-Florence, 1998). Beginning at the lowest level in the chain, consumers discuss which attributes they use to discriminate between products, and why these attributes are important. This continues to what consequence is expected and why (Reynolds and Perkins, 1988).

The resulting ladders, or perceptual orientations, represent the combinations of elements that serve as the basis for distinguishing between and among products in a given class (Reynolds and Gutman, 1988). Consequently, the detailing and subsequent understanding of these distinctions at the different levels of abstraction provides a perspective on how product information is processed, from what Reynolds and Gutman (1982) refer to as a motivational perspective. Therefore, the underlying reason why either a product attribute or a consequence is important is revealed (Reynolds and Gutman, 1988).

4.2 Hard and Soft Laddering

A technique of 'soft' Laddering has been developed as an alternative to traditional Laddering, which has subsequently been known as 'hard' Laddering. Soft Laddering restricts the respondent's natural speech as little as possible. Hard or traditional Laddering interviews,

however, require the respondent to give answers that demonstrate increasing level of abstraction through attributes, consequences and values, and that the ladders are produced one by one (Grunert and Grunert, 1995; Grunert *et al.*, 1995).

Walker and Olson (1991) developed a paper and pencil Laddering technique. Respondents were asked to complete boxes, with arrows representing the means-end chain relationship, with the most important attribute used to distinguish between two greetings cards being written in the first box, followed by the resulting consequences and values. This technique, requiring self-administration, is an example of hard Laddering.

4.3 Laddering Techniques

Reynolds and Gutman (1988), provide a thorough and descriptive guide to conducting a Laddering interview. The stages they propose are as follows: eliciting distinctions; selecting key distinctions to ladder; techniques to use; and analysis. This guide was followed during the Laddering interviews that form part of this project. The stages outlined by Reynolds and Gutman are discussed below.

4.3.1 Eliciting distinctions

The Laddering interview begins by the individual identifying the perceived meaningful difference between products. It is the responsibility of the interviewer to then confirm that the distinction made is bipolar. Although existing literature presents no clear consensus of why this bipolarity is necessary, it is generally assumed that this helps ensure that the responses are actually attributes through their presence on a continuum with two extremes. An example of this could be choosing a product that has a low salt content, as opposed to choosing one with a high salt content. Once identified, the participant is then asked which of the poles is preferred, and the question "why is that important to you?" follows. It is suggested that two elicitation methods are included in the interview in order to obtain the necessary distinctions. The

purpose of this is to ensure that no important elements have been overlooked.

It is possible that attributes elicited may vary depending upon the elicitation method used, which in turn may lead to the measurement of different exerts of cognitive structure. Grunert *et al.* (1995) maintain that if the intention of the means-end chain analysis is to measure exerts of cognitive structure, relating especially to the prediction of choice behaviour when choosing between specific product alternatives, then the set of attributes required are those that are used to make this choice. These attributes may vary in the level of abstractness, be both intrinsic and extrinsic; be based on characteristics not evident in the physical product such as an ethical production process; or even be related to actually purchasing the product. It is (Grunert *et al.*, 1995) suggested that one way to avoid this problem is to begin with a preference task, linking attributes to the explanation given by the respondent for their preferences.

4.3.2 Selecting key distinctions to ladder

On obtaining a satisfactory number of distinctions between the products, the interviewer must select which to use to form the basis of the Laddering. Two main ways exist by which to do this. The interviewer can use their own judgement and base the decision upon, for example, prior knowledge of the products, or the aims of the specific research. Alternatively, all the previously made distinctions can be presented to the participant, who is then asked to rate them in order of importance; the distinction rated highest would thus be selected.

4.3.3 Techniques to use

Reynolds and Gutman (1988) suggest six techniques to use during the Laddering interview to obtain an adequate ladder.

1. Evoking the situational context: the best results are obtained from Laddering when the participant is provided with a realistic situation in which they would use the product. As it is the individual, however, that is the focus of the study, and not the product, it is important that the relevant consumption situation is elicited and used for the basis of the interview.

2. Postulating the absence of an object or a state of being: if the participant has problems progressing through the levels of a ladder, a possible solution is to ask them to consider what it would be like if a product did not possess a specific attribute, if they did not have a certain object, or if they did not feel a certain way.

3. Negative Laddering: although the majority of Laddering is centred on what participants do and how they feel, there is the potential to obtain valuable information by asking why participants do not act in a certain way, or do not want to have certain feelings.

4. Age-regression contrast probe: a further method to encourage participants to verbalize their feelings and behaviours is to move them backward in time and ask them to consider their past behaviour.

5. Third person probe: if a participant has difficulty identifying their own motives for their actions it is possible to ask how they think other people might feel, or might want to feel if in similar circumstances.

6. Redirecting techniques: silence/communication check: if the interviewer remains silent the participant may be encouraged to continue seeking an appropriate answer. Finally, a communication check simply requires the interviewer to refer back to what the participant has said and ask for further clarification or a more precise description.

4.3.4 Considerations when conducting a Laddering interview

When the respondent has an elaborate cognitive structure with regards to the specific product being investigated, forked answers may occur; that is, the elicitation of several cognitive categories at the same level of abstraction (Grunert *et al.*, 1995). Indeed, a respondent may feel that they should in fact give as many answers as possible. In a flexible interview, the interviewer can continue Laddering from each of the responses given. Alternatively, probing can continue only from the initial response given. If this second option is followed, however, the alternative responses that are not probed may interfere with subsequent answers and result in deviations from the ideal linear structure.

It is proposed that one of the greatest difficulties when conducting a Laddering interview is to know when to stop probing (Grunert and Grunert, 1995). In cases where the participant's

cognitive structure for a particular product is weak, they will very easily reach a stage where they are unable to retrieve any further categories of increasing abstractness. If probing continues, however, the participant is likely to switch to an alternative strategic perspective. Grunert *et al.* (1995) give an example of this. After responding to the question 'why is it important for you to be healthy?' there may be no immediate response from the participant. The participant may turn to a different strategic perspective in order to find a response, such as imagining future situations where good health would be important, such as a skiing holiday, thus, obtaining different cognitive categories. The more variation, therefore, in the strategic perspective, the more doubtful are the results. Consequently, the interviewer should be aware of changes in strategic perspective through long pauses and unfinished sentences, and also by re-analysing audio-recordings of the Laddering interview (Grunert *et al.,* 1995).

4.4 Analysis of Laddering Data

Once all the Laddering interviews are completed, attribute-consequence-value links will have been obtained for all participants. As the analysis progresses, an aggregate of all ladders is formed, which leads to the production of the final hierarchical value map. The stages of analysis required to produce a hierarchical value map are described below.

4.4.1 Coding Laddering data

When analysing means-end chain data, the first step is to conduct a content analysis of all the ladders elicited. A set of summary codes is first developed, by classifying the responses as attributes, consequences or values, and then breaking each down into individual summary codes. The codes should be broad enough to incorporate more than one respondent, but not too broad, as meaning will be lost.

Difficulties may arise in distinguishing between attributes, consequences and values. This is dependent on the context information that is available during the coding process, which in turn

is related to the administration of the Laddering task (Grunert *et al.,* 1995). Furthermore, problems may also occur in finding the correct level of abstraction. Radical coding and broad categories are, therefore, frequently required in order to make the subsequent implication matrix technically manageable (Grunert *et al.,* 1995; Gutman, 1991).

Once coding is complete, numbers are then assigned to each code. Each element, in each individual's ladder, is then scored using the respective numbers. Thus, a matrix is produced, the rows representing a respondent's ladder, and the columns corresponding to the number of elements in the longest ladder. The matrix is then used to determine the dominant pathways between the key elements.

4.4.2 Implication matrix

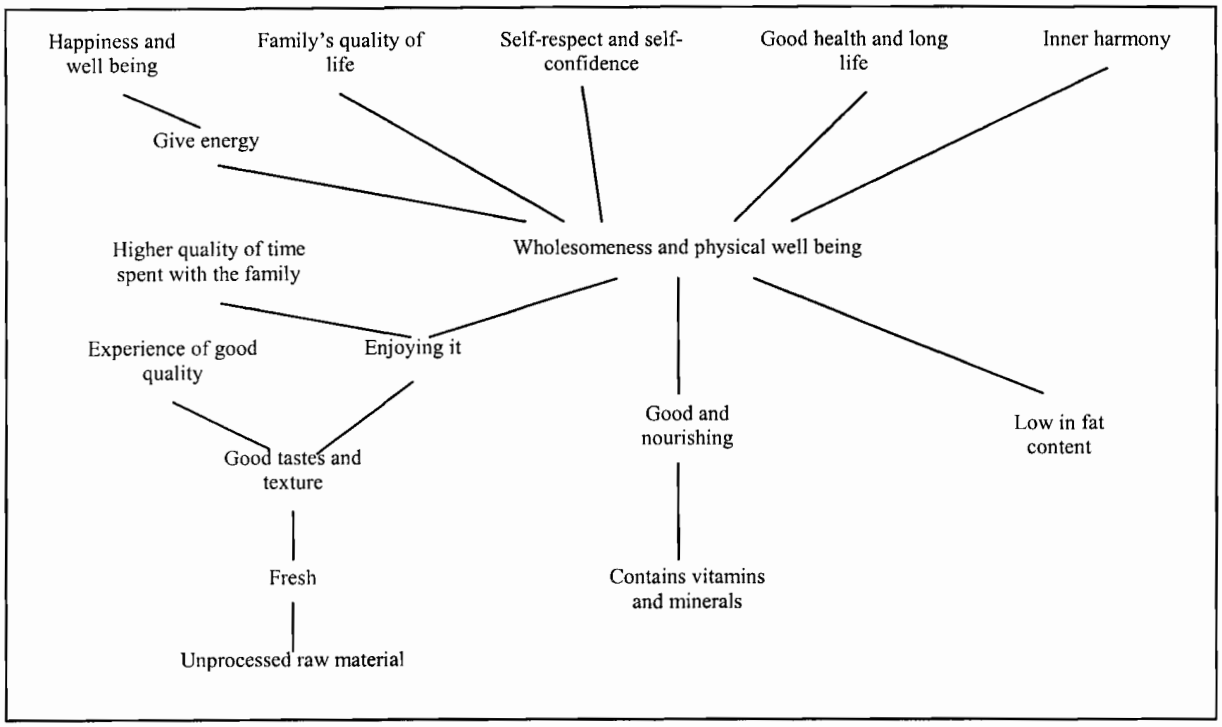
The next stage in the analysis is to construct a second matrix that represents the number of times each element leads to another element. Direct and indirect relationships between elements can be represented in the matrix. The numbers in the matrix are expressed in a fractional form, direct relations to the left of the decimal place and indirect relations to the right. Consequently, "an individual respondent's ladders are decomposed into their direct and indirect components" (Reynolds and Gutman, 1988).

4.4.3 Constructing the hierarchical value map

The construction of the hierarchical value map requires the reconstruction of 'chains' from the aggregate data (chains referring to the sequence of elements emerging from the implication matrix, whereas ladders refer to the elements elicited by each respondent). The first stage is to consider the adjacent relations, for example A to B, and B to C, to form an ABC chain. It is not necessary, however, for an ABC ladder to have been produced by an individual in order to form an ABC chain. Connecting all the chains that are produced from the linkages in the large matrix then forms a hierarchical value map. This task, according to Reynolds and Gutman (1988), requires great ingenuity on the part of the analyst, their only advice being to avoid crossing lines. The ability of the hierarchical value map to represent the data is assessed by the proportion of relations between elements accounted for by the hierarchical value map. Once a hierarchical value map has been constructed, a pathway, running from the bottom to the top, is considered to be a potential chain representing a perceptual orientation.

An example of a hierarchical value map is given below. The map shows the cognitive structure for a group of Danish consumers, with a high involvement in the purchase of fish products.

Figure 4.1 Hierarchical value map for fish, for the more involved respondents.



Source: Sorensen *et al.* (1996)

Two views exist of what a hierarchical value map represents. The modest view is that the hierarchical value map conveys the major results from a Laddering study; the second, more ambitious view, is that it is as estimate of the cognitive structure for the specific sample of respondents (Grunert *et al.,* 1995). For as Grunert *et al.* (1995) theorise, when taken together and analysed appropriately, the ladders from a set of respondents will yield an estimate of the group's cognitive structure. When taken for the individual alone, the ladders only represent a collection of single chains, not a network of associations.

When producing the hierarchical value map, in practice, it is only possible to incorporate the most important links; the analyst must specify a 'cut-off level'. The cut off level "gives the

minimum cell entry in the implication matrix necessary to be represented as a link in the map" (Grunert *et al.*, 1995). No statistical or theoretical criteria to specify the cut-off level is given in the literature. The only guidance given is that the analyst must balance retention of information alongside manageability when determining the most appropriate cut-off level.

4.4.4 Using Laddermap

Laddermap is a software tool that can be used to facilitate the analysis of Laddering data obtained through interviews. Alongside a more efficient analysis, Laddermap also increases the quality and reliability of the results of the interactive coding (Gengler and Reynolds, 1993).

5. MEANS-END CHAINS IN RELATION TO THE CURRENT STUDY

5.1 Justification of the Use of Means-End Chains

The focus groups completed earlier in this study provided a broad overview of consumer perceptions of, and attitudes towards, British food products. Initial indications were provided of which product categories a British origin is important for and also the reasons for choosing a British food product. The second phase of the research was to explore specifically why a British origin is important. Thus, a Laddering interview, based upon the question *'why is that important to you?'* initially appears to be a suitable technique to use. Indeed, in industrialised societies, such as Britian, where food has gone past simply being required for survival, individuals are able to choose between a huge range of food products. In order to understand consumer preferences for these various foods, it is important to understand the self-relevant consumer consequences attached to food products (Grunert *et al.,* 1995b). Means-end chains will allow the discovery of the self-relevant consequences gained through purchasing a British food product.

The findings of the focus groups suggest that reasons for purchasing a British product can be grouped into three main areas: that of ethnocentric reasons, the attributes of a British product that can be related to the concept of product country image, and also the authenticity of the product. Thus, when determining the influence of the country of origin of a product, in this case a British food product, it is necessary to consider the characteristics of the product and the consumer. Therefore, the method of data collection must take into account in both of these areas. The focus of means-end chains is the individual (Reynolds and Gutman, 1988). This, therefore, would allow the consumer based reasons for choice, such as ethnocentrism which has a value orientation, to be revealed which may not be the case if the method used was based only on preferences for a specific product without exploring why the individual preferred the specific product. As a Laddering interview is centred around products themselves, and

distinctions between the attributes that different products possess, it is also possible to uncover product related reasons for choice, in this case product country image attributes and authenticity, and additionally, why these attributes are important to the individual.

Using a means-end chain analysis will allow the actual value held by consumers to be revealed. It was indicated by the focus groups that a British food product was chosen because *"it is good to feel like you are supporting your own"* or that a British version of a product was perceived to be superior. The Laddering interviews, therefore, will reveal why supporting your own economy or cultural identity, or having the highest quality product is important to the individual. For example, 'supporting your own' typifies an instrumental value as giving your support describes a desired mode of conduct, but the importance of the 'national security' is an example of a terminal value as it represents a desired state of being.

It will be possible to use the information gained from the Laddering interviews to clarify data gathered through the focus groups and further develop attitudinal statements to use in the quantitative phase to measure relevant constructs. For example, it is proposed that a form of national and cultural identity is displayed through food. Thus, the means-end chains will also aid in the development of a scale to measure this concept, which will be used in the later quantitative phase.

Grunert and Grunert (1995) doubted the use of means-end chains in connection with low involvement products, such as food products. However, Bech-Larsen *et al.* (1996) propose that it is possible to counteract any problems that may arise. Furthermore, a number of studies have been completed, using a means-end chains analysis, to investigate consumers' cognitive structure towards specific food products, ranging from fish products to genetically modified foods (see, for example, Grunert, 1995; Sorensen *et al.,* 1995; Jonas and Beckmann, 1988; Bredahl, 1998). Therefore, previous research justifies the suitability of this method of analysis when investigating consumer attitudes to specific food products.

Previous means-end chain studies involving British consumers have not yielded particularly

good results when compared to other nationalities incorporated in the same study, for example Bredahl (1998). A recent study by Jonas and Beckmann (1998), however, investigating attitudes towards functional foods, interviewed consumers in Denmark and the UK using hard Laddering, and obtained results that showed a more complex hierarchical value map/cognitive structure for UK consumers. This is an encouraging result, supporting the use of means-end chains in this study. Furthermore, as the focus is upon British food, something familiar to the participants, this should act as a further encouragement to produce the desired ladders.

The study by Jonas and Beckmann (1998) also used a total sample size of forty participants, twenty in Denmark and twenty in the UK. Other studies have used samples of a similar size, such as thirty participants discussing each product or scenario when two or more examples are being studied, for example Bech-Larsen *et al.* (1996). Furthermore, in the Laddering guide proposed by Reynolds and Gutman (1988), a hypothetical sample of sixty-seven was used, and the discussion of methodological problems by Grunert and Grunert (1995) used a Laddering study with a sample size of twenty-nine to illustrate the issues raised.

5.2 Means-End Chains in Relation to the Previous Focus Group Results

From the analysis of the data gathered through the focus groups, it is expected that there will be a difference in the ladders produced by fresh and processed products. The immediate response from participants in the focus groups was that they preferred to buy British fresh products, and specifically fruit and vegetables. One of the major reasons given for this, which it was expected would influence the results of the Laddering interviews, is that of national pride. If a foreign import was chosen over a British version of the same product then participants felt that this was an admission of inferiority. Thus, it is expected that it would be important to buy a British fresh product, not only as supporting British agriculture was thought to be a desired behaviour, but also to maintain national pride. British fresh products were also thought to be of an overall, superior quality, covering characteristics of taste, safety and freshness, therefore, representing the need to provide, particularly for a family, the best quality

food available. Furthermore, relating to national pride, cultural associations were made between buying British versions of specific fresh produce. This strongly related to the seasonality of produce, for example, British strawberries in the summer. Thus, it was expected that these associations would relate to national identity, as eating this produce at specific times of the year is something that is special to British people, and that only British people do.

When processed products were discussed in the focus groups, the Britishness was frequently conveyed through the brand origin. Consequently, participants felt that the large manufacturers producing these brands did not require their economic support. Alternatively, supporting local producers of processed products was considered to be an appropriate way to behave. As locally produced processed products were not intentionally included in this study, it was expected that chains associated with economic support would not be as prominent for processed products. It was expected, however, that the quality attributes of a processed product, conveyed through a British brand, woullead to the same end values as for fresh products, any variation occurring in the attribute and consequence part of the chain.

Taking into account the time and financial resources available for the current study, the Laddering interviews focused only on fresh fruit and vegetables, using a sample size of forty. This number is justifiable in comparison to previous studies, particularly as only one product and one scenario was investigated.

6. OVERVIEW OF THE LADDERING INTERVIEWS

6.1 Recruitment of Participants

The main recruitment criteria that it was necessary for the participants to fulfill, and the basis of the homogeneity of the sample, was that they were responsible for at least half of their households food shopping. Further guidelines were also developed to select consumers that had a general interest in food. This was considered a necessary prerequisite for taking part in an interview in order that the all participants were able to talk about food, and consequently respond to probing. Broad ranges of socio-demographic variables were also included. Recruitment took place only in the Reading area. Individuals were approached in the town centre and asked to complete a recruitment questionnaire (Appendix 2). Those individuals responding in the required way were then asked to take part in a one-to-one discussion about food choice. Individuals were not told that the discussion would be about British food so as not to pre-empt responses. Individuals were given the choice of the interview being held at their home or in the Department of Agricultural and Food Economics, University of Reading, and were told they would be given a cash gift in appreciation of them completing an interview. Recruitment for and moderation of the interviews was by Angela Groves. The socio-demographic characteristics of the participants gathered through the recruitment questionnaire are given in the tables below.

Table 6.1 Proportion of males and females in the sample

Gender	Value	Frequency	Valid %
Male	**1**	8	20
Female	**2**	32	80
Total		**40**	**100**

Table 6.2 Age of the sample

Age	Value	Frequency	Valid %
20-25	**1**	9	22.5
26-35	**2**	12	30
36-45	**3**	8	20
46-55	**4**	8	20
56-65	**5**	3	7.5
66 +	**6**	0	0
Total		**40**	**100**

Table 6.3 Age respondent left full-time education of the sample

Age at leaving full-time education	Value	Frequency	Valid %
16 or below	**1**	14	35
17-18	**2**	12	30
19 or above	**3**	14	35
Total		**40**	**100**

At the beginning of each interview participants were asked for their permission to take an audio recording of the discussion. They were also informed that the technique used involved the participant frequently being asked why previously mentioned product characteristics were important, and that if they perceived the questions to be repetitive that this was not a fault of their responses, but a symptom of the method used. Once all necessary instructions had been given, the Laddering process began. The first stage was to elicit distinctions between the products used to obtain the attributes from which to begin probing. Selection of the range of products used in the interview and the format of the actual interviews itself are discussed in the sections below.

6.2 Selection of Products Used in the Laddering Interviews

As previously discussed, the focus groups suggested that, in general, country of origin and more precisely a British origin was of greater importance for fresh products than for processed products and consequently, the Laddering interviews focused only on fresh fruit and vegetables. To compile the fruit and vegetables to use in the initial ranking task, the findings of the focus groups were first reviewed and any fresh product that was mentioned in one of the groups was identified. In order to maintain realism, it was necessary that the product not only could be grown in Britain, but that a British grown version of that product was commercially available. The list of suitable products was piloted at the University of Reading, where staff and students were asked to rank the products in order of the importance of a British origin for each product. A final list of twelve products, named in Table 8.2 below, was, consequently, identified and used in the actual interviews, as the following section explains.

Table 6.4 Fruit and vegetables used in the Laddering interviews.

Apples	Raspberries	Mushrooms
Pears	Potatoes	Tomatoes
Plums	Carrots	Lettuce
Strawberries	Leeks	Cauliflower

6.3 Format of Interviews

6.3.1 Eliciting distinctions and selecting distinctions to ladder

A Laddering interview began with participants ranking a set of twelve fruit and vegetables in the order that they thought a British origin was most important. Although this specified the particular concept of interest, the product attributes, to probe in the actual interview, were elicited from the respondent themselves. Respondents were asked what differences existed

between the products a British origin was, and was not important for, and what was similar about those products that a British origin was important for, and alternatively, was not important for. This continued until differences between all products were elicited or the participant was unable to identify any further distinctions.

Reynolds and Guttman (1988) suggest that two elicitation methods be used to ensure that all possible differences are uncovered. The ranking procedure was the only elicitation method used in the Laddering interviews. Although not available to the interviewee, the interviewer was able to refer to the findings of the focus groups, which were consistent with the attributes emerging from the Laddering interviews when ensuring that all possible attributes had been elicited and selecting distinctions from which to begin probing. Thus, the selection of attributes to use to begin probing was based on the overall aims of the research, issues raised in the literature review, and the findings of the focus groups. Probing began from as many attributes as possible. On occasions when more than one attribute was elicited, probing occurred in the same order that the attributes were identified.

When beginning to probe from a new attribute, the same words were used and reference was made to the statement originally made by the participant. The participant, therefore, was familiar with terminology the interviewer used to describe the attribute and was also reminded of why they originally identified that attribute, thus, promoting a greater response. This refers to the first two steps for ensuring validity outlined by Grunert and Grunert (1995), namely that: "1. The raw data should be a result more of the respondent's cognitive structures and processes than of the researcher's cognitive structures and processes" and "2. The data collection should not involve strategic processes not typical of the target situation". Thus, it was attempted to refer the respondent back to their original cognitive structure, therefore, increasing the validity of the subsequent analysis.

6.3.2 Techniques used in the Laddering interviews

Reynolds and Gutman (1988) suggest a number of techniques to use in order to produce a ladder. In addition, soft Laddering proposed by Grunert and Grunert (1995) attempts to

restrict respondents' speech as little as possible. Through the pilot interviews it was found that participants did not respond well to frequently being asked why an attribute or consequence was important to them. Consequently, the interviews were semi-structured, wherever possible incorporating the guidelines proposed by Reynolds and Gutman (1988), but when necessary allowing the respondent to talk freely.

In particular, participants responded well to postulating the absence of a specific product attribute or production of a certain consequence. This was especially useful at the beginning of an interview when the respondent was not accustomed to thinking very deeply. For example, a respondent may identify *"fresher if British"* as an attribute, but when asked why it is important that the product is fresh they may be unable to give a reply. When asked how they would feel if a product was not fresh, their immediate response may be *"I would be upset"*. From this broad response, however, the participant might then be able to continue with *"that nutrients are not as high"* and those high nutrient levels were important to *"stay healthy,"* thus, revealing why the freshness of a product is important.

A further successful method of eliciting ladders was through negative Laddering, and also relating this to a third person. Participants found it easier to discuss how they would feel if, for example, they did not support the British economy or how they felt towards individuals who did not give their children nutritious food.

When eliciting distinctions between products at the beginning of the interview abstract attributes and consequences were frequently elicited. Reverse Laddering was, therefore, employed working backward from the concept identified to the concrete product abstract. Consequently, this must be taken into account when coding the ladder.

As stated previously, participants were made aware of the format of the interview before the Laddering began. It was necessary, however, for the interviewer to remind the participants of this during the course of the interview, and to apologise for what may be perceived to be repetitive questions if the participant was evidently becoming irritated.

During the course of the interview, a participant may reach an abstract attribute, consequence, or value that had previously been mentioned in an earlier ladder. If this occurred, probing continued for a further one or two levels to ensure that the ladder was comparable. The participant was then asked if the previous ladder was applicable, and also if there was anything else that made the previous attribute or consequence important to the individual. This avoided irritating the respondent. It was then important that the interviewer referenced the relevant section of the previous ladder to the current ladder.

The final consideration when conducting a Laddering interview was when to actually terminate the probing process. Participants in this piece of research frequently reached the end of a ladder themselves, that is, they could no longer continue to further levels of abstraction along the same strategic perspective. This was clear if a participant was attempting to think of responses that were not of the same strategic perspective. If this happened it was necessary for the interviewer to endeavor to return the participant to their original perspective using appropriate Laddering techniques (Reynolds and Gutman, 1988). If this was not possible probing along the ladder ended at whatever level of abstraction that had been reached. Overall, participants in this study had difficulty reaching the value level, but easily identified positive consequences obtained from specific attributes.

A copy interview guide used through out the Laddering interviews is given in Appendix 3. Examples (Fig 6.1 to 6.5) are given of the ladders produced by participants in the study. The initial attribute, elicited as the reason for the importance of a British origin, is given at the base of the ladder. The positive consequences and personal values form the higher levels of the ladder.

Figure 6.1 A ladder produced from probing why the attribute *'specific variety'* is important

Figure 6.2 A ladder produced from probing why the attribute *'a typically British product'* is important

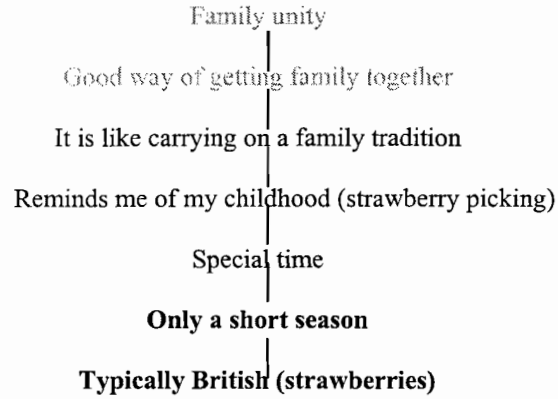


Figure 6.3 A ladder produced from probing why the attribute *'a British origin'* is important

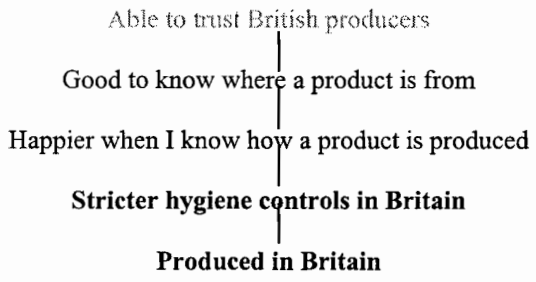


Figure 6.4 A ladder produced from probing why the attribute *'in season'* is important

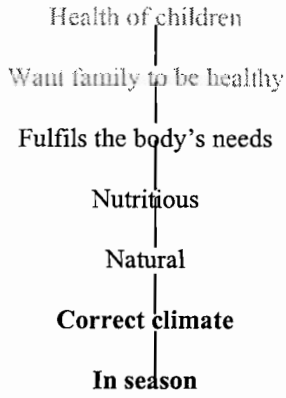


Figure 6.5 A ladder produced from probing why the attribute *'not imported'* is important

Analysis of the ladders began with the initial coding of the data and then the formation of the implication matrix and hierarchical value map. These stages, along with relevant examples, are discussed in sections below.

7. ANALYSIS OF LADDERING DATA

7.1 Coding of the ladders produced

7.1.1 Distinction between attributes, consequences and values

When coding the Laddering data it is necessary to first make a distinction between the attributes, consequences and values. There is little advice in the means-end chain literature on how to classify characteristics as a specific attribute, consequence or value. To aid this classification system, the current research used the definition Bech-Larsen *et al.,* (1996) propose, to conceptualise the relevant levels of abstraction. Furthermore, examples quoted in the literature of ladders produced from previous research were also referred to and used to support the classifications that were made. For example, Grunert *et al.* (1995) proposed that attributes might be quite abstract, relating to the production process or purchase situation, thus, supporting the inclusion of a number of the attributes in this study.

7.2 Reliability and validity of coding

A process of iterative coding was used in the analysis of the ladders produced. Definitions were produced for each code and the results of the initial coding were made clear. The coding began using very specific codes based on the terminology used by the respondents, which gradually became broader as the coding process evolved. This process continued until a suitable level of abstraction was reached. This constant reviewing of codes ensured that coding was not too broad so as to lose meaning, but reduced the data to a manageable form.

Grunert and Grunert (1995) proposed that to ensure the predictive validity of the results "coding should preferably be based on cognitive categories widely shared among both consumers, researchers and users of research results". Consequently, at points during the interview the participant was asked to clarify what a certain concept meant to them. This

provided a break from the continuous 'why' probing, as well as helping to clarify the context of the statement, adding to the validity of the coding. A simple example of this was where a participant stated that a British product was *"healthy"*. When asked to clarify, it was evident that to some participants healthy referred to the benefits gained from an optimum nutritional content, whereas to others healthy reflected the benefit gained from eating safe food.

The use of parallel coding as a further method to ensure the reliability of coding is disputed in the literature. Reynolds and Gutman (1988) advocate the use of parallel coding as a reliability check. Alternatively, Grunert *et al.* (1995) contend that the same background information is not available to the second coder, and therefore, it is arguable whether a comparable coding system is produced. Parallel coding was not used in this study. Once the final coding system had been developed, this was then used to code the raw ladders produced. This second coding process yielded comparable results to those produced in the original coding process.

The tables below list the attributes, consequences and values and relevant definitions elicited from the coding procedure. This is followed by the final coding system and definitions produced which were used in the subsequent analysis.

It should be noted that the attributes, consequences and values have varying levels of abstractness, and on initial inspection may not appear to relate to British products, this being particularly true for the consequences and values. The consequences and values represent the benefits of choosing a British product, and not the fundamental distinction between a British product and an import. For example, the individual receives the benefit of avoiding shopping through buying a British food that is perceived to be fresher and has a longer shelf life.

Table 7.1 Final coding system: Attributes of British products

Attribute name	Definition
Product is in season	*A product is in season.*
Superior taste	*Taste is considered to be superior to import.*
Fresher than imports	*Products are fresher if British.*
Long shelf-life	*Product has a longer shelf life.*
Appearance	*Product characteristic.*
Local product	*Produced, or perceived to be produced locally.*
Typically British	*The product is perceived to be typically British by the respondent.*
Associated with childhood/past	*The product was present in the individual's childhood or sometime in the past.*
Specific variety	*Britain is related to the specific variety of a product, e.g. Cox's apples.*
Can be grown in Britain	*If it is possible to actually grow the product in Britain.*
Less travel	*The product has travelled less in the process of farm to plate.*
Nutritional content	*The nutritional content of a British product is thought to be superior.*
Juicier	*Product characteristic.*
Sweeter	*Product characteristic.*
Country of Origin	*The product is actually made in this country.*
Stricter hygiene standards	*Product is produced under stricter hygiene controls.*
Production process	*A British product is preferred due to some aspect of the production process.*
Size	*Product characteristic.*
Texture	*Product characteristic.*
From a specialist shop	*A British product is purchased from somewhere other than a supermarket.*
Too expensive	*A British food product is too expensive.*
Country image	*Country image of Britain (climate and geomorphology).*
Labelled as British	*Information is given with product that confirms its British origin.*

Table 7.2 Final coding system: Consequences received through purchasing a British Product

Consequence name	Definition
Consume natural product	*Individual perceives the product to be natural.*
Preferred taste	*Taste of the product is preferable to the individual.*
Know the product tastes the way it should	*Product is consumed at the correct time of year when the taste is at its best.*
Look forward to having the product	*Consumption or purchase of the product is considered to be something quite special, and unlikely to be available all year.*
Support local	*Individual is consuming a local product.*
Greater product knowledge	*Individual is happier knowing the origin of the product.*
Maintains physical and mental health	*Consumption and/or purchase of the product maintains the individual's health.*
Maintains child's health	*Consumption of the product maintains the child's health.*
Like the product	*An individual knows that their children will like the product.*
Avoids shopping	*By choosing the product, subsequent shopping trips are reduced.*
Fulfilling responsibility	*Avoid letting people down; not being responsible.*
Support employment and growth	*Choosing a British product supports employment and growth in the area, creating a prosperous environment.*
Associated with upbringing	*Product is related in some way to the way the individual was raised.*
Support agriculture	*Individual is able to support farmers.*
Family activity	*The family can be involved in the purchase of the product.*
Easy to use in cooking	*Less effort is required by the individual to prepare/consume the product.*
Fulfilling preference to buy British	*Individual able to buy a British product.*
Consuming safe food	*The individual considers a British food product to be safer than imports.*
National cuisine	*Products can be used in the production of 'proper food' when cooking at home.*
Maintain what is traditionally British	*Individual is saddened by the lack of traditional British foods.*
Greater variety to choose from	*Greater range of products available for the individual to choose between.*
Pleasant sensation after eating	*The product provides a pleasant sensation after eating.*
Excitement	*By consuming the product the individual feels that they are making their diet, or the diet of their family, more interesting.*

Table 7.3 Final coding system: consequences contd.

Consequence	Definition
Able to relate to the product	*Individual is able to associate with the product.*
Familiar	*The individual is more familiar with British foods than with imported foods.*
Evaluate own decision	*The individual considers as a result of purchasing a product that they are able to evaluate their own decision.*
Not satisfied with product	*Product chosen offers value-for-money to the individual.*
Social experience	*Purchasing the specific product provides a social experience.*
Competitive	*The individual is able to feel that they are successful, and can compare themselves favourably to others.*
Higher quality	*The individual is satisfied that they are consuming a high quality product.*
Value-for-money	*The product offers value-for-money to the individual.*
Educate children	*Individual considers it important to educate children.*
Not able to find easily	*Purchase of a product is difficult for the consumer and the presence of a specific attribute is rare.*
Avoids being disappointed	*The individual avoids disappointment by purchasing a British product.*
Avoids wastage	*The individual avoids wastage by purchasing a British product.*
Confidence in producer	*Individual feels that the British producers have a greater knowledge of production.*
Able to eat more fruit and vegetables	*Following the advice to eat more fruit and vegetables.*
Avoids being lazy.	*The individual does not consider laziness to be a desirable mode of behaviour.*
Able to get the children to eat it	*The individual knows that their children will eat the product.*
Authentically British experience	*By purchasing or consuming the product the individual feels that they are consuming something British.*
Not able to distinguish product	*Purchase of the product is difficult for the consumer as distinguishing product that possesses a particular attribute is difficult.*
Greater involvement	*Greater involvement in end product.*
To British tastes	*The product is suitable to the tastes of British people.*
Able to buy again	*Individual happy to repeat purchase.*

Table 7.4 Final coding system: Values fulfilled through purchasing a British product

Value name	Definition
Support your own country	*Supporting the economic prosperity of one's own country.*
Familiarity	*Feeling secure through familiar experiences.*
Freedom to choose	*One's actions (choice of product) are not constrained in any way.*
Health and well being	*Limit suffering from poor physical or mental health.*
Welfare of child	*Generally want the best for one's children.*
Enjoyment	*Personal pleasure.*
Social acceptance	*Able to fit in with one's reference group.*
Adventurous	*Penchant for new and exciting experiences.*
Family security	*Maintenance of a secure, stable, and happy family environment.*
Nostalgia	*Fondness for the past.*
Trust British	*Acting in a sincere, honest and credible way.*
Emotional security	*Feelings of contentment.*
Price consciousness	*Not acting in a frivolous and financially irresponsible manner.*
Patriotic	*Supporting, and being proud of one's own country.*
Progress	*To develop and positively respond to new innovations.*
Proud of achievement	*Ability to take pride in one's own actions.*
National identity	*To distinguish one's self from other nations and cultures.*
Independence	*Not to be dependent on others; self-sufficient.*
Expression of love	*A display of one's feelings towards others.*

7.3 Production of Hierarchical value maps

Once the implication matrix had been generated, Laddermap was used to construct a hierarchical value map. The initial hierarchical value map constructed is based on all possible

attributes, consequences, and values for all forty respondents. At this stage it is necessary to specify a cut-off point. Reynolds and Gutman suggest a cut-off point of 4 for every sixty respondents. The nature of the data and coding process sometimes makes this practically infeasible. In general, it is necessary to balance the interpretability of the hierarchical value map with the potential loss of information. In addition, the hierarchical value map produced using Laddermap is restricted to a combined total of fifty attributes, consequences and values. Consequently, to avoid merging codes and losing the quality of the data, a higher cut-off level than that of 4 which Reynolds and Gutman (1988) advise is used. Although this only incorporates 20% of possible links, it provides an initial indication of the structure of the data. The resulting hierarchical value map is illustrated (Fig 7.1 and 7.2). For ease of explanation, two separate hierarchical value maps have been illustrated. Concepts may, therefore, actually appear in both maps, but the incidence of crossing lines is eliminated. A more detailed analysis of chains, using lower cut-off points and involving particular concepts follows.

Figure 7.1 Hierarchical value map: part 1

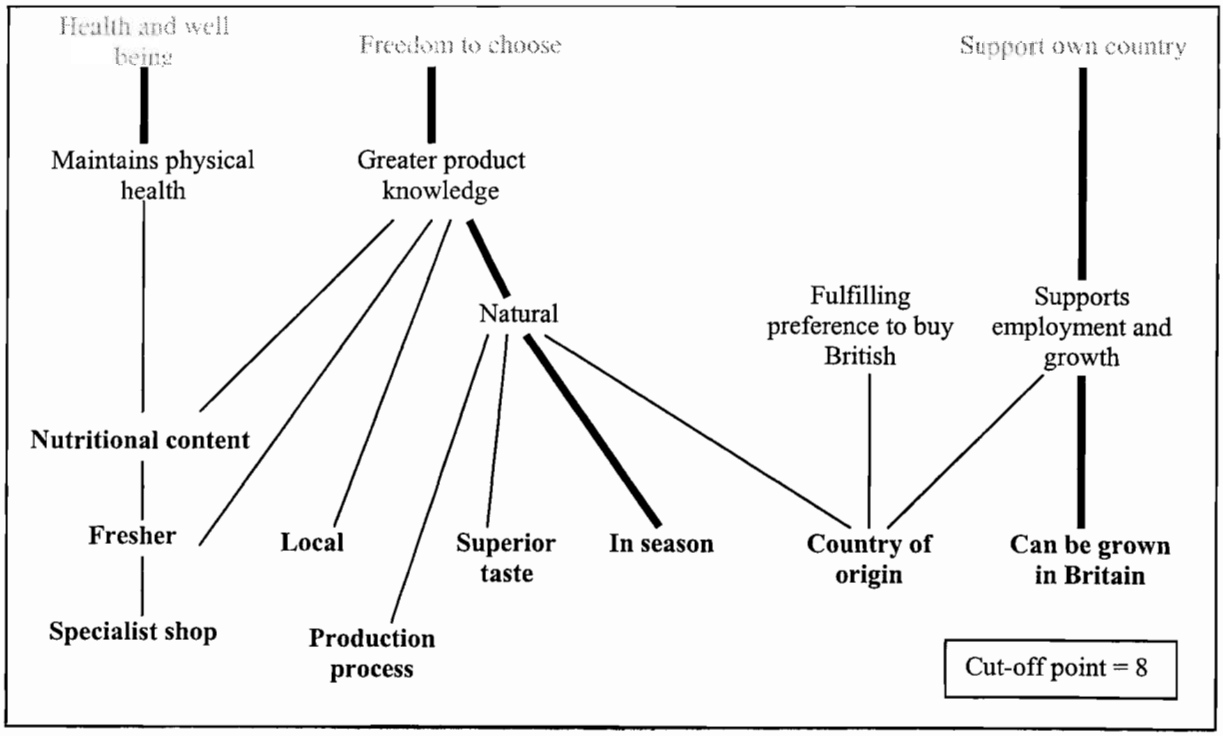
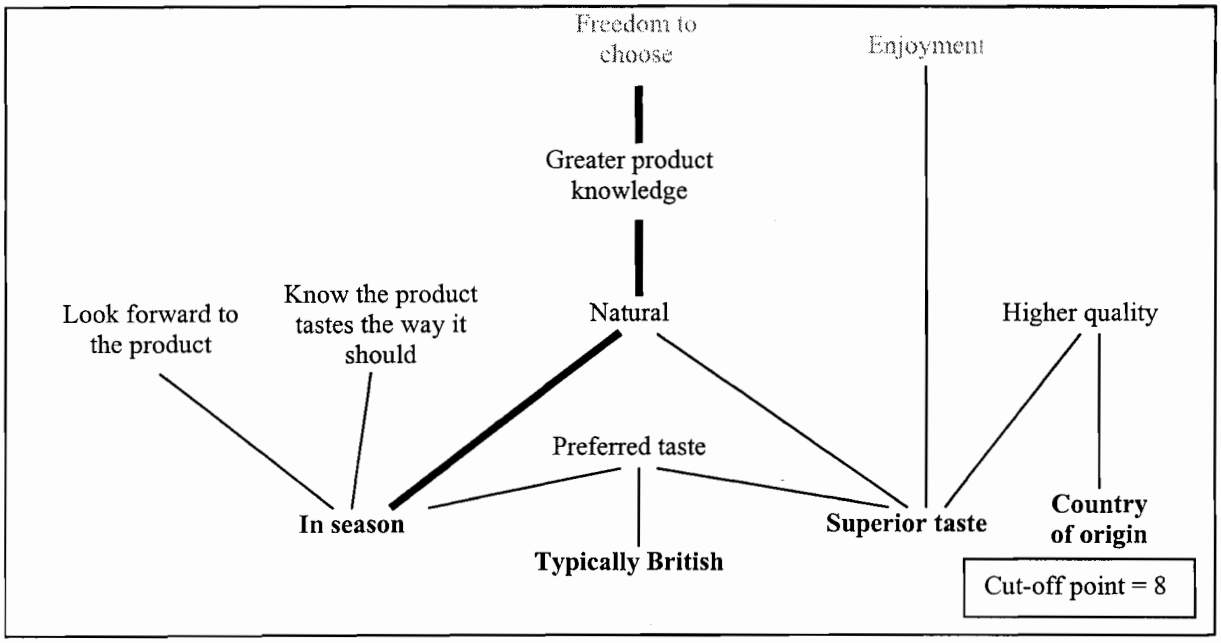


Figure 7.2 Hierarchical value map: part 2



Thick lines represent a greater proportion of respondents that mentioned a specific link. The relevance of an attribute, consequence or value is highlighted by the number of links from, through or to that particular concept. For example, two major themes initially emerging are the importance of consuming a 'natural' product, and the economic importance of buying a British version of products that can be produced in Britain.

After constructing the initial map, further hierarchical value maps were generated, based around specific concepts. Hierarchical value maps were not developed for all concepts identified, only those that emerged as important through the course of the interviews and subsequent coding process. When sorting the data by specific concepts it is possible, using Laddermap, to generate an implication matrix and hierarchical value map consisting of only the ladders that include the specific concept of interest. The hierarchical value maps produced around specific attributes, consequences and values are illustrated in Figs 7.3 to 7.23. A discussion of the results obtained follows.

Figure 7.3 The Hierarchical value map produced from ladder including the attribute: Fresh

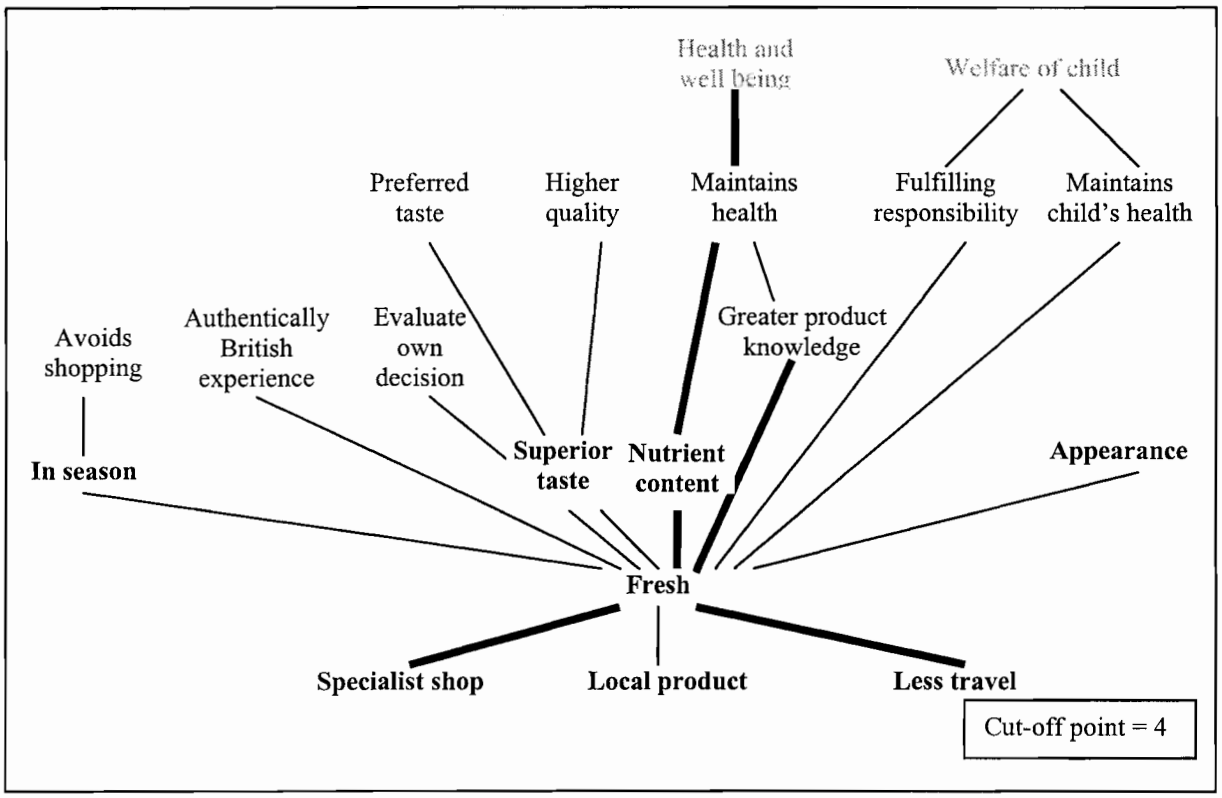


Figure 7.4 The Hierarchical value map produced from ladder including the attribute: In season

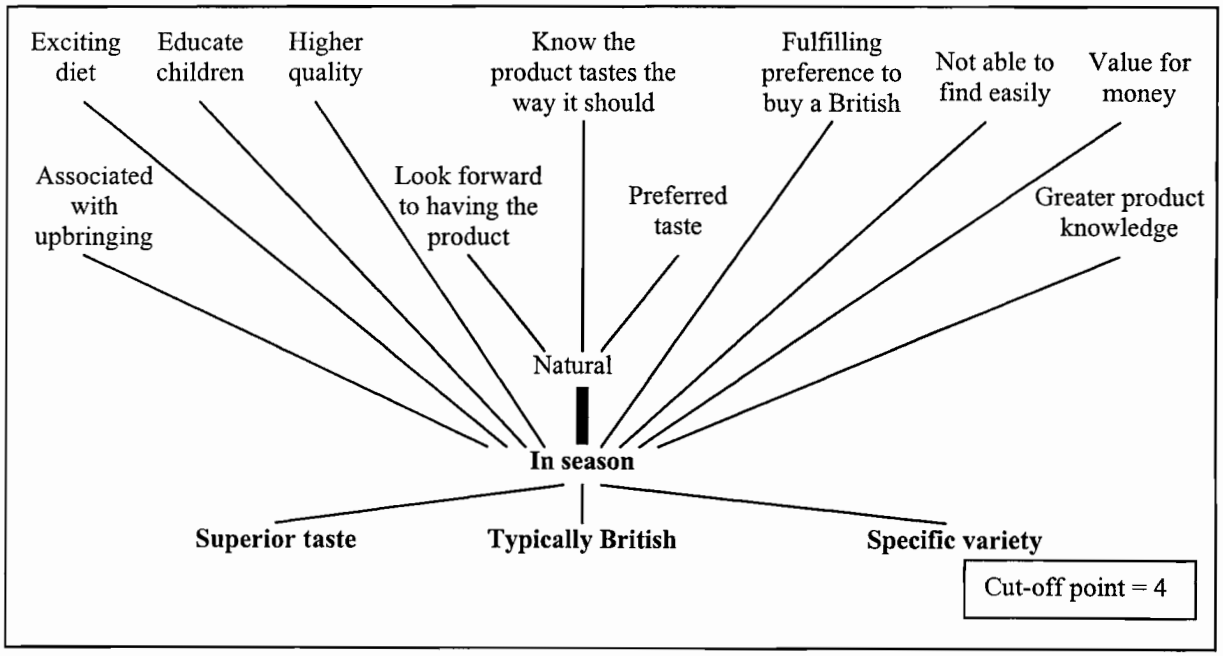


Figure 7.5 The Hierarchical value map produced from ladder including the attribute: Typically British

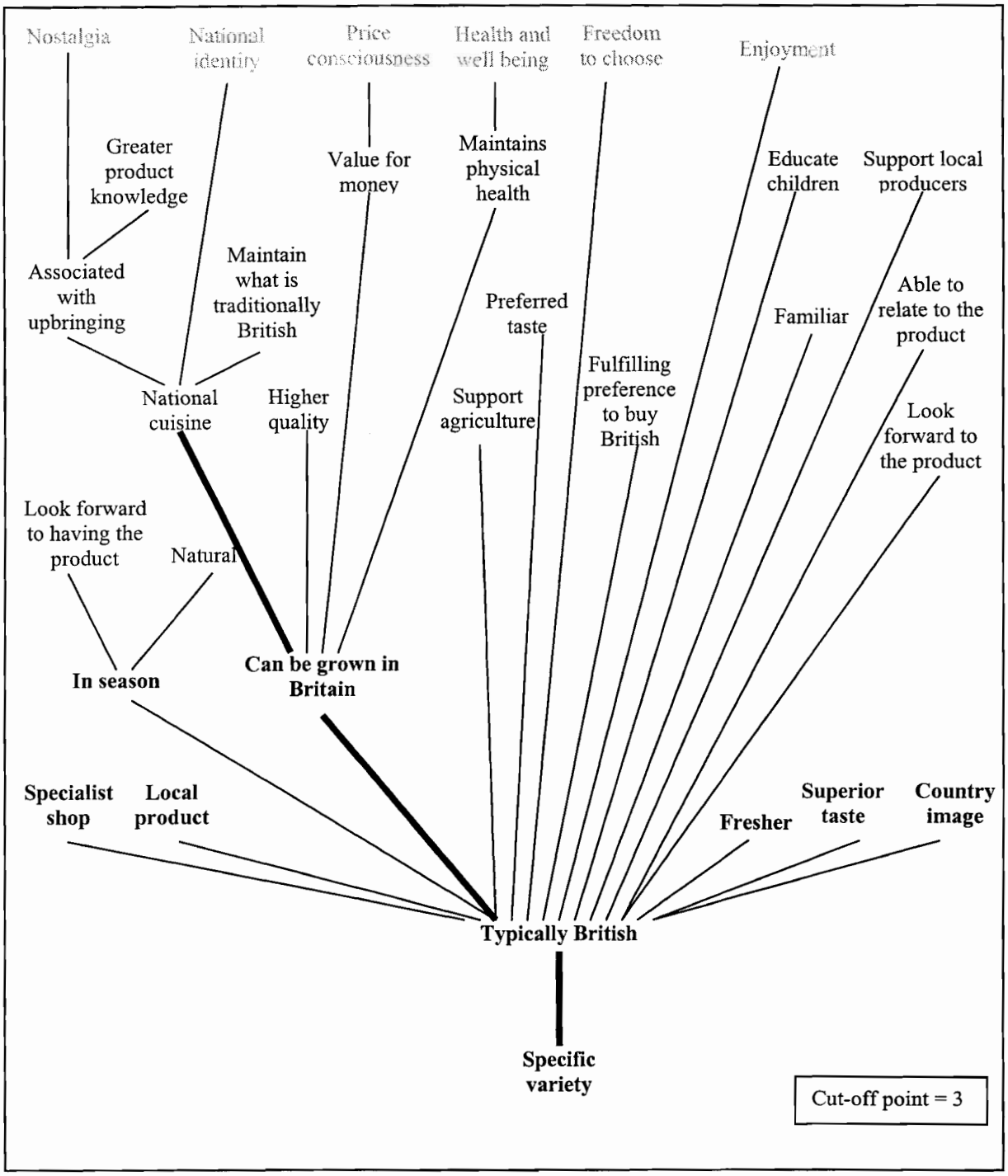


Figure 7.6 The Hierarchical value map produced from ladder including the attribute: A local product

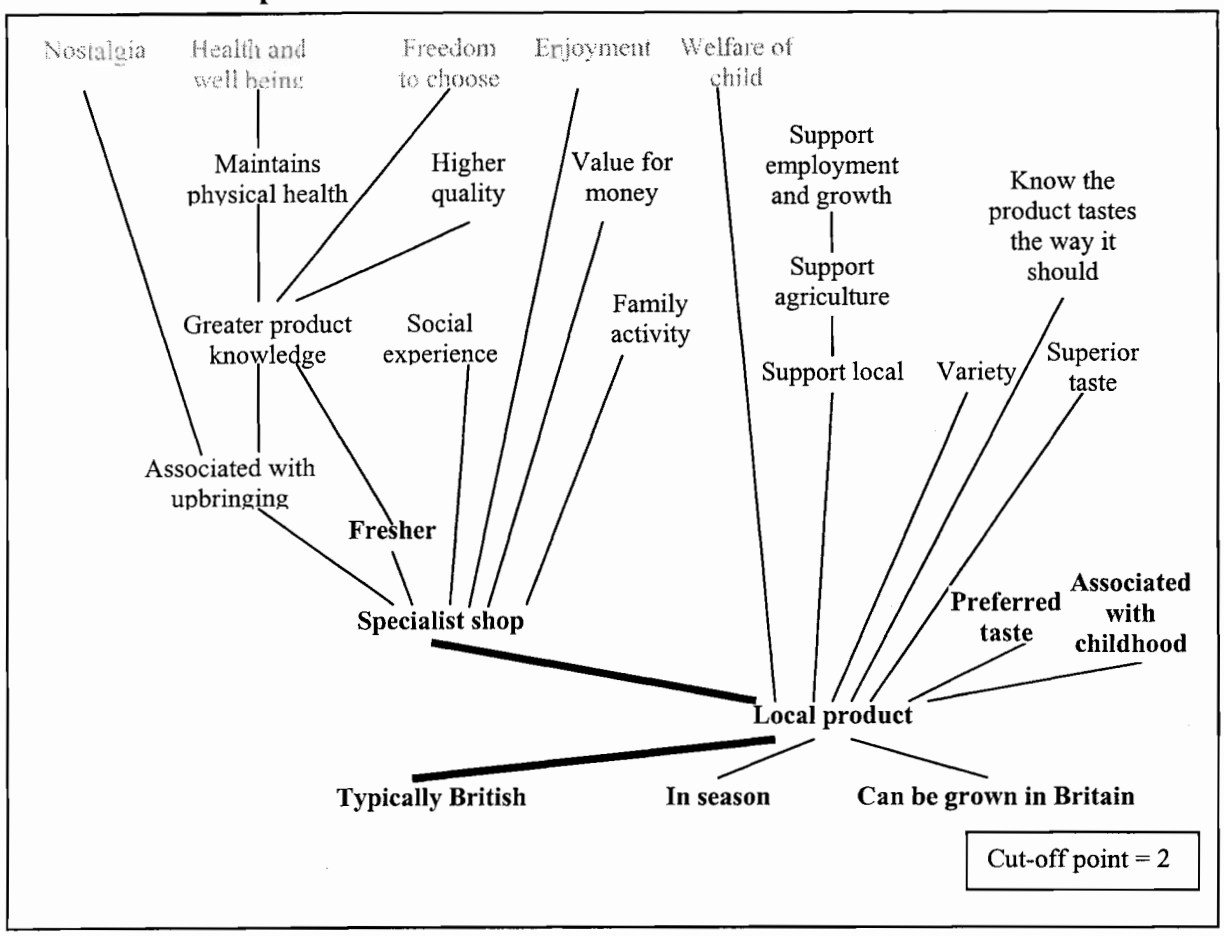


Figure 7.7 The Hierarchical value map produced from ladder including the attribute: Superior taste

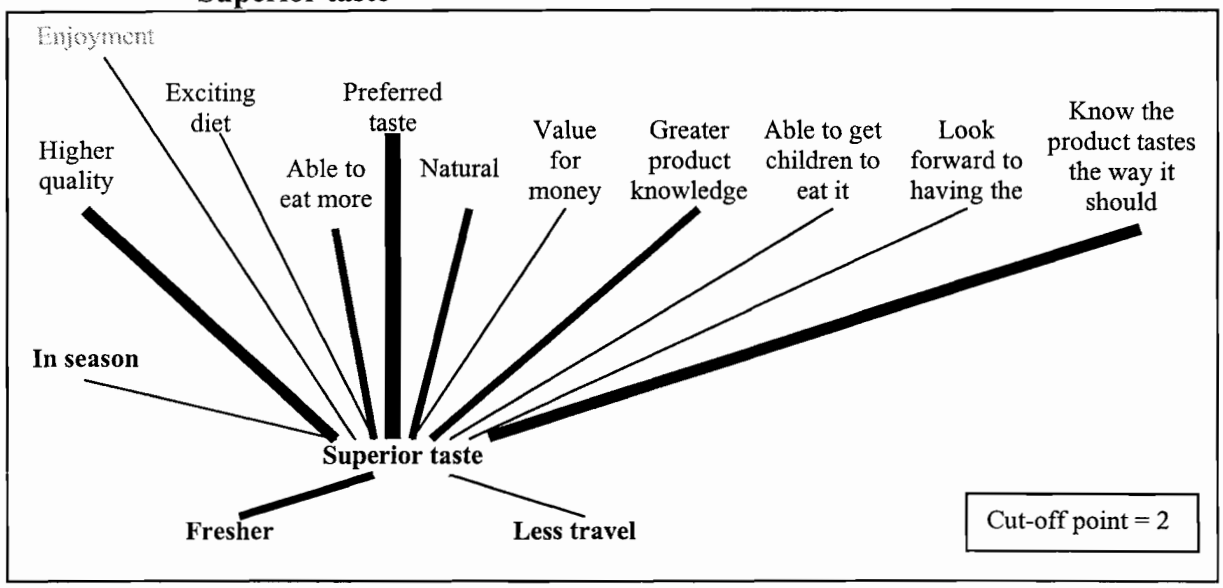


Figure 7.8 The Hierarchical value map produced from ladder including the attribute: Can be produced in Britain

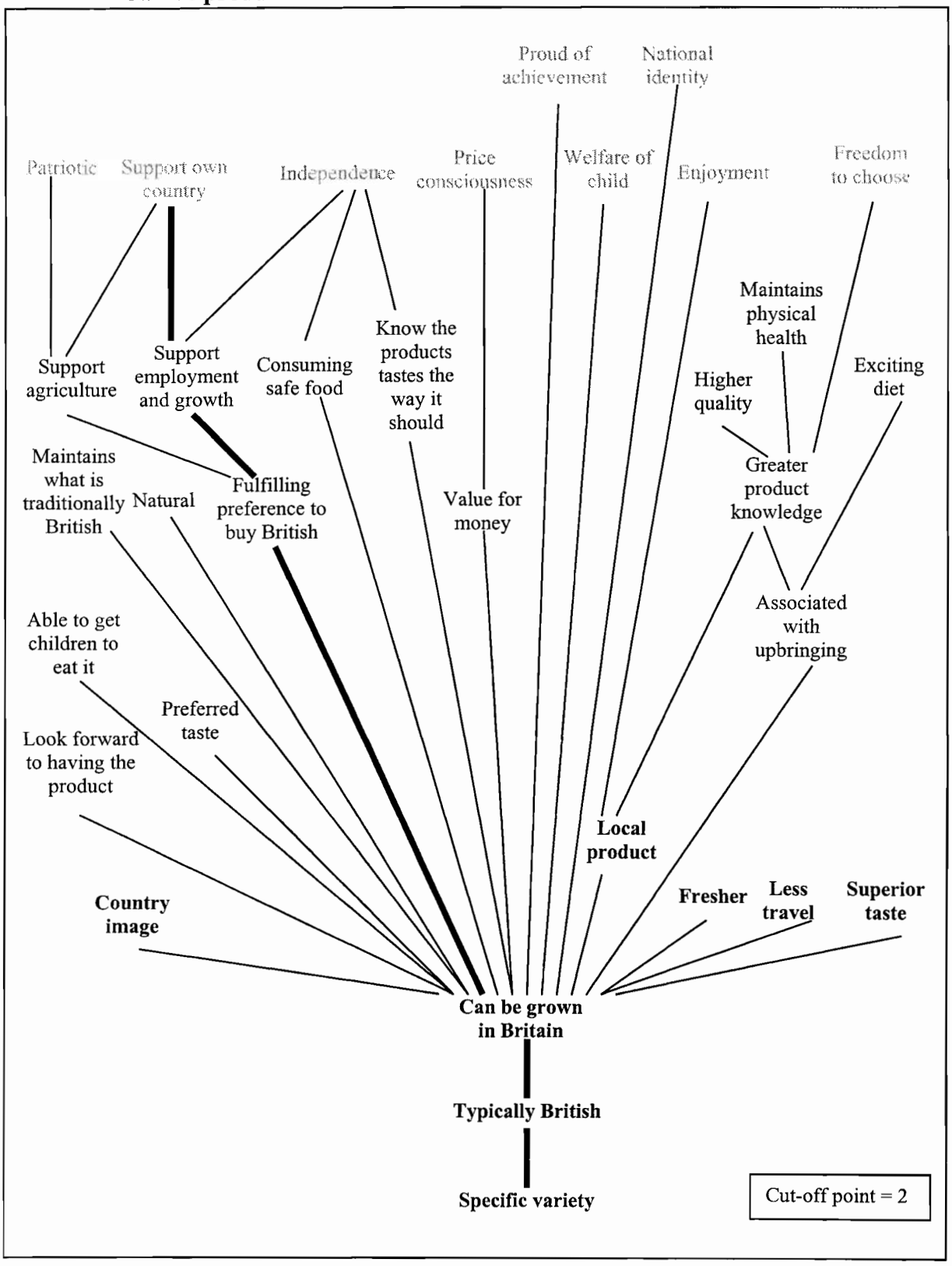


Figure 7.9 The Hierarchical value map produced from ladder including the attribute: The production process

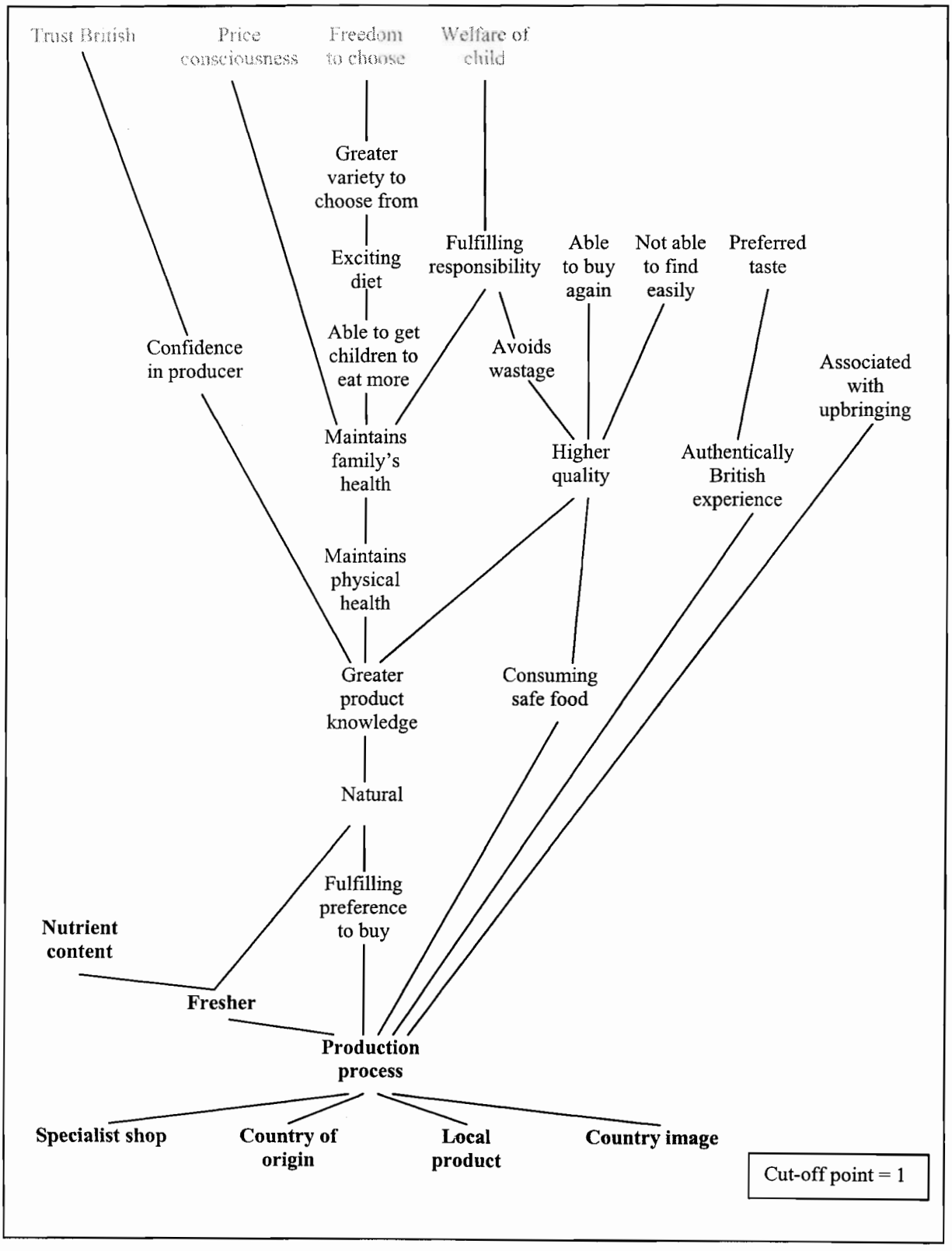


Figure 7.10 The Hierarchical value map produced from ladder including the attribute: Less travel

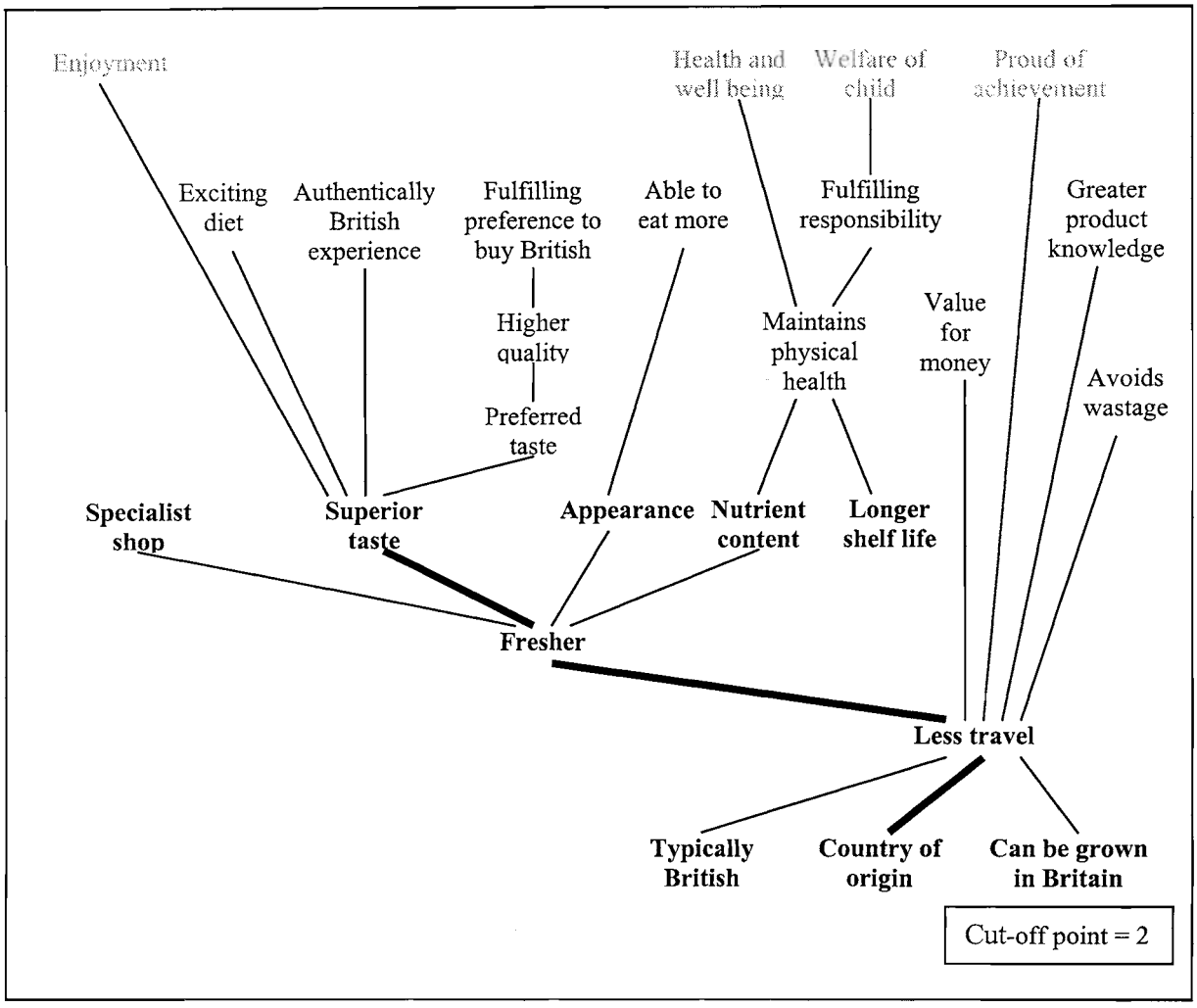


Figure 7.11 The Hierarchical value map produced from ladder including the consequence: Natural product

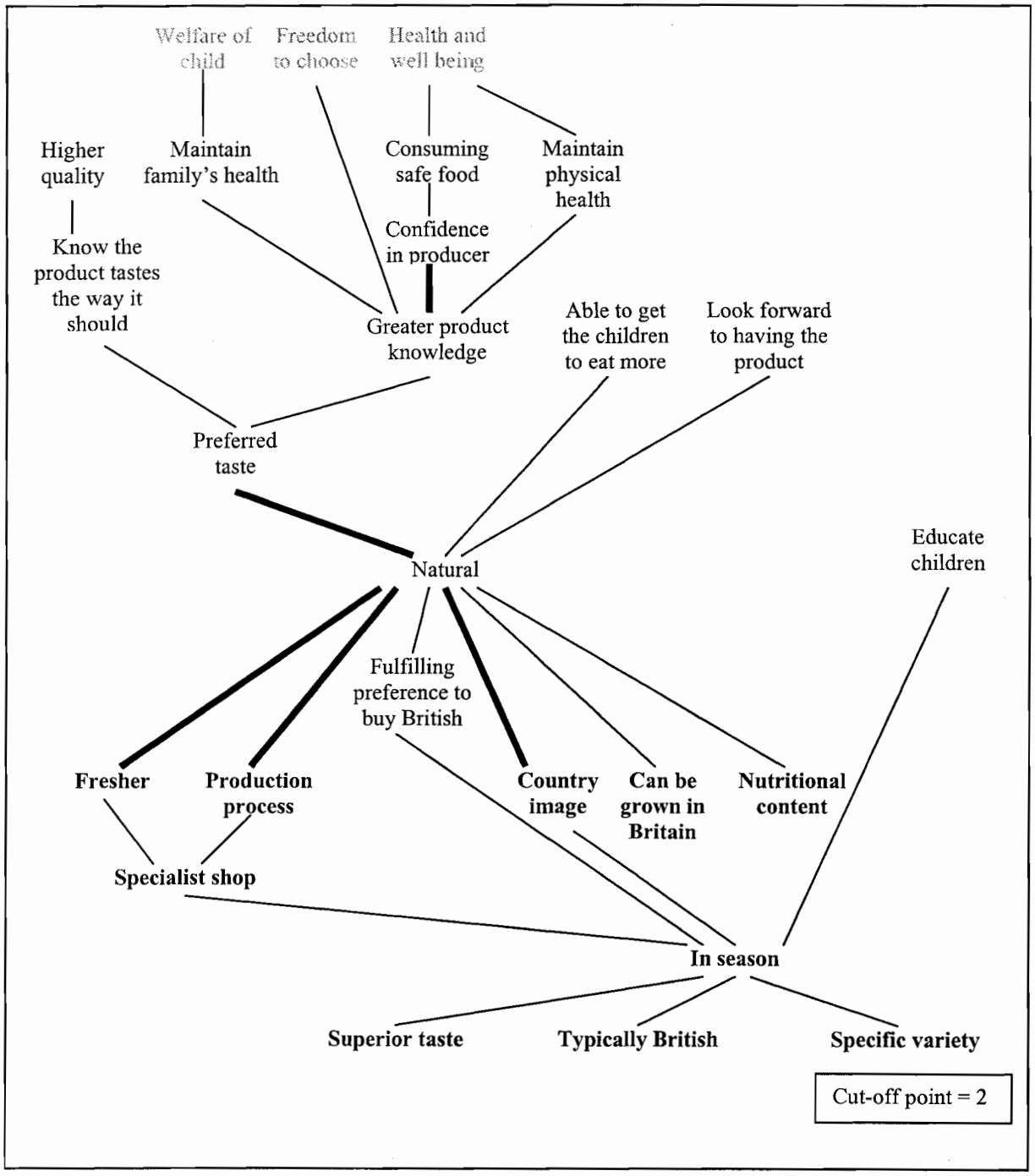


Figure 7.12 The Hierarchical value map produced from ladder including the consequence: Consuming safe food

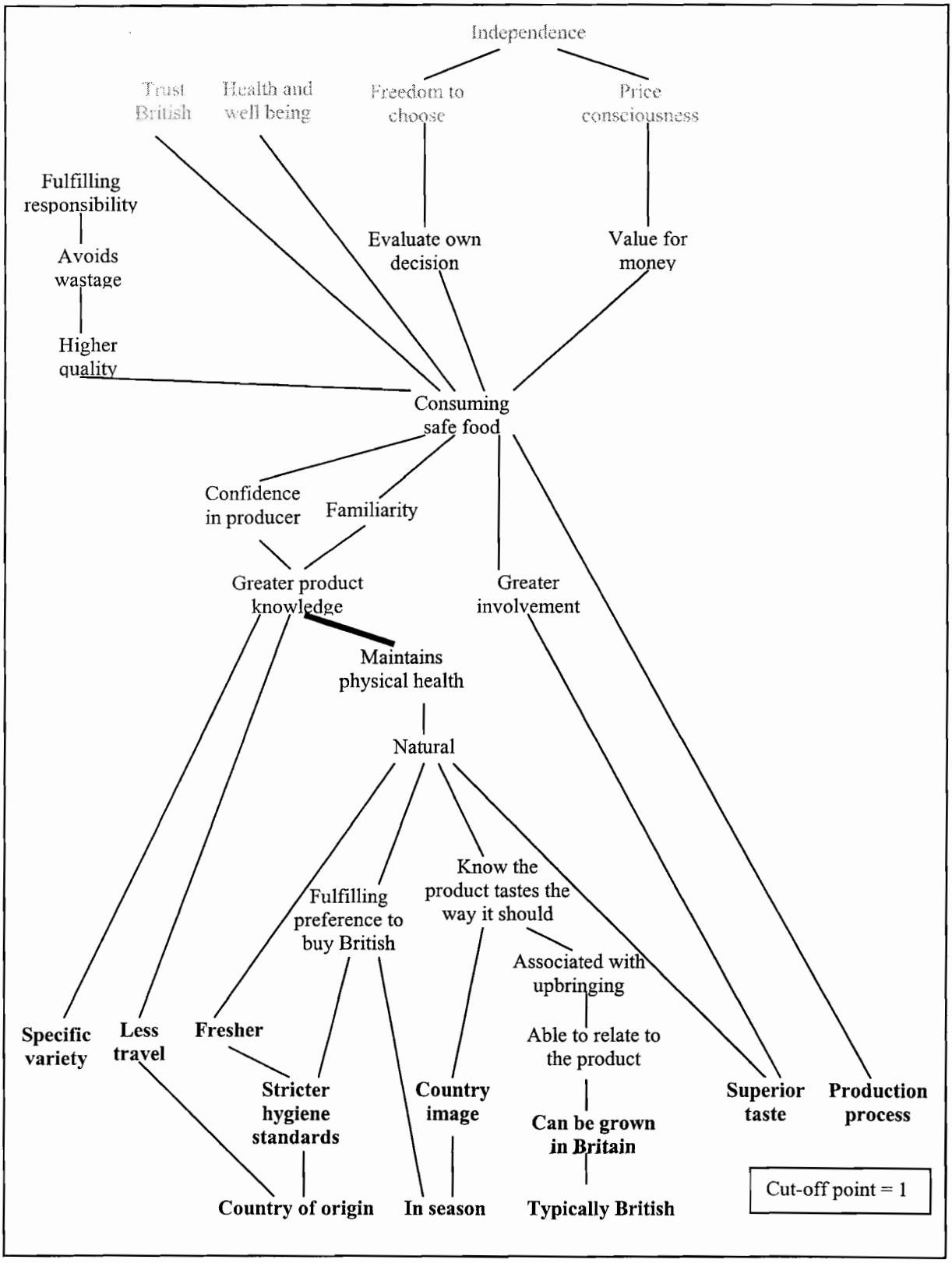


Figure 7.13 The Hierarchical value map produced from ladder including the consequence: Greater product knowledge

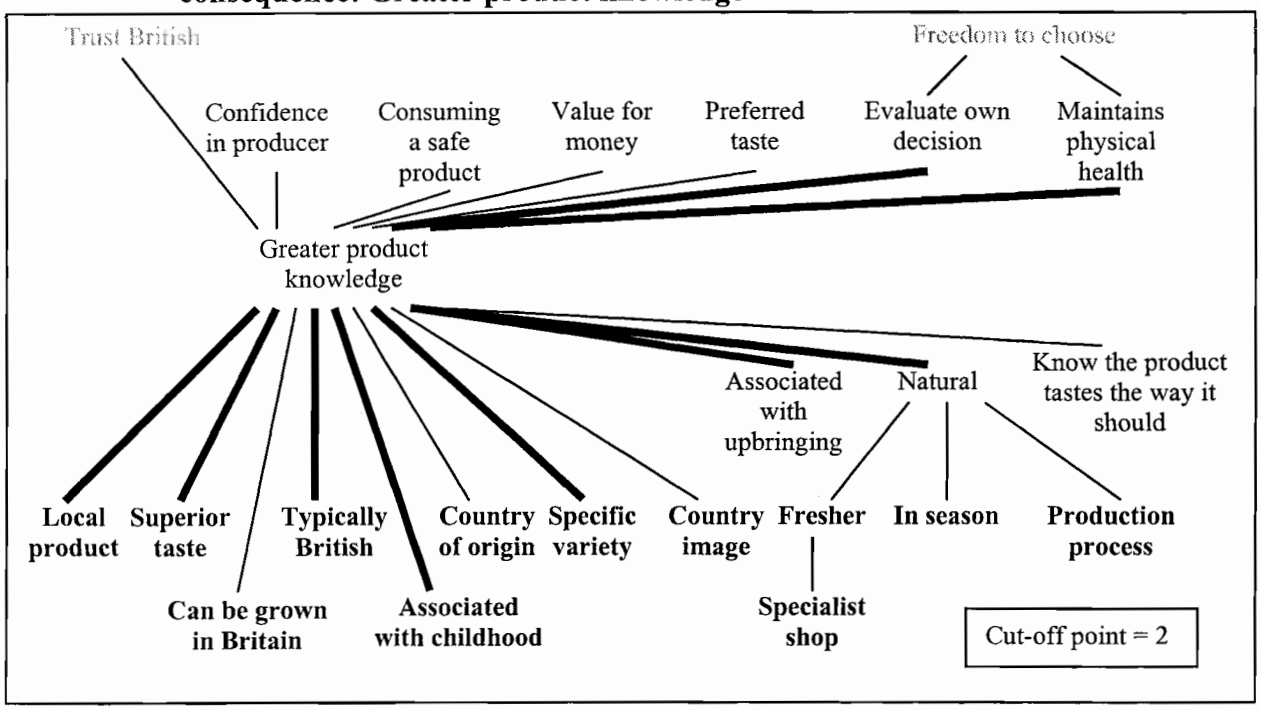


Figure 7.14 The Hierarchical value map produced from ladder including the consequence: Value for money

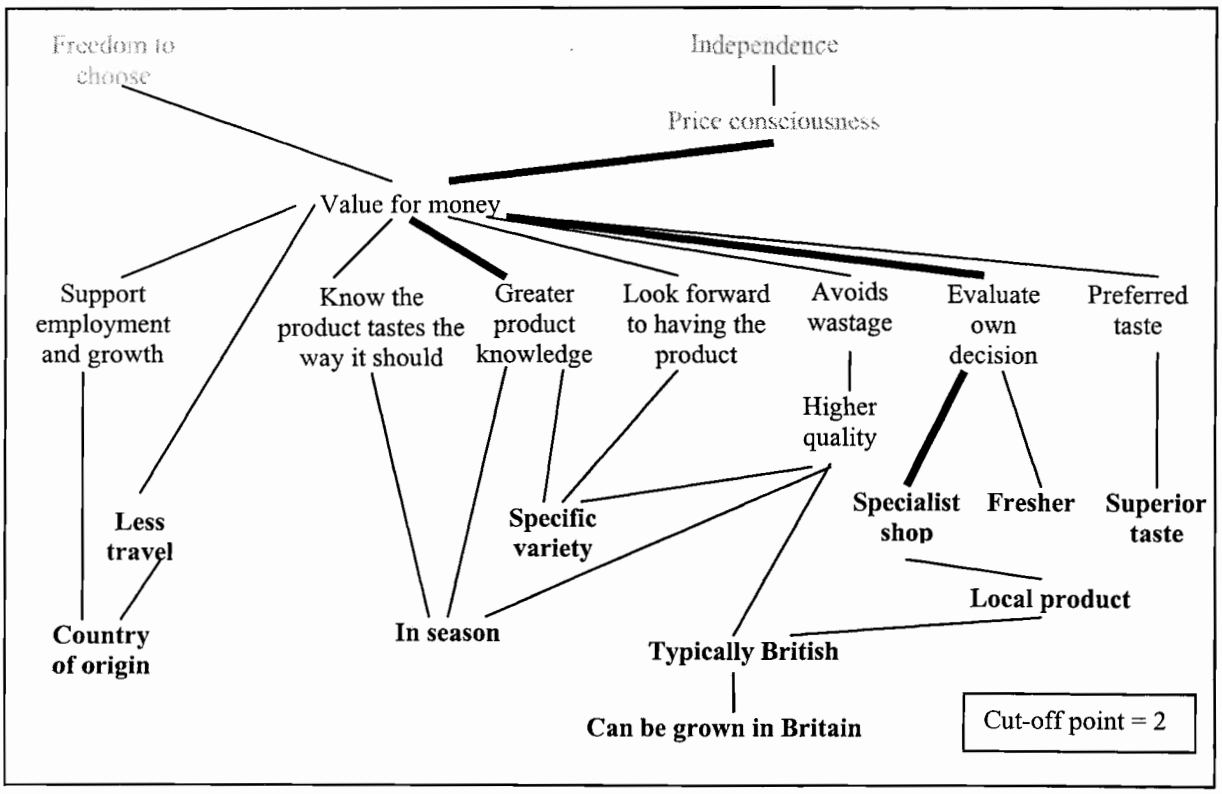


Figure 7.15 The Hierarchical value map produced from ladder including the consequence: Supports employment and growth

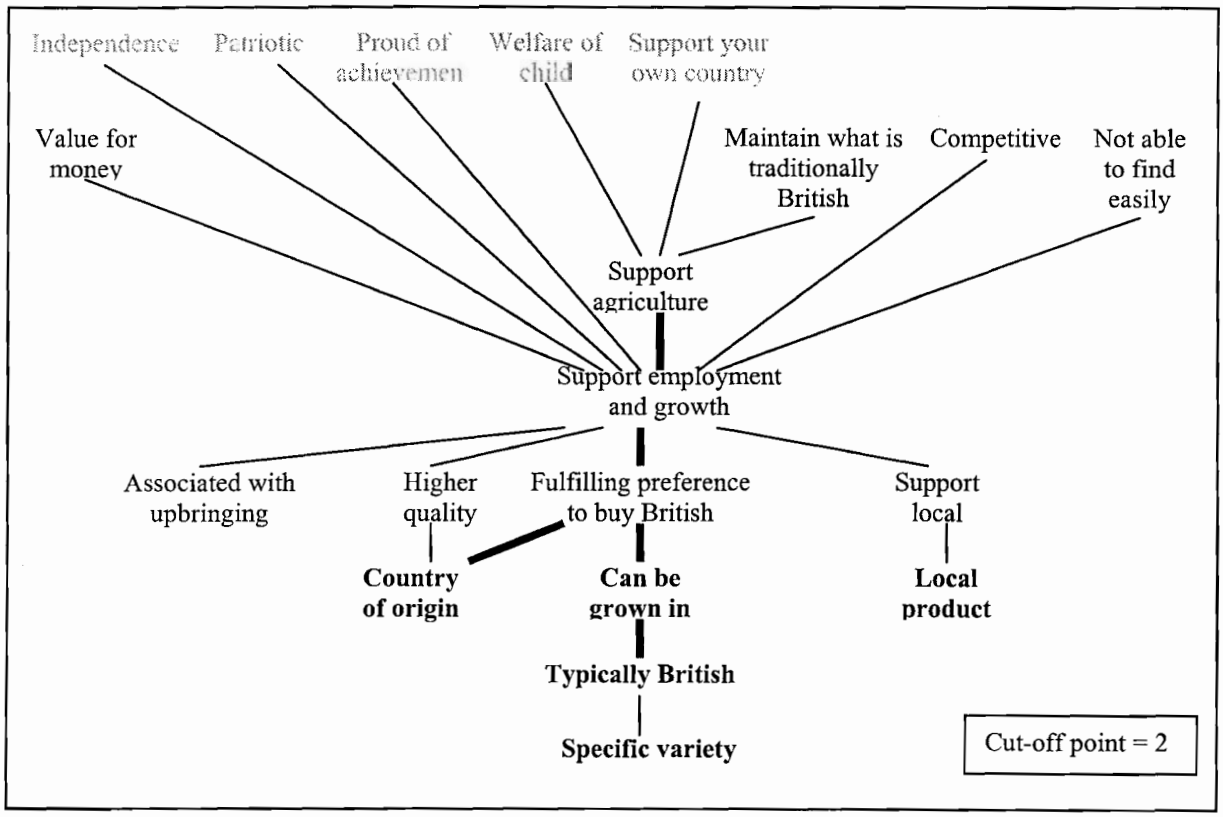


Figure 7.16 The Hierarchical value map produced from ladder including the consequence: Preferred taste

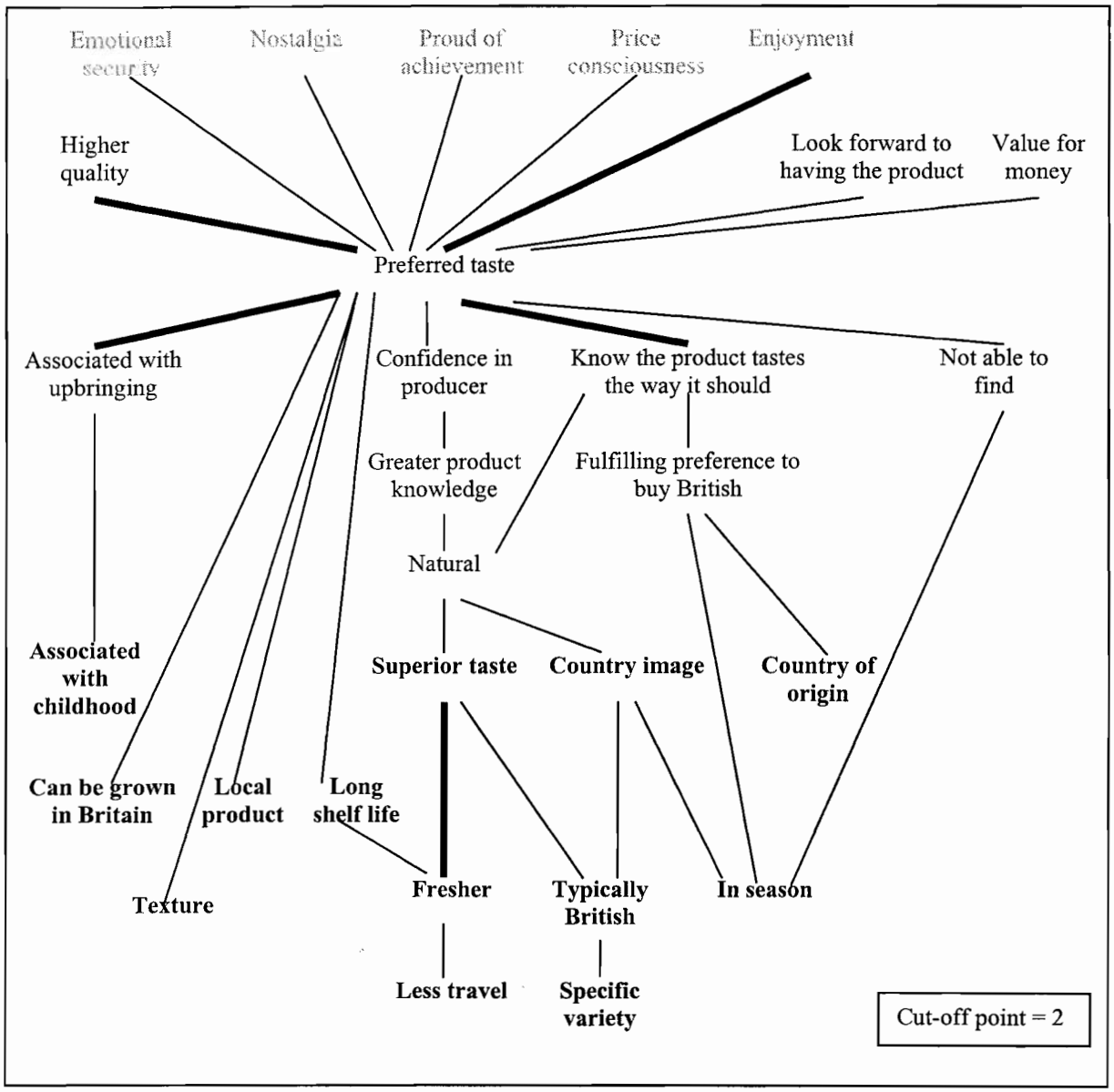


Figure 7.17 The Hierarchical value map produced from ladder including the consequence: Support agriculture

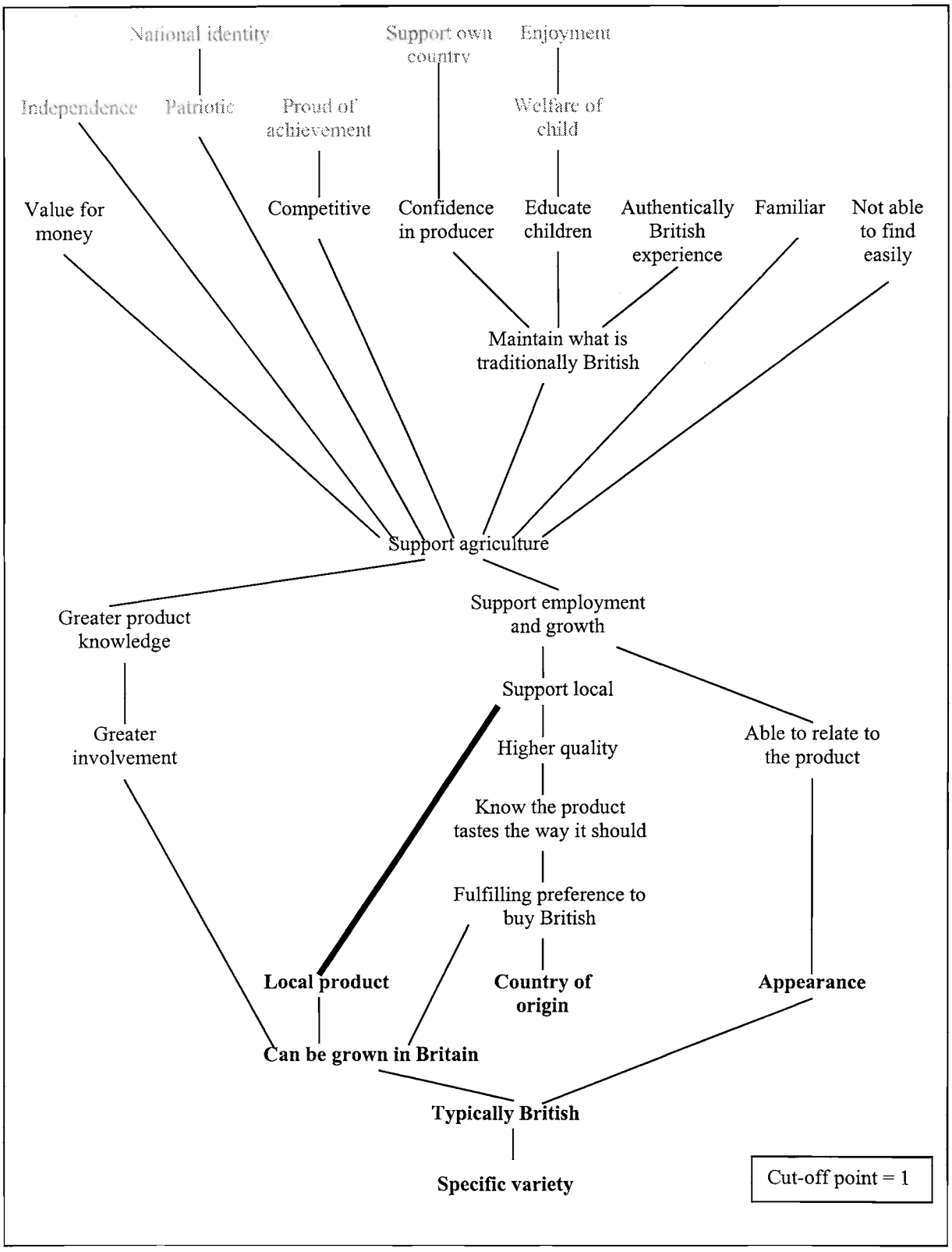


Figure 7.18 The Hierarchical value map produced from ladder including the consequence: Higher quality

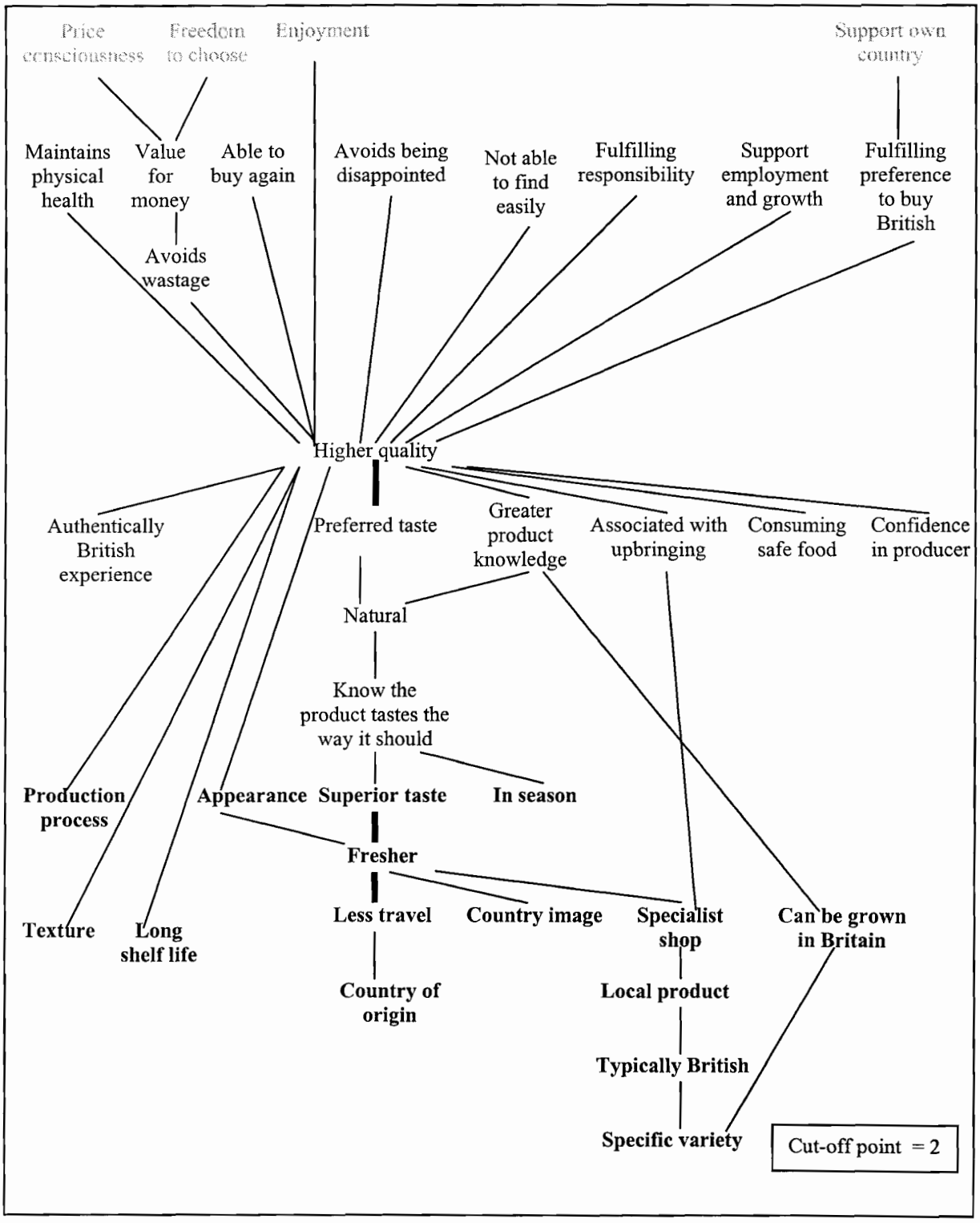


Figure 7.19 The Hierarchical value map produced from ladder including the consequence: Familiar

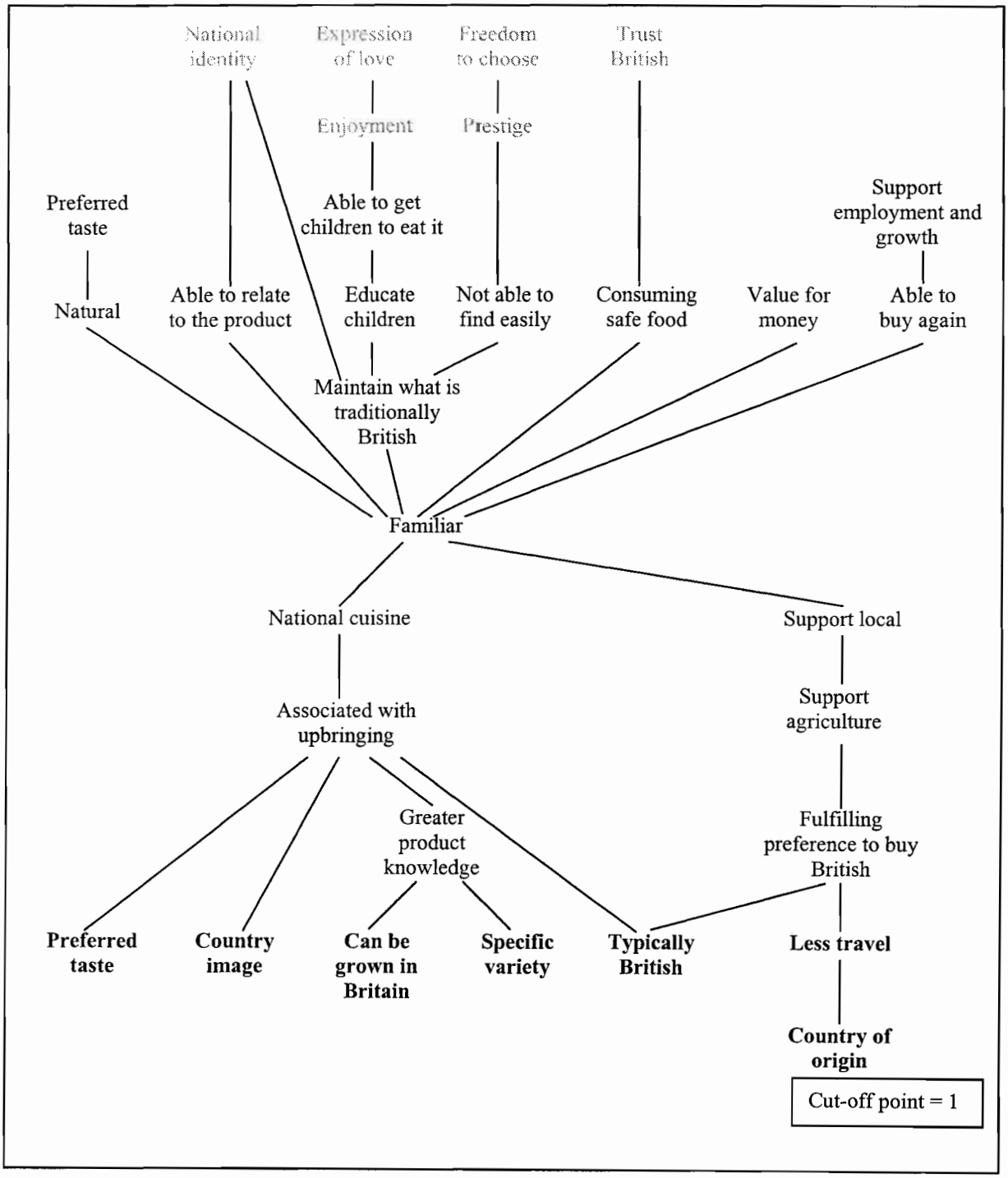


Figure 7.20 The Hierarchical value map produced from ladder including the value: Health and well being

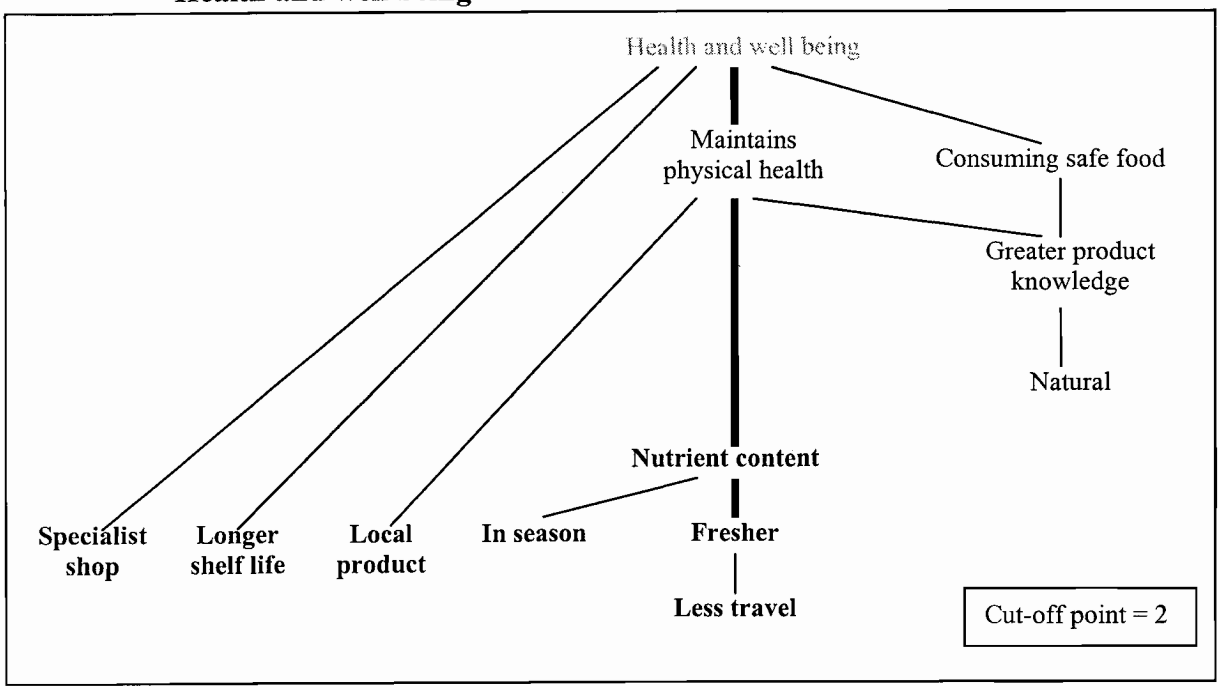


Figure 7.21 The Hierarchical value map produced from ladder including the values: Support own country and Patriotic

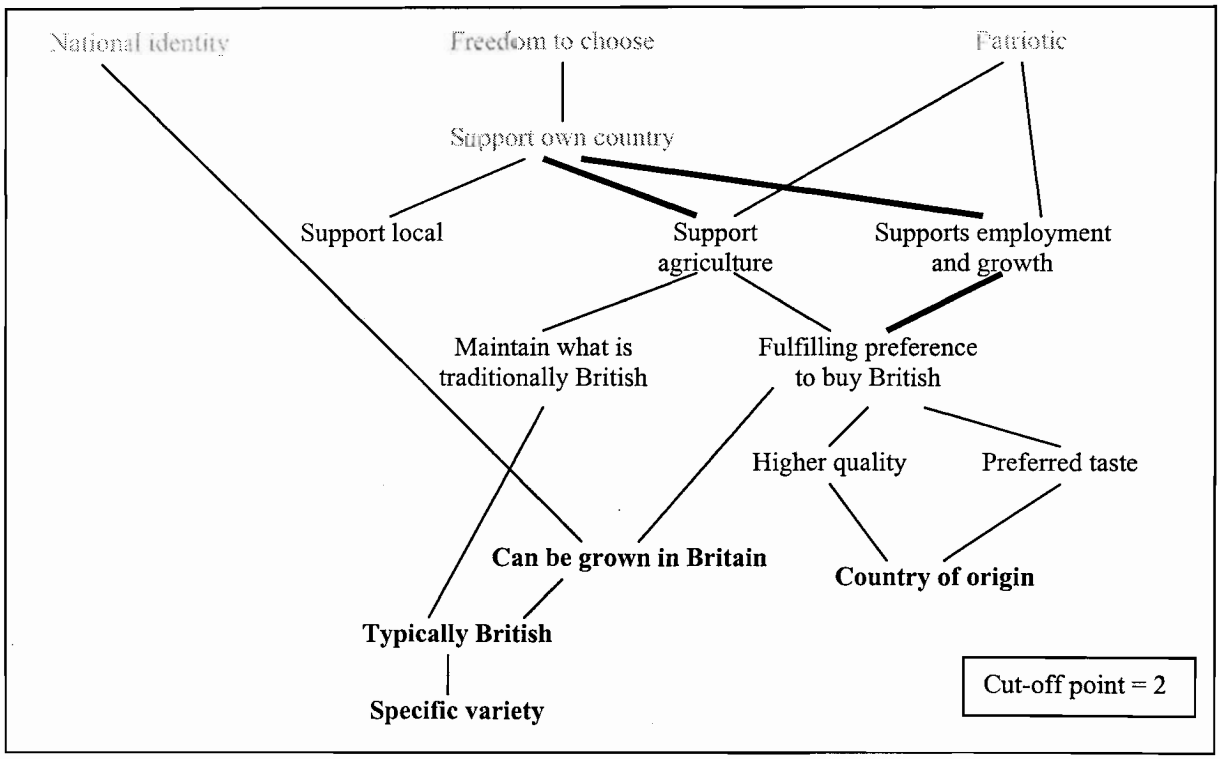


Figure 7.22 The Hierarchical value map produced from ladder including the value: Nostalgia

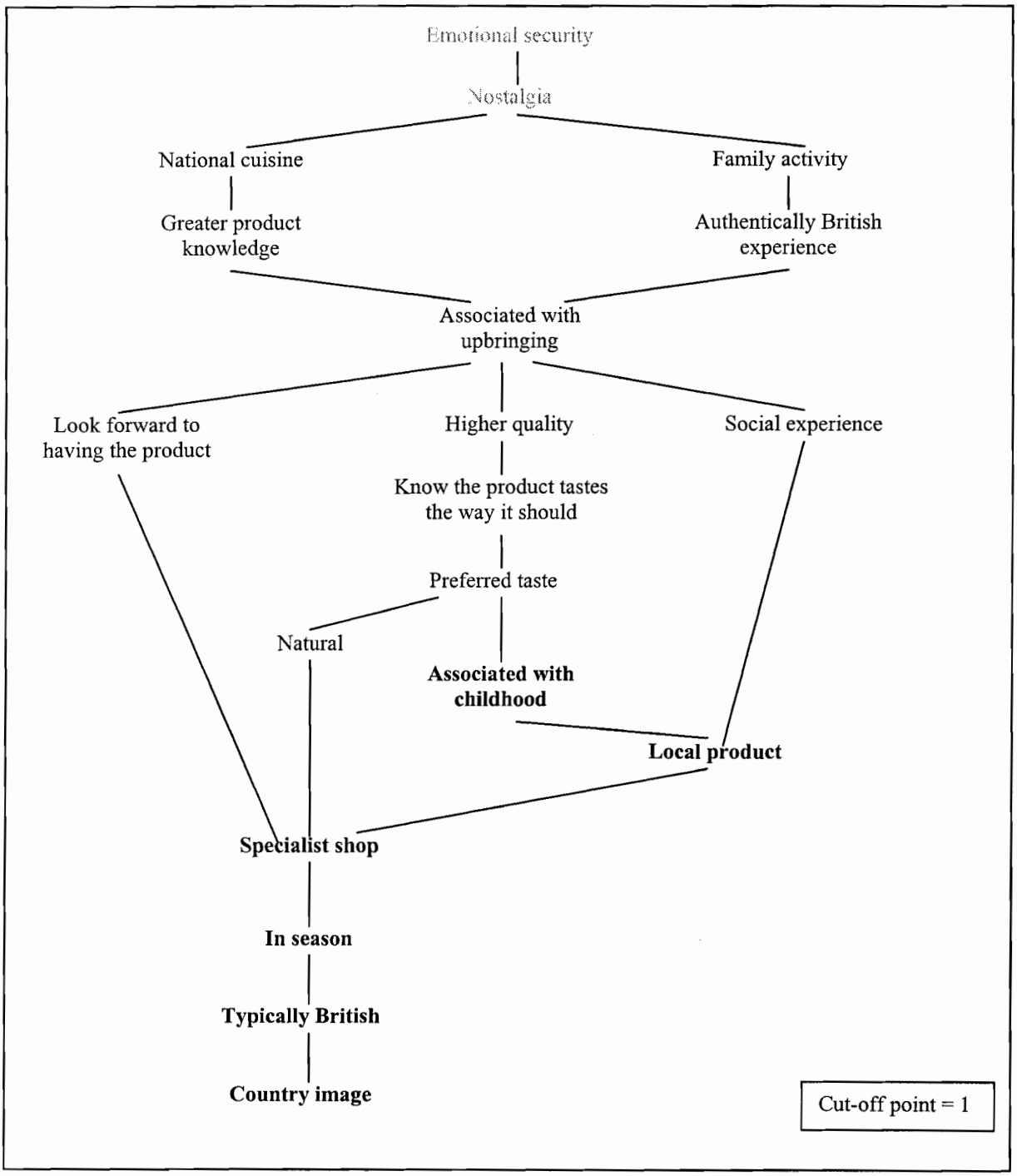
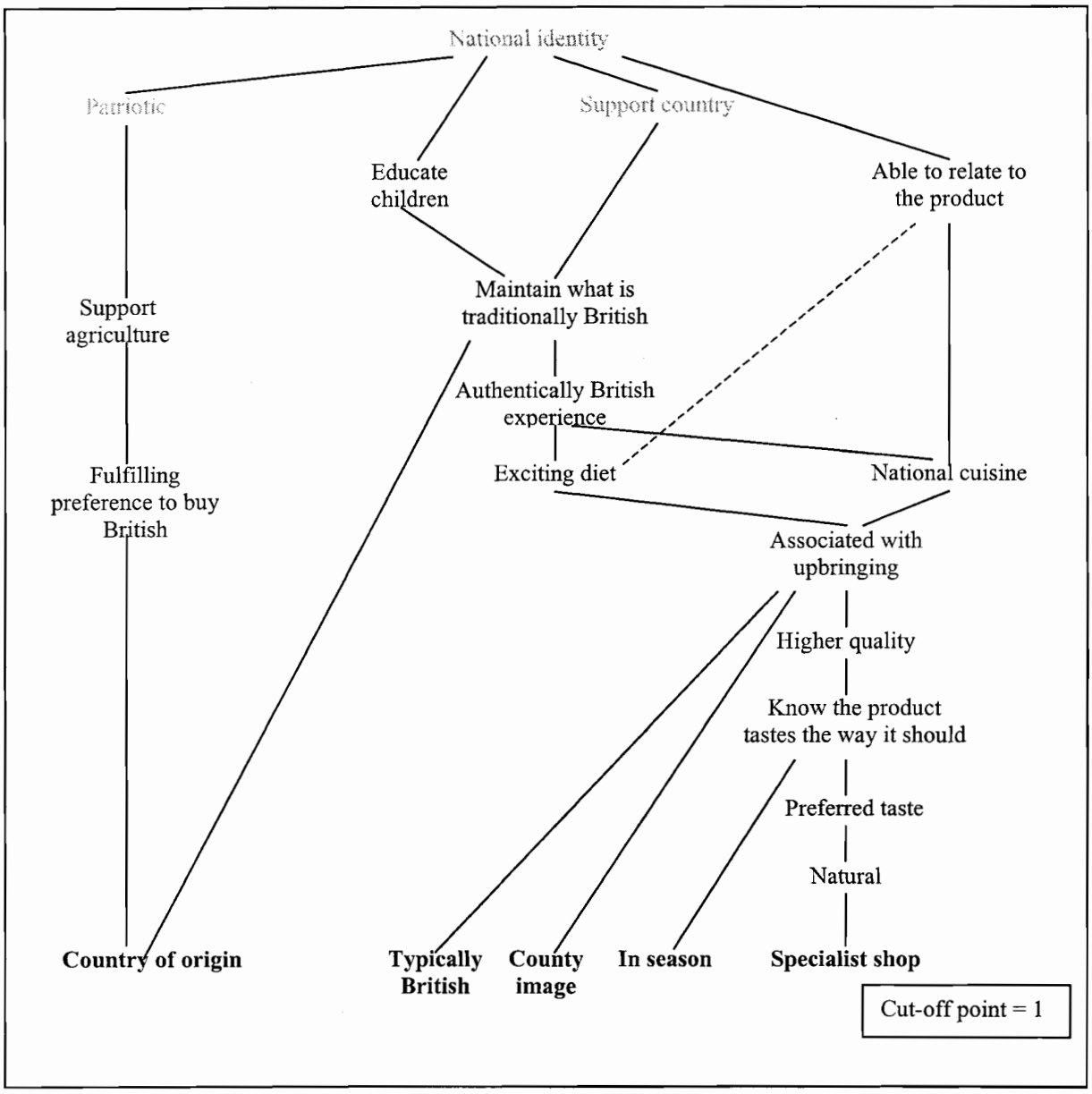


Figure 7.23 The Hierarchical value map produced from ladder including the value: National Identity



8. DISCUSSION

8.1 Overview of Coding Procedure

From the hierarchical value maps illustrated in the previous section it is possible to identify resulting managerial and theoretical implications. This chapter will review the data as a whole, and with reference to specific concepts.

The attributes that were identified as forming the basis of a preference for a British origin for fresh food products varied in abstractness. Attributes identified ranged from the appearance of the product, to the product being considered to be typically British. Thus, it is possible to contend that the attributes identified were used to either indicate an aspect of quality on which a British product was judged superior, or to convey some form of cultural significance that a British product possessed. Although the consequences identified further strengthened these associations, on the whole the consequences could be simply split into physical and psychological benefits. The codes developed for the attributes, consequences and values were consistently based upon the vocabulary of the respondent. Consequently, the values that were identified represent how the respondents themselves communicated specific values, and may not necessarily comply with existing value systems that previously have been developed. Furthermore, the final list of values has retained the product specificity of the study, and may initially appear to refer only to British food. The value list produced is, however, comparable to previously developed lists of values. For example, trusting British can be considered to relate to behaving in an honest way, and freedom to choose the product that one wants corresponds to the terminal value freedom. Honesty and freedom are both constituents of the list of values proposed by Rokeach (1967).

8.2 Review of the Results Gathered

As expected from the results of the focus groups and previous research (Groves *et al.,* 1999; NFU, 1999; IGD, 1998), participants in the interviews instinctively felt that it was important for products that could be produced in Britain, to be produced in Britain. This led to the fulfilment of values such as patriotism and supporting one's country. In addition, the importance of independence was highlighted, both for the country and the individual. This appeared to result from products that provided economic benefits. Purchasing a product produced in Britain also gave the consumer the benefit of obtaining value-for-money, providing financial security.

Unsurprisingly, the results revealed the freshness of a product to be important. The main reasons for this related to health, as respondents believed the nutritional value of a fresh product would be higher. This was important not only to maintain the individual's health, but also in order to feel that they were fulfilling their responsibility to maintain the health and welfare of their child and family. Perceptions of a product's freshness were stronger if the product was produced locally or purchased in a specialist shop. Furthermore, if products were thought to have spent less time in transit they were also deemed fresher, thus, leading to a preference for British products. Consequently, there is the opportunity for specialist retailers[2] to promote this aspect of their products, particularly if they are selling local produce that has not travelled so far.

Participants in the study generally considered that local products were sold through specialist retailers. For major food retailers to successfully sell local produce it is necessary to overcome the existing perceptions held by consumers, that supermarkets do not discriminate between food produced locally, nationally, or globally. From the interviews it was clearly evident that consumers believed the distribution system of supermarkets to be too big to be able sell

[2] As defined on page 37, the term specialist shop includes outlets such as farm shops and pick your own sites, farmers markets, independent green grocers and specialist food retailers selling fresh produce.

produce grown in the local area. Alternatively, in smaller greengrocers the produce was expected to be local, and unsurprisingly, this association was stronger in the case of markets, farm shops, and farmers markets.

Through buying a local product from a specialist shop the participants felt that they also knew more about the product. Knowledge gave the participants freedom over their own actions and the ability to choose the product they considered to be the most suitable for themselves. In addition, through having greater knowledge about the product, the individual was able to make a more informed judgement of the health-giving properties of the product, and the product's ability to fulfil the need to be healthy.

The characteristics of the production process meant that the participant felt that the product was natural, and consequently, that they knew more about it. Indeed, consumer anxiety caused by recent food scares is partly due to a lack of understanding of what the particular 'scare' means to the consumer. Consequently, greater product knowledge allowed the participants to have confidence in British producers, establishing what they felt to be a trusting and honest relationship. This is of great importance in order to counteract the growing tendency for consumers to become distinctly distrustful, particularly of the government, in terms of current issues surrounding food and science. Greater product knowledge also meant that the individual was able to choose which product would maintain their child's health satisfying the value of welfare of child. As previously presented, greater knowledge of a product enabled the individual to make their own choice as opposed to relying on external influences, and also make a decision that was the most financially secure.

A benefit obtained from a number of attributes was to know that one was consuming a natural product. This stems from the production process as discussed above, also that the product was fresher, as it had not undergone any storage treatments, and that it was the natural season to grow a typically British product. Concurrently, the findings of a recent study also reveal that due to recent food scares consumers are becoming "increasingly reluctant, knowingly, to consume food that has been tampered with or altered 'unnaturally'". Furthermore, this offers

support the proposition of Goldsmith *et al.* (1997) who suggested "that preferences for natural foods may, however, be related to the social values because this product category reflects more than mere sensory benefits and goes deeper to the fundamental motives for consuming products".

From the results of the current work, the need exerted by consumers for clear labelling of both the origin and the method of production of a product is clearly evident. Not only would this help create favourable attitudes towards British products, through establishing a trusting relationship between consumer and producer, but also through the realization of personal values such as financial security and the welfare of the family. Labelling of products with both the origin and the methods of production is increasing and consumers are beginning to recognise both the presence and message of these labels. More specifically, this indicates that current moves by the NFU to produce a British brand (NFU, 1999) would be well received by consumers.

It was recognised that if products were thought of as typically British, then this led to the realisation that the product could be produced in Britain. Through purchasing and consuming a product that was typically British, respondents were able to attain their desires for health and well being, and financial security. Furthermore, typically British products were also considered to be a part of the British national cuisine, through which the individual was able to establish or confirm their national identity. Clearly, this supports the relationship between food and national identity.

Food is central to an individual's sense of identity. Not only does food allow one to establish oneness or otherness with those who eat the same or different foods, but it is also fundamental to the biological, psychological and sociological construction of the individual (Fischler, 1988). Furthermore, as Fischler (1988) continues, it is because identity is so vital to a culture and of such symbolic importance that 'cuisines' have been developed. Food and cuisine, therefore, have a pivotal role in providing individuals with a collective sense of belonging. Thus, endorsing the proposition by Goldsmith *et al.* (1997), that in cases where individuals

interact with a product category that visibly represents something about themselves to others; values, indeed, may guide purchase and use of the product. It the context of products emanating from one's own country, it may be feelings of consumer ethnocentrism (Shimp and Sharma, 1987) that are being displayed.

Products that an individual was able relate to their upbringing were considered to be part of the British national cuisine, and provided the individual with subsequent benefit of being able to associate themselves with the product. This association is fundamental to the development of a sense of national identity. Through consuming foods that constitute the 'British cuisine' the individual was able to experience an authentically British consumption situation. The individual can, consequently, be satisfied that they are maintaining something that is traditionally British.

The hierarchical value map produced from ladders containing the national identity value suggested that there were two main reasons why an individual may wish to maintain traditionally British foods and cooking methods: firstly, the economic support given to one's own country, and secondly, in order to educate children to know what is typically British. Additionally, reasons for educating children about 'British food' were two-fold. In particular, children should be aware of the produce that can be grown in Britain, and also, what is traditionally British food. This knowledge, it is intended, would then allow children to develop their own sense of national identity. Although this finding is perhaps particularly prominent as the majority of the sample had children, it nevertheless highlights the opportunity to incorporate an element of child education, in particular incorporating typically British varieties of produce that can be produced in Britain, and the effect of the seasons, alongside the opportunity for specialist shops to encourage an element of family entertainment. Additionally, the need to educate children in schools about the origin and the seasons of the food they eat is also identified.

National identity, therefore, was achieved through supporting agriculture. In addition, resulting from supporting agriculture were the values of patriotism and national security.

Agriculture is historically an industry strongly connected with Britain, or indeed any country, through its climate and geography. It is possible, thus, that in the case of agriculture and agricultural products, buying British is an emotional response, as opposed to a more rational and economic approach of buying British to support the national economy, as perhaps would be the motivation for buying consumer durables manufactured in Britain.

Participants realised, however, that they did not always know the season the product was available. Results, therefore, are the thoughts of the respondents, not necessarily reality. This finding is concurrent with that of the IGD (1998), that despite the fact that consumers have little knowledge of the seasons, and seasons have little effect on actual purchase, there is a demand for more information about seasons. Consumers are then able make a judgement of the freshness and tastiness of a product based upon knowledge of the season.

The results indicated the desire for foods that create feelings of nostalgia. Holbrook and Schindler (1991) define nostalgia as "a preference toward objects that were more common when one was younger". Thus, nostalgia refers to a longing for the past, a yearning for yesterday, or a fondness for possessions and activities associated with days of yore (Holbrook, 1993). The results obtained here correspond with the existing definition, and with feelings of nostalgia gained from products that are associated with the past and childhood in general. Furthermore, it could be argued that local and seasonal products, and the use of specialist shops, that lead to feelings of nostalgia at higher levels of abstraction, are not parts of today's complex food production and retail industry, although current initiatives are aiming to change this. The complex production and distribution systems of today provide consumers with very little idea of the origin of a product, in the sense of both location and production. Thus, the value of nostalgia is opposed to the current food retail environment that most consumers experience.

The importance of financial security and acting in a price consciousness way is clearly evident from the results of the Laddering interviews. Although present as a value itself, financial security also allowed the individual to feel as though they were able to act independently, with

the freedom to make their choices. An individual felt as though they were acting in a price consciousness manner if the taste of the product was good, so the individual knew both their family and they would eat the product and also if the product were fresher and, therefore, would keep for longer in the home. In addition, if the individual had a greater knowledge of the product, their perceptions of the value-for-money offered by the product were likely to increase. It appeared that two reasons were evident for this: that the product is value-for-money because the individual actually knows what they are buying and there is little or no risk involved, and secondly through experience the consumer knows that they are not wasting their money. Furthermore, a product providing value-for-money also fulfilled the desire for family security. There are a number of possible reasons for this connection. The economic use of resources enables the individual to purchase the highest quality food for their family, or alternatively, allows extra money to be spent on other family activities.

8.3 Limitations

A number of limitations exist, both with respect to means-end chains and the laddering technique, and more specifically the laddering interviews conducted for this study. As proposed in existing literature, it is not possible to predict consumer behaviour through the use of means-end chains, or to specify which aspects of cognitive structure are being tapped, in which situations they are the most relevant, and why, indeed, these aspects are important (Grunert *et al.,* 1995). However, the purpose of this research is not to predict consumer behaviour, but to obtain a greater understanding of consumers' reasons for choosing a British food. The final quantitative survey phase of this research will use a larger sample size and allow inferences to be made from sample to population.

The responses gathered through the interviews may also be susceptible to social desirability bias, that is, giving answers that are socially acceptable even if untrue (Malhotra, 1996). When probing the respondent as to why specific attributes or consequences are important, they may respond with answers of increasing abstraction that they feel are desirable responses to

give. Thus, it can be debated whether these answers do reflect the values important to the individual, as it is their values that determine which answers are desirable even if the respondents do not directly connect the response to themselves. Indeed, this reflects suggested laddering techniques, the difference being that the interviewer has control, and not the respondent. Alternatively, the responses may be considered to be spurious and should be disregarded from the data set. Consequently, it is important to ensure against possible interviewer and social desirability bias, as this research has attempted to do, in order to maintain the quality of the data.

In addition, the laddering technique is limited by the lack of a clear distinction between attributes, consequences, and values and the effect this has on the coding process, and also the level of abstraction to be aimed for when coding the data. Furthermore, as considered in earlier sections of this report, problems may also arise in connection with the respondent switching strategic perspective during probing and producing a ladder that reflects attributes, consequences and values that are important in a situation different to that which the interviewer originally specified. Thus, again, in order to reduce possible limitations of a laddering interview it is necessary for the interviewer to stay in complete control over the interview.

The results of the focus groups (Groves *et al.,* 1999) suggest that there are different reasons for choosing a British origin depending upon whether the product is a fresh or a processed food. If both fresh and processed products had been incorporated into the Laddering interview, it would have been possible to discover whether different attributes of the two product categories lead to the same consequences and values, or if the difference is deeper and different values motivate the purchase between fresh and processed products. A number of previous means-end chains studies investigating food compare two products or two possible scenarios (e.g. Sorensen, 1996; Bech-Larsen, 1996; Bredahl, 1998). A recent example was Bredahl (1998), who investigated consumers' cognitions with regards to genetically modified food, and used beer and yoghurt as tangible products, each interview focusing on one of the two products.

This format could have been replicated in the means-end chains analysis phase of this study, investigating the importance of a British origin for both fresh and processed food products, with half of the interviews focusing on each product category. As stated earlier, however, it is likely that the attributes revealed would relate to two different concepts, namely a British brand origin for processed and an actual British country of origin for fresh. Consequently, the results would not be comparable, and two separate sets of Laddering interviews would be required to produce to separate hierarchical value maps.

The Laddering interviews were conducted throughout July and August of 1999. During these summer months there is a greater awareness of, and the opportunity for consumers to visit pick-your-own farms and farm shops. These were frequently mentioned in the interviews and were coded under specialist shops. Furthermore, there is a greater opportunity to visit such outlets as part of a day out with children, when on summer holidays away from the normal time restrictions, and the demands of normal shopping patterns at home.

Although the availability of foods does not substantially change, the foods that can actually be produced in Britain change considerably depending upon the season. It is possible that there is a preference among consumers, particularly when buying food for their children, for British produce available in the summer as opposed to the winter. For example, individuals, and particularly children, may exhibit a greater preference for British strawberries in the summer as opposed to British brussels sprouts in the winter. The focus groups also revealed that the season also affects the way consumers cook, perhaps more than what they cook. There is a greater desire for fresh fruit and salad vegetables in the summer that are eaten as they are, as opposed to the winter when fruit and vegetables have a constituent role in a meal and their own individual taste is not so obvious. Produce available at different times of the year was included in the interviews in an attempt to avoid any effect this may have.

The reasons for choosing some products may, therefore, vary between seasons. If the interviews had been conducted over a different period, the results may have differed from those that were obtained. It would be interesting to have two phases of interviews: one phase

in the summer, and one phase in the winter. If two phases of interviews were not feasible, an interview format that either split the range of foods into summer and winter produce, or probed the consumer as to how the initial attributes elicited may vary depending upon the season may be useful. The initial list of products given to the consumer consisted of both summer and winter produce in an attempt to eliminate this bias. It remains possible, however, that the current relevance of each product may vary depending upon the time of year.

As no major differences were found between the focus groups conducted in England and Scotland, laddering interviews were only conducted in one location. Clearly, a larger sample, split between locations throughout Britain would provide results that gave a greater picture of the attitudes of British consumers towards fresh foods produced in Britain. In doing this, the issue of whether to use one or multiple interviewers would need to be considered with regard to the consistency of the interview format and subsequent coding process.

As was suggested from the focus groups, it would be interesting to split the sample between a rural and an urban area. The idea of supporting agriculture and buying local produce was prevalent in the results obtained here. Splitting the sample between area would reveal if the importance of supporting agriculture varied for different areas, therefore, providing producers and retailers with greater information on targeting different areas based upon their purchase motivations. In addition, this would also indicate if those individuals living in a rural area are motivated by different values to those living in urban areas. To do this successfully a larger sample would be required, which was not feasible in this study. Further difficulties may occur in recruiting the required number of participants from a rural area in the required time period.

When considering the recruitment of the sample, a further area that may yield interesting results is the possibility of recruiting the participants from near a supermarket and also from customers of a farm shop or farmers' market. Information would need to be asked about the frequency that the individual visits a farmers' market and the types of product that are purchased. It would be interesting to know what those individuals who make an effort to regularly to use farmers' markets or farm shops feel about British products, whether it is due to their attitudes towards the product or the producer.

The results will clearly have been affected by the current climate of the food industry in Britain. Consumers are exposed to persuasive promotions to buy British foods, in particular agricultural produce, at the same time as being bombarded with information concerning recent food scares, such as BSE and GM foods in particular. Furthermore, the argument still exists concerning the growth of out-of-town food retailers and the possible detrimental effect this has on small independent retailers situated on local high streets. Correspondingly, there has been considerable growth in the last few years in the number of farmers markets operating throughout the country, and the idea of 'food miles' and buying local food direct from the producer. In addition, the availability and variety of organic foods is rapidly expanding, and many consumer in response to increasing concern over unknown pesticides and antibiotics used in food production are beginning to choose organic foods where possible.

The operational capacity of Laddermap is limited to constructing hierarchical value maps produced from no more than fifty codes. Thus it is not possible to produce a graphic representation of the entire data set using the recommended (Reynolds and Gutman, 1988) cut off point of 3. However, no other software is available that will handle Laddering data. Completing the analysis manually would be too time consuming and laborious to make Laddering an efficient technique to use. Attempts, consequently, have been made in this research to reveal as many links between attributes, consequences and values as possible, without using a very broad coding system that results is loss of meaning.

8.4 Further work

Incorporated into the quantitative survey will be areas that literature, focus groups and means-end chains reveal to have an influence on consumer preferences for domestic or foreign food products. Shopping behaviour will also be included in the questionnaire. Participants will be asked about the types of shops that they use, and also how frequently they shop for food. Questions covering socio-demographic characteristics will also be included to obtain consumer based information in order to discover to what extent perceptions of, and attitudes

towards British food products vary depending upon the characteristics of the consumer. It is the intention to administer the survey in four locations throughout Britain, with a sample size of four hundred. Again the main recruitment criteria will be that the respondents are primary food shoppers, responsible for half or more of their household's food shopping.

8.5 Conclusion

Through a means-end chain analysis, this report aimed to identify why a British origin is important for fresh fruit and vegetables. Forty laddering interviews were conducted with consumers responsible for at least half of their household's food shopping. The ladders produced were subsequently analysed using the Laddermap software. Attributes through which the consumer formed their preferences were either related to the physical product, or an element of the product that was typically British. The hierarchical value maps represent chains that illustrate how personal values affect the importance of, and preference for specific attributes of the product. Thus, overall reasons why a British origin was important for British fruit and vegetables were:

- through choosing typically British foods one is able to establish a sense of national identity and feelings of nostalgia;
- British products were perceived to be fresher and, consequently, more nutritious, therefore, the individual was able to maintain their own or their family's health;
- due to the belief that British fruit and vegetables offered value-for-money, an individual is able to act in a price conscious way and remain financially secure; as results of perceptions of the production process involved consumers felt that they knew more about the product and, consequently, felt that they were able to trust British producer; and finally,
- through buying a British product British consumers are able to support their own country.

The means-end chains study has identified areas where British fruit and vegetables have potential advantages over imported products. In order to exploit these possible opportunities, producers and retailers must identify the attributes that their products possess and promote these attributes in terms of the personal values that the attribute fulfils.

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APPENDICES

Appendix 1 Recruitment criteria

QUESTION	RESPONSES	OVERALL	EACH PRODUCT
9. Gender	Male	10	5
	Female	30	15
10. Which of these corresponds to your age group?	20-25	4	2
	26-35	6	3
	36-45	10	5
	46-55	10	5
	56-65	6	3
	65+	4	2
11. Can you tell me at what age you left full time education?	16 or below	10	5
	17-18	20	10
	18 or above	10	5
8. Score on food interest questions	6 or above	40	20

Appendix 2 **Recruitment questionnaire and participant information**

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Campden & Chorleywood Food R.A.

QUESTIONNAIRE

1. **Do you, or any of your close friends or relatives work in any of the industries shown on the card?**

   Marketing ☐
   Marketing Research ☐
   Journalism ☐
   Advertising ☐
   Media ☐
   Food Industry (manufacture or sales) ☐

2. **Are you currently studying full time at a university or college?**

   Yes ☐
   No ☐

3. **Approximately what proportion of your household's weekly shopping do you do, either on your own or with your partner?**

   All ☐
   More than half ☐
   About half ☐
   Less than half ☐
   None ☐

4. **How many other people do you normally buy food for?**

   Adults: .....
   Children:.....

5. **Are you, or any of you household vegetarian?**

   Yes ☐
   No ☐

number ☐☐☐

6. How often do you consume fresh fruit and vegetables in an average day?

5 or more portions a day ☐
2 to 4 portions a day ☐
1 portion a day ☐
Less than one portion a day ☐

7. Which of the following fruit and vegetables do you buy?

STRAWBERRIES ..... ☐
MUSHROOMS ..... ☐
LETTUCE ..... ☐
CAULIFLOWER ..... ☐
RASPBERRIES ..... ☐
APPLES ..... ☐

CARROTS ..... ☐
LEEKS ..... ☐
PLUMS ..... ☐
PEARS ..... ☐
TOMATOES ..... ☐
POTATOES ..... ☐

8. I am going to read out a series of statements that people have made concerning food choice, and I would like you to tell me how much you agree or disagree with them by using the scale on the card.

	Strongly agree **1**	Agree **2**	Neither agree or disagree **3**	Disagree **4**	Strongly Disagree **5**
1. When shopping for food, I look to see if a food product is made in Britain					
2. It is important for me that the food I buy is locally produced.					
3. I rarely try local foods when I am on holiday abroad.					
4. I frequently look to see where the food I buy was produced.					
5. I do not enjoy trying new foods that I have never eaten before.					
6. I try to cook the food I have eaten on holiday when I return home.					

9. Gender?

Male ☐
Female ☐

10. Which of these corresponds to your age group?

20-29 ☐
30-39 ☐
40-49 ☐
50-59 ☐
60+ ☐

12. Can you tell me at what age you left full time education?

16 or below ☐
17-18 ☐
19 or above ☐

13. Have you attended a discussion on food issues within the last 6 months?

Yes ☐
No ☐

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Respondent Details

NAME _____

ADDRESS _____

_____

_____

DAY TIME TELEPHONE NUMBER _____

HOME TELEPHONE NUMBER _____

I consent to taking part in an interview on food issues. The interviewer has informed me that the interview will be recorded for the purpose of analysis and interpretation, and that personnel involved in the project will only access this material.

I understand that I may withdraw from the interview at any time.

The interviewer was unknown to me before the start of the interview.

Signature of respondent: _____

Date: _____

DATE OF INTERVIEW: _____

TIME OF INTERVIEW: _____

number ☐☐☐

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Interview on Food Issues

Thank you for agreeing to participate in the interview.

We are frequently asked to find out what consumers think about various food related topics. To establish this we sometimes need to talk to people like yourselves, and on this occasion we would like you to participate in an interview to discuss issues relating to food choice.

To establish that we have a cross section of people, you have been asked certain questions about your age and occupation. These details will only be used for the analysis of the data. The information that you give to the interviewer will be kept completely confidential. The name of yourself and your family will never be disclosed to other parties under any circumstances, or put on mailing lists. The interview will last approximately one hour, and as a token of our appreciation you will receive a gift of £10.00

Please note that the interview will be audiotaped to enable an accurate analysis of the results to be made.

If you have any queries or concerns, please contact **Angela Groves** at the Department of Agricultural and Food Economics, The University of Reading, 4 Earley Gate, Whiteknights Road, Reading, **on 0118-9875123, (ext. 4038) during office hours**, or **0118-9352036 outside office hours**. We look forward to meeting you.

Yours faithfully

Angela Groves

Appendix 3 Interview guide

CONSUMER ATTITUDES TOWARDS BRITISH MADE FOOD PRODUCTS

LADDERING INTERVIEWS

- **LADDERING INTERVIEW GUIDE - FRESH PRODUCTS**

From the recruitment questionnaire and the post-interview questionnaire information will be gained in connection with demographic characteristics of the individual, their food related behaviour, and the importance of a British origin to the individual, with respect to the image of Britain and British food, and their ethnocentric tendencies.

- **INTERVIEW GUIDE**

1. I am going to show you a list of fresh food products. Please can you rank them in order of which you would normally look to see if it was produced in Britain.

2. Why is the product you ranked as most important different to the products you ranked as least important? (Work from both ends until all/a satisfactory number of products is compared, and all attributes are elicited).

3. You said that you look for a British origin for [*highest product*] because of [*first attribute elicited*]. Why is [*first elicited attribute*] important to you?

Start probing! see (Reynolds and Guttman, 1988)

- **PRODUCTS TO BE USED**

FRESH PRODUCTS	
STRAWBERRIES	CARROTS
MUSHROOMS	LEEKS
LETTUCE	PLUMS
CAULIFLOWER	PEARS
RASPBERRIES	TOMATOES
APPLES	POTATOES