

What Do Buyers Really Want When They Purchase Organic Foods?

An investigation using product attributes.

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Abstract

This paper contributes to the development of marketing strategies for the organic movement. After an extensive review of the literature empirical research using product attributes was undertaken in Australia.

The identification of organic buyers remains elusive as they were spread throughout the community in which they comprise almost 40%. However, the organic industry only has a market-share of approximately 1% because most of them only purchased organic foods occasionally.

Cluster analysis of organic food buyers based on the importance of the health, quality and environment attributes identified five groups. The size of these groups varies for specific retail outlets. For example, 88% of Organic Food Cooperative customers are passionate about all three of these attributes. Finally, prominent branding of organic products is essential as it transforms hidden credence qualities into an identifiable revealed attribute.

Key words: marketing, organic foods, attributes, Australia

Introduction

Marketing, as an academic discipline and a practice in industry, has developed over the last century to address the challenge of understanding how people make decisions. This understanding may then be used to influence these decisions, that is, their purchase choices. In some arenas marketing is regarded negatively because of its ability to manipulate consumption beyond needs. This can have negative personal, social and environmental consequences. However, marketing, particularly 'societal marketing', may have positive outcomes, as in the promotion of environmentally friendly activities, such as domestic recycling, water conservation, exercise and healthy eating.

Marketing, and more particularly the sub-discipline of buyer behaviour, uses an array of techniques to illuminate diverse facets of individual choices. However, because of the inherent diversity of individuals, and the multiplicity of situations in which they make choices, each of these techniques offers only a limited perspective. For example, it is recognised that personal choice is influenced by social factors, such as one's cultural identity, class, family situation, as well as by psychological factors, including those related to personality, motivation, world views and attitudes.

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Marketing organic foods

A key objective in researching the marketing of organic foods is to identify who purchases these products and why they purchase them. Focussing on product attributes offers a relevant approach. This considers any product as bundle of attributes that interact with the social and psychological factors, mentioned above, to influence the act of purchasing.

However, a buyer is not aware of all the product attributes, and those that they are aware of differ in their influence. These salient attributes may be irrelevant or determinate in relation to their choice.

Most food buyers know that 'organic' means food that is grown without the use of artificial chemicals. Further, although a large segment of the market buy organic food, they only do so occasionally. This explains why organic food sales are less than the percentage of buyer's who purchase it. In relation to Australia it has been reported that approximately 40% of food buyers purchase organic food whilst organic food sales are less than 1% of total food sales (Pearson, 2002). Also these organic food buyers are spread throughout the community with no obvious defining social or demographic characteristics.

Attributes of organic food

Previous research has identified that the most important attributes of organic foods centre around health (i.e. minimal artificial chemical residues in the product and high nutritional value), environment (i.e. preference for a product that has been produced and processed in an environmentally friendly manner) and high quality such as taste (Pearson, 2002).

Although the construct of attributes is intuitively appealing, there are significant complexities associated with research into buyer choices using them. There is an implicit assumption in much marketing practice, and literature, that buyer's are able to identify the attributes at the time of purchase. Price is an example. Usually it is possible for buyers to compare substitute products on the basis of price. However, some attributes are not easy for the buyer to identify. Quality is one such example. How does the buyer evaluate the quality of an apple prior to purchasing it? A particular production method, such organic, may offer another example. In situations where the product is labeled as organic, or the retailer only sells organic foods, the buyer has to rely on the credibility of this organic claim. The buyer is not able to inspect the supply chain for the product to confirm that its organic claim is valid.

Another complexity arises from attributes that fluctuate. For example, it is common for the taste of some products, such as fresh fruits and vegetables, to fluctuate between shopping trips. The reasons for this relate to the biological and climatic influences in production and to the ripening and loss of freshness through the distribution chain up until the product is eaten. A specific example of the fluctuations in taste is found with apples. A component of taste that is important with apples is texture and this fluctuates from being crisp to being floury (HRDC, 1990).

Thus, products where the attributes are difficult to identify at the time of purchase, or where there are fluctuations in them, provide challenges for buyers. However, they may be analysed by using the distinction between search, experience, and credence products as well as the intrinsic/extrinsic and revealed/hidden classification of attributes.

Search, experience and credence products

Study of the information exchange in the interaction between the retail outlet, the product, and the buyer has contributed a classification of products according to the ability of the buyer to identify the determinant product attributes. The classification is into search, experience, and credence products. The distinction between search and experience products was made by Nelson (1970). He suggested that there are two types of product depending on the way in which the buyer gathers information about them.

The most obvious procedure available to the consumer [buyer]... is search. [that is a search product] ... But there are goods [products] for which this search procedure is inappropriate - goods it will pay the consumer [buyer] to evaluate by purchase rather than by search. ... We will call this information process experience. [that is an experience product].

The distinction of a third type of product was suggested by Darby and Karni (1973).

...search qualities which are known before purchase, experience qualities which are known costlessly only after purchase, and credence qualities which are expensive to judge even after purchase. [here is the third product, a credence product]

Another relevant classification of attributes is those that are intrinsic or extrinsic to the product, and between those that are revealed or hidden to the buyer.

Intrinsic/extrinsic and revealed/hidden classification of attributes

Intrinsic attributes are defined as those inherent in product, such as taste or colour, which, if changed, would result in a change to the product itself. By way of contrast, extrinsic attributes are defined as those that are independent of the product, such as brand or organic. This classification also relates to the distinction between search, experience and credence products. A product where the buyer is predominantly seeking revealed attributes would be classified as a search product, whilst an experience product would be one where the buyer is predominantly seeking hidden attributes.

A credence attribute is hidden to the buyer and extrinsic to the product. Hence, credence attributes, such as organic, have the potential to be particularly problematic for the buyer as it may be very difficult for them to identify their existence through search or experience. Ideally the product will be clearly identified as being organic, by either an organic brand on the product or by being sold by a retail outlet that only sells organic. Such clear identification of the organic product assists the buyer by transforming a credence attribute (organic) into the more easily identifiable search attribute (a brand).

As previously discussed, the most frequently mentioned attributes given as reasons for purchasing organic foods are health, quality and environment. These are hidden attributes. Whilst those given as reasons for not purchasing organic foods, that is, high price and limited availability are revealed attributes. This important insight is shown in Figure 1.

Figure 1 Salient attributes of organic foods

Attribute*	Intrinsic	Extrinsic
Revealed		<i>(Price)</i> <i>(Availability)</i>
Hidden	Health Quality	Environment

*The attributes mentioned as reasons for purchasing organic foods are in plain font, whilst the reasons for not purchasing them are in brackets and italics.

An important question that arises from this attribute classification is the relative importance of health, quality and environment to organic food buyers. It may be that there are different groups of organic buyers, such as those who are attracted to the environmental benefits versus those who purchase for health reasons (Ott et al., 1991). If this is the case, these

different market segments will benefit from different marketing efforts. This question was explored by gathering empirical data.

Method for empirical research

The aim of the empirical component of the research was to undertake a study which would identify organic food buyers and explore why they purchase these products using the construct of attributes. The data collection proceeded in two steps: an exploratory study using interviews followed by a descriptive study using a questionnaire.

The exploratory study comprised in-depth interviews using open-ended questions with a representative sample of 20 food buyers. The majority (15) of these represented the main stages in the household life cycle, such as parents with infant or primary or secondary age children, parents where children have left home, single parent households, and households of non-related adults (Bagozzi, 1986). The remaining five interviews were with known organic food buyers. The information gathered during the exploratory study was then used to determine appropriate content for the questionnaire in the descriptive study. The purpose of it was to provide quantitative data that would enable identification of segments of organic food buyers.

Both the exploratory and descriptive studies were conducted in a regional centre that was demographically representative of Australia. Armidale, a University town in the state of New South Wales with a population of 20,000 was chosen.

In the descriptive study a total of 300 useable responses were obtained from a random distribution to households and 83 responses from Organic Food Cooperative buyers. In the random distribution a questionnaire was mailed to every fifth household (1,000 households). It required the main food buyer to respond to multiple choice questions in relation to buying food. A response rate of 33% yielded 300 usable questionnaires after 30 were removed due to them being incomplete. Of these 300, 105 were organic food buyers. In addition, 83 buyers completed the questionnaire whilst shopping at the Armidale Organic Food Cooperative. Both data sets were analysed using descriptive statistics.

The demographic profile of the questionnaire respondents from both the random sample and the Organic Food Cooperative buyers indicated that they are representative of the Armidale population. However, as is common with research using questionnaires, there is the possibility of some self-selection in terms of the respondents and hence the results may be biased.

There are numerous variables that could be used to explore the differences between individual organic food buyers and this empirical research used their rating of the three most important attributes, namely, health, quality, and environment.

The specific questions asked were:

when you are considering **buying organic food, how important** are the following

Not - Fairly - Very important?

0 1 2 3 4

Health

Quality such as taste and freshness

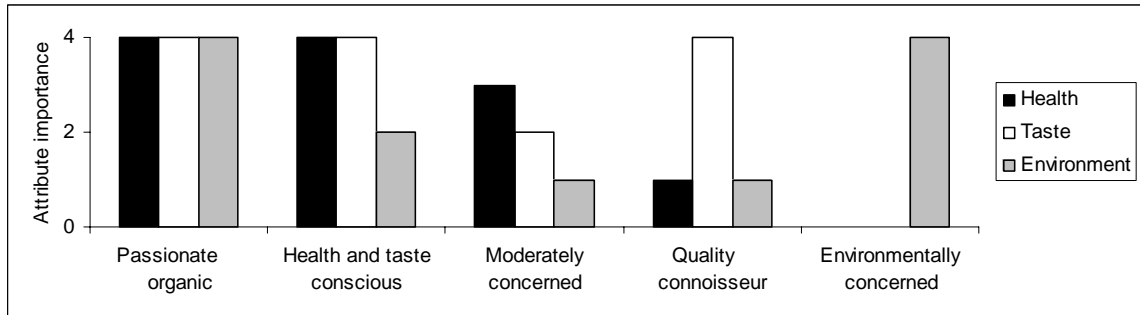
Environmental issues

Results

Analysis of the organic buyers was undertaken. As previously mentioned, it may be that individual organic food buyers differ in the reasons why they purchase organic food and, if this is the case, it will have significant implications for the marketing of these products.

Cluster analysis was used to create groups of organic food buyers who had the same rating of these attributes. Figure 2 provides the results of this analysis.

Figure 2 Groups of organic food buyers from random sample



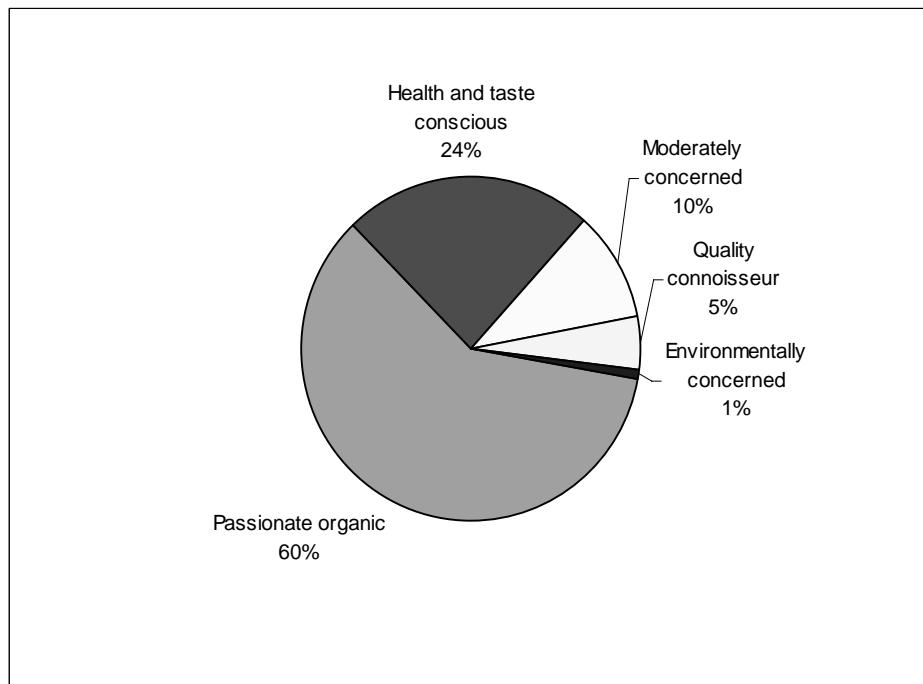
(Attribute importance has been rated on a 5 point scale where 4 is 'very important' through to 0 'not important. n=105 for random sample. These results are significant at a 95% confidence level. $\chi^2 = 148.9$)

The results from this analysis identified five distinctly different groups of organic food buyers, namely:

- Passionate organic:** who gave the highest rating for all three attributes.
- Health and quality conscious:** who gave the highest rating for only health and quality.
- Moderately concerned:** for whom all three attributes were of moderate importance.
- Quality connoisseur:** for whom only quality was given the highest rating.
- Environmentally concerned:** for whom only environment was given the highest rating.

The next step in the analysis was to show the relative size of these groups. This is important from an applied marketing perspective as it is generally only feasible to promote products to the largest segments in the market. Figure 3 shows the relative size of these groups of organic food buyers from the random sample.

Figure 3 Relative size of organic food buyer groups from random samples.

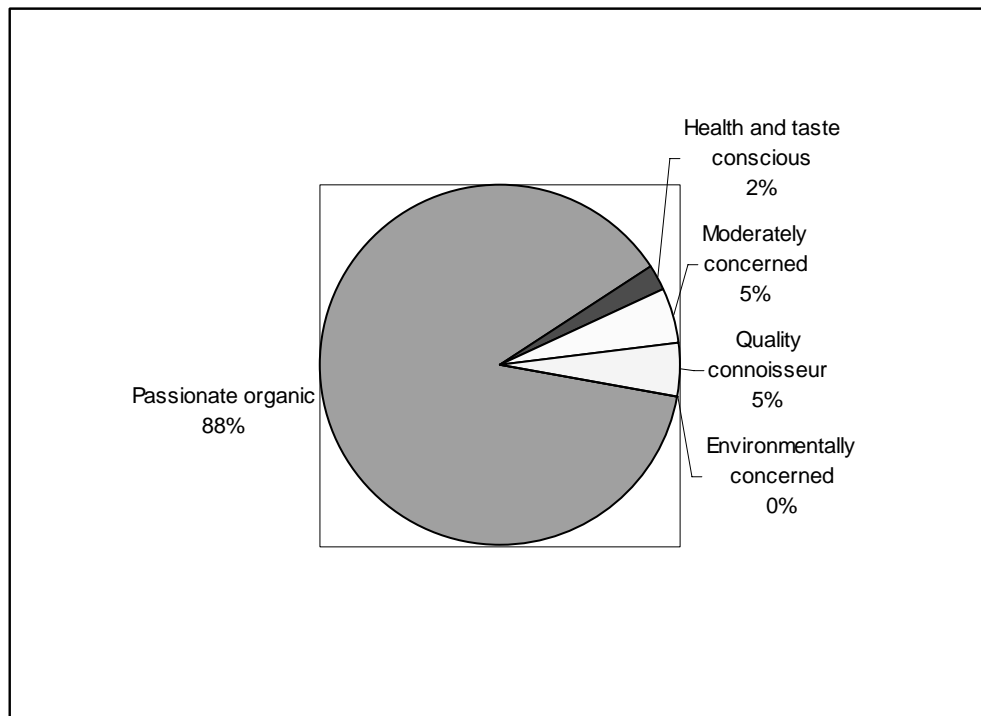


(n=105. These results are significant at a 95% confidence level. $\chi^2 = 120.9$)

The largest group (60%) are the *passionate organic* food buyers. To them health, quality and environment are all very important. It is also relevant to note that the two largest groups, that is, *passionate organic* buyer, and *health and quality conscious*, account for the vast majority (84%) of all organic food buyers.

As these results are for all organic food buyers in the region they could be used for a marketing campaign that was focused on increasing sales in this area. However, there are a number of independent businesses who sell organic products in this region. For example, there are general grocery suppliers like supermarkets, specialized retail outlets such as health food stores and farmers markets as well as dedicated organic food outlets such as home delivery business' and food cooperatives. It is possible that the specific customers who use these individual retail outlets will differ in their rating of the attributes. As an example, Figure 4 shows the relative size of these groups of organic food buyers from the Organic Food Cooperative.

Figure 4 Relative size of organic food buyer groups from Organic Food Cooperative sample



(n=83. These results are significant at a 95% confidence level. $\chi^2 = 240.6$)

The Organic Food Cooperative buyers differ from the buyers who purchase from other retail outlets. The most obvious area is in their passion and enthusiasm for organic products. For example, the proportion of *Passionate organic* food buyers is much larger (88% as compared to 60%). This result may be explained by the fact that there is an additional effort required from Organic Food Cooperative buyers. This retail outlet does not offer a full range of grocery items so they have to go to the supermarket as well.

Discussion - Implications for marketing organic foods

As most buyers are aware of organic food, and have an accurate knowledge of what it means, it is appropriate to focus promotion on the positive attributes of organic, rather than making buyers aware of it. Further, the most important attributes of these products are health, quality and environment.

The inclusion of a revealed attribute, such as a brand emphasising the health, quality and environment claims, will assist buyers by making it easy for them to identify the presence of these hidden attributes at the time of purchase. Thus, the brand simplifies the choice task by allowing consideration of revealed attributes only.

Whereas the negative attributes, that is, the higher price of many organic foods and their limited availability in terms of the inconvenience of many retail outlets that sell them, are revealed and extrinsic to the product. These attributes are under the direct control of retail outlets and their associated supply chains. At a superficial level the price premium offers a plausible explanation as an impediment to increasing sales. However, there is an opportunity for more research and this investigation will uncover a complex range of issues which includes the problematic issue of 'value'. In relation to availability, the organic industry is expanding its distribution. Indeed, the inclusion of an increasing range of organic foods in supermarkets is an example that is addressing the availability issue.

Most food buyers use simple choice methods when they make regular purchases of relatively low priced products such as grocery items. The specific choice methods used are often based on habit, that is, purchasing the same products every week (Pearson, 2000). Habits tend to lead to stable purchasing patterns; thus whilst habits require effort to change, once changed they will stay that way for a significant period. In some circumstances the habit is varied and this is usually based on an impulse purchase. Impulse purchases generally relate to those that are done on the 'spur of the moment' where the buyer is influenced by what they see in the retail outlet.

Products displayed in prominent positions will attract the most impulse purchases. Thus, in terms of the layout of product displays in retail outlets that sell other products, it is important that organic foods are prominently displayed to increase their sales. The most appropriate areas to display these products are where the buyers enter the retail outlet, or at the ends of aisles. However, the owners of the retail outlet may wish to use these areas to display products that influence the visual appeal of the internal environment for the retail outlet, or to display product price promotions. Hence, organic foods may have to be displayed in other areas of the retail outlet. Where ever the organic food is, it is important that it is identified in some prominent manner.

Destination products are somewhat the opposite of impulse purchases. Buyers tend to be committed to purchasing them, that is, they are prepared to go to the effort of finding another retail outlet in response to the product not being available (Dick, 1998). Thus, for those buyers who are committed to purchasing organic food, they would see it as a destination product and hence seek it out. The Organic Food Cooperative is an example of retail outlet that attracts buyers who see organic as destination products.

However, it would appear that for many food buyers, organic foods are not destination products as they regularly substitute. In those situations where the substitution is caused by a 'stock out' for the organic the organic industry may prioritise achieving continuity of supply. For example research has identified that food buyers purchase a large number of individual fresh fruit and vegetable products (Pearson, 2000). However, a small number of them account for the majority of expenditure and amount bought. For example, the top 10 fruits and top 10 vegetables account for approximately 80% of the amount bought (Pearson, 2005). Thus, the organic industry could have the greatest impact on increasing its overall sales, by avoiding substitution and more generally, by targeting these top 10 fruits and top 10 vegetables.

Conclusion

If organic food is better for the individual and better for the environment, why are sales only 1%? The preceding discussion has provided a partial answer to this question. At only 1%

market share there is lots of room to increase sales. The following conclusions suggest some directions for achieving this.

So, a large percentage of buyers purchase organic foods, most of whom only purchase it occasionally. There are two important conclusions arising from this.

The first is that organic food buyers are not a small group of dedicated people. They are spread throughout the community with no obvious defining characteristics. Further, at around 40% of the community in Australia, they represent more than a small niche, although still not the mass market.

The second important conclusion is that most of the organic food buyers only purchase it some of the time. There is a very small percentage of buyers who exclusively purchase organic food, however, the vast majority only purchase it some of the time. Hence, these organic food buyers often substitute organic food with conventional food. Understanding the reasons for this switching is an area for further research into the purchase context. This would include the barriers of limited availability and high price as previously identified as well as other issues. The choice of retail outlet, differences between individual product categories as well as situational differences such as the availability of time and planned consumption situation are also relevant.

Further, it is essential that organic products are identified with a prominent brand. This assists buyers in reminding them of its positive health, quality and environment attributes. And finally, it would appear that the largest segment in the organic market are those passionate organic buyers who are attracted to all three of these attributes, although the size of this segment will vary for different retail outlets.

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