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Branding of Japanese Organic Supermarket and the Characteristics of Consumer Behavior in Its User Segments[1,2]

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1. Background

Over the past few years, the interest in health-conscious organic foods has remarkably increased. Behind this trend is a growing concern for issues concerning health or the environment, and an increase in the number of children with allergies. Organic food is gradually attracting the attention of people who previously had little interest in them. Statistic data confirms the presence of active consumers who choose organic food, even if prices remain comparatively

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high.

In Japan, the organic food industry has mainly developed through the home delivery system (Ogawa, 1999, 2001; Tokue, 1999).

So far, the exclusive, membership based home delivery system was the dominant distribution channel for organic products. However, this trend is gradually shifting towards the open, retail system, where the general run of consumers can have easy access to organic products.

In addition, organic food is finally being acknowledged by the general public, as the enactment of the revised Japanese Agricultural Standards for organic products in June 2000 symbolizes. The enforcement of the law introduced the full-fledged certification system of organic produce, which is likely to expand business opportunities for the organic food market.

Although there are many articles that discuss consumer behavior towards organic food in other countries, little is known about consumer behavior towards these same in Japan.

Since the increase in organic food-conscious consumers in many countries, a number of studies have investigated consumer behavior towards organic food in the European and U.S markets. For example, in 2001, Squires *et al.* presented a cross-cultural study of organic food consumption comparing Denmark and New Zealand.

Gardyn analyzed the U.S organic market in 2002. In 1995, Grunert *et al.* took an interest in Danish schoolteachers buying organic food. In contrast, studies on Japanese consumer behavior towards organic food quite limited.

2. Research Objectives

As an open distribution channel, organic supermarkets are expected to become a major driving force for the growth of Japan's organic food market. This pioneering study identifies the characteristics of organic supermarket users, in expectation of contributing to develop the brand management of organic supermarkets in Japan.

The purpose of this paper is to demonstrate consumer behavior in organic supermarkets. Based on the discoveries obtained from this research, we will discuss future development strategies of the organic food market. We shall particularly offer some important implications inferred from an in-store questionnaire survey data.

3. Data

We hypothesized that the population for this questionnaire survey would be the customers of a specific organic food supermarket. To grasp the general trends of the customers of this store, we sampled some of the visitors who purchased food items. Accordingly, the actual population for this research is the total amount of customers who visited this store on the day of the survey. A total of 103 samples were selected among 990 visitors via random sampling.

The field investigators conducted questionnaire surveys by interviewing and filling out the answers given by the informants on the questionnaire form. The survey points were set at the opposite side of cash registers so that field investigators could interview customers who actually purchased items.

The majority of respondents were female (84.2%) and housewives accounted for 70.9%. Most of the respondents were in their 30's (43.7%).

4. Consumer Characteristics in the Questionnaire Survey

4.1 High Frequency of Visit and High Per-Customer Expenditure

30 of the 103 samples used were heavy users, who visit the store more than 3 times a week (Table 1). By combining them with the users who use the store "once or twice a week", we can estimate that "frequent users" consist of 77.2% of the total customers. The average (median) expenditure per customer is 2,000 yen (Table 2), which is quite high for a supermarket that only sells food. According to the consumer monitor research conducted by the Ministry of Agriculture in 2000, the mode expenditure per customer is between 400-499 yen for vegetables, and between 700-999 yen for meat products. We estimate that the general consumer spends approximately 1,500 yen per visit.

The prices of vegetables sold in the organic supermarket we researched were approximately 30 percent higher than an ordinary supermarket in that neighborhood.

A number of studies point out that there is a willingness to pay premium prices for eco-products and organic food (c.f. Loureiro *et al.*, 2002; Thompson, 1998; Weir and Calverler, 2002).

Table 1 Frequency of Visit

	Percentage of Distribution(%)	Frequency
More than three visits a week	29.1	30
One or Two visits a week	48.6	50
One or Two visits a month	13.6	14
Three or Four visits a year	2.9	3
First time visits (Never visited before)	5.8	6
Total	100.0	103

Table 2 Per-Customer Expenditure

	Percentage of Distribution(%)	Frequency
Under 500yen	4.0	4
500-999yen	17.0	17
1,000-1,999yen	19.0	19
2,000-3,999yen	31.0	31
4,000-5,999yen	17.0	17
6,000yen and over	12.0	12
Total	100.0	100
Per-Customer Expenditure (Median)	2,000 yen	

4.2 Consumers' Motivations for shopping at MOTHER'S

Table 3 shows that "shopping at a natural food specialty store" was the most popular motivation for organic supermarket users (72.8%). "High quality" was the second most answered reason, chosen by 57 people (55.3%). Both of these two choices are related to the quality of product itself. Given the facts that customers chose MOTHER'S because it is a natural food shop or because the quality of the products is high, we can assume that consumers have a strong commitment to food. This assumption is confirmed by the subsequent responses to the different standards of motivations such as "good service", "cheap price" and "a wide variety of goods".

Another distinctive feature of MOTHER'S customers is that vicinity of residence did not constitute a main reason to visit the store.

Table 3 Reasons to Visit This Store

	Percentage of Distribution(%)	Frequency
Because this is a natural food shop	72.8	75
Because the quality of the products is high	55.3	57
Because this store has goods I want	25.2	26
Because this store is close from home	18.4	19
Because this store has a wide variety of goods	5.8	6
Because the interpersonal service is good	3.9	4
Because the price is cheap	2.9	3
Others	13.6	14
Total	100.0	103

4.3 Customer's Store Loyalty

Here we analyze the results to the question of whether the customers visit other natural food stores than MOTHER'S or not (Table 4).

Forty-eight users (47.5%) answered that they visited other (multiple) stores. Given the MOTHER'S consumers' keen interest in natural food in general, those customers fall into two segments. One consists of people who have a strong interest in natural food and tend to shop around among a variety of food and stores for comparison. Another segment is consisted of people who only visit MOTHER'S. The latter, who represent 52.5% of all respondents, are considered to have a noticeably strong store loyalty to MOTHER'S. A reservation should be made, however, about the possibility that some of them may shop at only MOTHER'S not because they are loyal, but simply because there are no other natural food stores available in their neighborhood.

Table 4 Store Loyalty of the Customers

	Percentage of Distribution(%)	Frequency
Visit various other multiple natural food stores	47.5	48
Visits this store only	52.5	53
Total	100.0	101

4.4 The Level of Concern for Agricultural Chemicals

We asked how seriously consumers cared about chemical-free food at the time of purchase (Table 5). The respondents were asked to answer on a scale of 1 to 4: "very concerned", "concerned", "sometimes concerned" or "not concerned". The results are shown in Table 6. The "Very concerned" customers account for 51.0%, followed by "concerned" (32.4%). Considering the fact that a majority of the customers visit MOTHER'S because it is a natural food store, the keen interest in natural food is intrinsically-linked to the concern for chemical-free food. It is therefore natural that many customers showed "very concerned" and "concerned" attitudes towards pesticide-free food. This concern for pesticides is the specific feature for MOTHER'S customers, and can not be generalized to all consumers. It would be reasonable to conclude that consumers who care for chemical-free food chose MOTHER'S.

Table 5 The Level of Concern for Agricultural Chemicals

	Percentage of Distribution (%)	Frequency
Very concerned	50.9	52
Concerned	32.4	33
Sometimes concerned	11.8	12
Not concerned	4.9	5
Total	100.0	102

4.5 Strong Commitment to Natural Foods

In this section we asked how frequently the customers bought natural food on a scale of 1 to 5: "almost always", "regularly", "once every two shopping occasions", "occasionally" or "rarely" (Table 6). The sum of people who bought natural food "almost always" or "regularly" amounts to 54.9%, while only 2.9% people answered that they "rarely" buy them.

These results suggest MOTHER'S customers' strong loyalty to natural food category. In the previous questions, we confirmed consumers' interest in natural food at the perceptual or attitudinal level. In this section, we will examine it at the behavioral level of purchase. It is possible to assume that there may be a gap between consumers' attitudes and behaviors. However, in this case study, we observed that the strong concern in natural food led directly to purchase.

Table 6 Frequency of Natural Food Purchase When Buying Food

	Percentage of Distribution(%)	Frequency
Buy almost always	23.5	24
Buy regularly	31.4	32
Buy once in every two shopping occasions	26.5	27
Buy occasionally	15.7	16
Buy rarely	2.9	3
Total	100.0	102

Questions about reasons to buy natural food were asked for the people who buy them "almost always", "regularly", "once in every two shopping occasions", and "occasionally". "Health" and "safety" were the top reasons, each chosen by 68 out of the 99 respondents (68.7%) (Table 7). Where conventional foods are concerned, taste is usually considered to be the most important attribute, and accordingly the top reason for

purchase. In this survey, however, taste ranked only fourth, with 36 out of 99 samples. This reveals the fact that taste is, unexpectedly, a weak and not markedly important reason to choose natural food. We can conclude that "health" and "safety" are the most highly appreciated benefits for natural food consumers.

Table 7 Reasons to Buy Natural Food

	Percentage of Distribution(%)	Frequency
Health	68.7	68
Safety	68.7	68
For the family's sake	44.4	44
Taste	36.4	36
As a customary practice	6.1	6
Others	5.1	5
Total	100.0	99

4.6 Consumers' Evaluation Criteria for Natural Foods Purchase

In this section we assess the attributes for purchasing natural food by order of importance. We specified eight attributes: "price", "wide variety of goods", "quality", "display", "atmosphere", "package", "description of products" and "interpersonal service quality". For each attribute, respondents were required to answer on a scale of -2 to 2. Each answer was scored according to the levels of importance as follows: "very important" (+2 point), "rather important" (+1 point), "don't know" (0 point), "not very important" (-1 point) and "not important at all" (-2 point). Average values for each attribute appear in Table 8.

Table 8 Important Attributes in Purchasing Natural Food

	Average Value	Standard Deviation
Food quality	1.79	0.53
Description of products	1.15	1.03
A wide variety of goods	0.98	0.83
Interpersonal service quality	0.67	0.90
Cheap price	0.48	1.12
Store atmosphere	0.36	1.09
Package	-0.05	1.12
Merchandise display	-0.03	1.08

Table 8 indicates that priority was given to "quality", with the highest average value of 1.79. This was followed by "description of products" (1.15). Attributes of "package" and "display" were relatively less significant.

The results provide valuable insight into the marketing of natural food. In terms of average value, two different types of attribute groups can be identified. The top three attributes, "quality", "description of product" and "a wide variety of goods" comprise one group. Another group would consist of the three lowest ranked attributes such as "display", "package" and "atmosphere". By comparing these groups, we found that the attributes for the former group represent essential parts of the products or service, while the latter group's elements denote relatively fringe values of the goods.

Natural food consumers have a discerning eye when it comes to the essential utility offered by these foods. In addition, a significant observation was that consumers are fairly conscious of the "description of products", which hints at the possibility of effective sales promotion plans. For example, descriptions may be deployed in POP signage. Also, the disclosure the names of the producers (cultivators) can function as a description. Strengthening of information disclosure on products is likely to be effective to gain support from consumers. Some studies also emphasize the necessity of improving the promotion of products in order to enlarge the market for organic products (c.f. Roddy *et al.,* 1996).

5. Buying Habits of the High-Involvement in Organic Food Segment

5.1 Consumers with strong interest in organic products

For organic supermarket companies, it is crucial to understand the tendency of organic consumers' buying behavior and their standards of goods purchase.

As mentioned in the previous section, nearly half the customers (50.1%) surveyed in the chosen natural food store were quite conscious about buying products with no (or reduced) pesticide treatment. This suggests that organic supermarket users have a higher involvement in natural food than consumers in general. Furthermore, among these organic supermarket users, there exists a segment of users who have an even higher involvement. High involvement leads to purchase.

In the following section, we demonstrate whether the degree of

involvement makes a difference in attribute evaluations at the time of buying. The respondents were divided into two segments. One is the "high involvement in organic food segment", who were "strongly concerned" about no (reduced) pesticide products. Another is "low involvement in organic food segment", the members of which answered "concerned", "sometimes concerned" and "not so much concerned".

5.2 Differences in Organic Involvement and Frequency of Purchase of Natural Food

We investigated the correlation between the degree of organic involvement and the frequency of purchase of natural food. As Table 9 shows, the higher the involvement of the segment becomes, the more frequently they buy natural food. To determine the positive correlation between these two variables, rank correlation is used as a measuring instrument. The results of Kendall's rank correlation coefficient were significantly high, $\tau b = 0.615$ and $\tau c = 0.754$.

Table 9 Degree of Involvement and Frequency of Purchase of Natural Food

	Frequency of Purchase of Natural Food					Total
	Buy almost always	Buy regularly	Buy once in every two shopping occasions	Buy occasionally	Buy rarely	
High Involvement in Organic Food	23	21	8	0	0	52
	44.2%	40.4%	15.4%	0.0%	0.0%	100.0%
Low Involvement in Organic Food	1	11	19	16	3	50
	2.0%	22.0%	38.0%	32.0%	6.0%	100.0%
Total	24	32	27	16	3	102
	23.5%	31.4%	26.5%	15.7%	2.9%	100.0%
Kendall's τ b	0.615		Kendall's τ c	0.754		

5.3 Correlation between Involvement in Organic Food and Attribute Evaluations in the Purchase of Natural Food

By what standards do high involvement consumers choose natural foods? Focusing on the high involvement in organic food segment, we examine how the degree of involvement affects the attribute evaluations at the time of purchase. The questionnaire adopted a numerical system of rating, that rate the answers on a scale of -2 to 2 for each of the 8 factors valued in the purchase of natural food. Average values can be obtained by translating the answers into numerical values.

Table 10 demonstrates the average values of differences between high and low involvement segments. The average values of the high involvement segment are higher in all sections except for "cheap price" and "display". Table 11 indicates results of the test that also measure the differences between average values. The average scores for "description of product" were different by 1.0% level of significance.

Table 10 Organic Involvement and Attributes Evaluations in Purchases

	High Involvement in Organic Food		Low Involvement in Organic Food	
	Average Score	Standard Deviation	Average Score	Standard Deviation
Food quality	1.88	0.47	1.70	0.58
Description of products **	1.58	0.67	1.15	0.16
Wide variety of goods *	1.17	0.73	0.78	0.89
Interpersonal service quality	0.83	0.83	0.50	0.95
Cheap price	0.38	1.17	0.58	1.07
Store atmosphere	0.50	1.02	0.22	1.15
Packaging	0.19	1.08	-0.08	1.18
Display	-0.19	1.08	-0.08	1.08

Note: test of difference in average values (two-sided t-test):

** $p< 0.01$ * $p< 0.05$

5.4 Involvement in Organic Food and Per-Customer Expenditure

Next, we shall verify the correlation between the degree of involvement and the total consumer expenditure at MOTHER'S. Table 11 shows average amounts of purchases and standard deviation according to the degree of involvement in organic food. Evidently, the degree of involvement is proportional to the amount spent. For example, while "concerned" people, who belong to the high involvement in organic food segment, spent an average of 3,591 yen (total amount spent at the store), the members of the low involvement segment spent only 1,957 yen.

Table 11 Involvement in Organic Food and Average Customer Expenditure

High-Involvement in Organic Food		Low-Involvement in Organic Food		
Average Expenditure(¥)	Standard Deviation	Average Expenditure(¥)	Standard Deviation	t value
3591.0	2348.63	1957.7	1607.46	4.07 **

Note: test of differences in average values (two-sided t-test):

** $p< 0.01$ * $p< 0.05$

5.5 Involvement in Organic Food and Shopping Frequency

This section examines whether the degree of involvement in organic food corresponds with shopping frequency (Table 12).

In the high involvement in organic food segment, customers who visit MOTHER'S more than three times a week account for 28.8% and "once or twice a week" for 59.7%. In total, 88.5% of the high involvement in organic food segment can be considered as frequent users.

By contrast, in the low involvement segment, frequent users only amount to 66.0%. The rates of "more than 3 times a week" or "once or twice a week" users were 30.0% and 36.0% respectively.

As mentioned before, overall, the frequency of visits is quite high for MOTHER'S customers, of which the high involvement in organic food cluster has been proven to be the most frequent user segment.

Table 12 Involvement in Organic Food and Frequency of Visits

	Frequency of Visits					Total
	More than three visits a week	One or two visits a week	One or two visits a month	Three or four visits a year	First time visits (Never visited before)	
High Involvement in Organic Food	15	31	4	1	1	52
	28.8%	59.7%	7.7%	1.9%	1.9%	100.0%
Low Involvement in Organic Food	15	18	10	2	5	50
	30.0%	36.0%	20.0%	4.0%	10.0%	100.0%
Total	30	49	14	3	6	102
	29.4%	48.1%	13.7%	2.9%	5.9%	100.0%

5.6 Involvement in Organic Food and Sales Contribution

The previous section clarified the correlation between the extent of involvement in organic food and the expenditure per-customer. In this section, we attempt to estimate the sales mix of MOTHER'S, by applying the "frequency of visit" figures.

Table 12 (above) presents the frequency of store visits according to the extent of involvement in organic food according to this survey. Customers were divided into groups according to the frequency of visits, and by converting the values of each group to a year-round value, we estimated cumulative figures of annual visits. For example, we assumed that the "More than three visits a week" category would visit the store four times a week on average and thus, 208 times a year.

Similarly, the "One or two visits a week" group is deemed to visit on average 1.5 times a week, and 78 times a year.

Table 13 shows estimated sales revenue and sales mix per category, depending on the degree of involvement in organic food and the frequency of visits. Here, we weighed the complex factors of annual visit frequency, per-customer expenditure, frequency of occurrence and the sampling ratio (10.4%). The estimated sum was 280 million yen, of which 68.1% was contributed by the high involvement in organic food segment. Also, the data clearly shows that frequent users, who visit the store more than three times a week, generate 59.0% of the turnover.

These results offer the important discovery that the crossover segment, where high involvement in organic food and high frequency of visits overlap, plays a vital role for business operations of organic supermarkets.

Table 13 Involvement in Organic Food and Estimated Contribution Rate to Total Sales

	Frequency of Visit					Total (¥,%)
	More than three visits a week (¥,%)	One or two visits a week (¥,%)	One or two visits a month (¥,%)	Three or four visits a year (¥,%)	First time visits (Never visited before) (¥,%)	
High Involvement in Organic Food	105,823,774	82,026,537	2,436,231	118,428	3,384	190,408,354
	37.8%	29.4%	0.9%	0.0%	0.0%	68.1%
Low Involvement in Organic Food	58,851,130	26,487,242	3,387,115	131,721	9,409	88,866,617
	21.1%	9.5%	1.2%	0.1%	0.0%	31.9%
Total	164,674,904	108,513,779	5,823,346	250,149	12,793	279,274,971
	58.9%	38.9%	2.1%	0.1%	0.0%	100.0%

6. Conclusions

In order to reach a conclusion, we must summarize three important facts obtained from the analysis of the questionnaire survey of organic supermarket users.

The first observation is that "cheap price" or "close from home" was not the reasons for store choice for many users. Unlike mainstream supermarket users, orientation towards price or convenience was not a factor here. Additionally, in choosing natural foods, these customers attach more importance to "quality" or "description of products" than to "price", "package" or "display".

Secondly, users of the MOTHER'S supermarket showed a strong

commitment to organic food. They shop at MOTHER'S on the grounds that it is a natural food shop. They have a tendency to visit multiple natural food stores and opt for natural produce when buying foods. These tendencies attest to their strong adherence to natural products.

We surmise that this adherence is presumably backed up by a strong consciousness for health and safety. These results indicate the existence of a stable consumer segment in Japan, which translates the concern for health and safety where purchasing behavior is concerned.

Finally, among the health/safety-conscious users, there exists a special segment of people who show an extremely high commitment to organic products.

Most of the food consumed by this high involvement in organic food segment was natural food. Research data clearly shows that this high involvement segment appreciates the "description of products" more than the low involvement segment does. This patron base constitutes heavy users whose per-customer spending and frequency of visit are both considerably high. The high involvement in organic segment is therefore the mainstay of support for the organic supermarket business.

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