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2. Abstract title: Evaluation of the profile of the Brazilian consumer of organic food:
an analysis of the market and company

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1. Introduction

The consumption patterns have evolved in recent years due to changing in the preferences and desires of consumers. Thus, to create sustainable competitive advantage, companies must differentiate themselves in accordance with the requirements of consumers, and adapting its internal environment to desires of consumers (SHANAHAN et al., 2008). The market is increasingly dynamic, tastes and preferences change at a rate less and less.

This context is no different within food production. In fact, the dynamics of the global market also affects the food sector. In this context, the food sector which plays a strategic role in all economies and being affected by food crises and new perceptions of the products offered. Moreover, the saturation of the market creates the need for careful positioning of the food product (BARBENA, SANCHEZ, 2010).

The development of new products in food segment has experienced the influence of increasing interest for new demands, as the search for foods that meet the consumers' emerging needs regarding their own health and the environment condition (CHEN, 2009). One of the trends in the food industry today is the production of organic foods, which is confirmed by the growing demand for these products in recent years (CICEK; KARTALKANAT, 2010; CRINNION, 2010, LIN et al. 2010).

Companies that produce organic foods have the challenge of ensuring the safety and quality attributes demanded by consumers throughout the whole food chain, since these products are still in introduction stage and are not prevalent (CHEN, 2007; LINDH; OLSSON , 2010). In addition to ensuring the required attributes of quality and safety, the producers of these foods should focus their efforts to meet the additional requirements of their customers.

In spite of the projected high growth in consumption of organic products, the customer characteristics that contribute to its growth are not well understood (ZHANG et al., 2008). Understanding customer behavior on organic foods may help producers to understand the consumption values and in turn, to develop a production mode and a marketing approach that combines these values, in addition to develop new products and improve the existing ones and to formulate guidelines for their companies quality management (CHANG; ZEPEDA, 2005; BERLIN et al., 2009).

In this sense, understand and define the profile of the consumer market is one of the biggest corporate challenges. The profile of the consumer market is defined as a reference. Companies try to approximate this ideal as possible. But it is remarkable that the level of proximity of some companies may be considered low. Thus, this study aimed to identify how close is the knowledge of Brazilian companies producing organic foods on consumers of these products as a function of four variables: reasons for purchase, characteristics packaging, local marketing / acquisition and source of information about the products. Thus, a survey was conducted with a sample of Brazilian companies and consumers based on a structured questionnaire of four questions related to the issue of multiple variables. The following section presents the theoretical framework that support the research.

2. Theoretical background

In the past decade, organic food accounted for only a small segment of the market. A small number of consumers were willing to pay higher prices for these products in this market in order to have quality and product safety guaranteed (PELLEGRINI; FARINELLO, 2009). Thus, the production of organic food is a trend in the food industry initially limited to some regions of the planet, which mainly reflected

the opposition to the consumption of industrialized food (GUTHMAN, 2003; LIN et al., 2010).

In subsequent years, the greater acceptance of organic foods has been fueled by the widespread acceptance of its quality characteristics, which has significantly increased the number of customers, retailers or processors (ROSIN; CAMPBELL, 2009).

Conceptually, organic food is that produced in compliance with certain standards for their production, handling, their stages of processing and marketing. The product must be properly certified by a body or specific authority to this end (RAMESH et al., 2005). As a general rule, the organic food definition is based on its production process (ANDERSON et al., 2006). Some authors, however, state that the subject is a hallmark of labeling (KOUBA, 2002; RAMESH et al., 2005), which does not seem to be entirely correct.

It should be clear for the consumers that "organic" is not related to safe food (MAGKOS et al., 2006). The label "organic" provides assurance to consumers that no food ingredient has been subject to irradiation and genetically modified organisms are excluded from its production (KOUBA, 2002).

Organic foods differ as to the variety and origin (SIDERER et al., 2005). Moreover, they are products with reduced durability compared to conventional foods (CAMPBELL, 2007). The organic production proposal is to combat the environmental and social impacts of food production, in addition to promote better quality of life to people who consume industrialized food (PUSSEMIER et al., 2006).

There is a general consensus in the literature about the reasons by which people will purchase organic food. It is observed in the literature, for example, that there are

differences between the consumers' attitude (usually positive) for organic food and the relatively low level of actual purchases.

More generally, one can consider that the organic product has market differentiation due to their intangible characteristics. These characteristics have given large and rapidly growing consumer market. However, there are challenges with research on the consumers of these foods due to the discrepancy between their perception on the issue of its elements that promote health, on the one hand, and scientific evidence of this fact on the other. Thus, there is no clear answer to the question: are organic foods healthier or not (PEARSON et al., 2011). Consumers seem to think so, as pointed out by the research of Gibbon et al. (2009).

In Brazil, there is increasing not only the expansion of the numbers of farmers who turned the traditional mode of agricultural production into organic methods, but also the number of outlets that sell these products (IBGE, 2006). In Brazil, small and medium businesses represent 90% of organic farmers, who work primarily in the domestic market. The other 10% consists of large establishments whose production is export-oriented. The processing of products is predominantly carried out by larger companies (BUAINAIN; BATALHA, 2007).

The production of organic food and its expansion in Brazil is seen as a lever for social empowerment of small farmers (BLANC, 2009). However, the organic food sector is still small and Brazil presents bottlenecks in the production, commercialization and institutionalization (BUAINAIN; BATALHA, 2007). Despite the high potential for production growth and increased product variety, supply of organic food is relatively inelastic and prices remain high in Brazil. The market share of organic products in total food sales is small, which corresponds in part to ignorance of the characteristics of consumers of these products by the Brazilian

companies (BUAINAIN; BATALHA, 2007). Then the research method is presented and then the results are found in field research.

3. Research Method

According to the classifications given by Kumar (2005), we used in this study the inductive research method, since the elements identified arise from the peculiarities observed for data and information generalization. The exploratory objective of this study aims to verify if the entrepreneurs of organic food sector know their market share, the consumers. For this purpose, we use the survey-type research, according to the classifications for technical procedures Bryman (1994).

3.1 Data collection tool

We chose a structured questionnaire, able to be sent, accessed, filled out and returned online. Google Docs platform was used for its construction. With this tool, this questionnaire can be sent automatically for respondents via e-mail, and it allows completion of the responses automatically, storing the data in a digital file. Sending the questionnaire by e-mail is used in other studies that address some characteristic of the consumer regarding any particular product, eg, Powell et al. (2011) and Webster et al. (2010).

According to Baruch and Holtom (2008), electronic questionnaires present apparently higher response rates, cost and times smaller than those applied by physical means. Additionally, they allow sending the same email message to multiple recipients at once, thus having a greater control of the questionnaires, providing larger territory coverage and ensuring the respondents' confidentiality and privacy. Surveys based on electronic consultations have become more popular because they are considered faster,

better, cheaper and more easily driven than traditional questionnaires (EVANS, J.R; MATHUR, 2005; SCHONLAU et al., 2001).

The questionnaire was divided into four questions. The same questions were applied to the companies and consumers, both of organic food. The questions were presented to for both members of the research in a multiple choice format (in this case, a question for each construct). Focus groups were conducted prior to identify the 4 variables that are investigated in this study. Based on Barbena e Sanchez (2010) and Achilleas e Anastasios (2008) ten options were presented to the question of reasons to buy organic food:

- The name “organic” is a brand to the consumers;
- Organic food is considered by the consumers superior in terms of quality when compared to others foods;
- The consumers rely on product origin;
- Just to be organic food;
- Consumers are concerned about the health of farmers and animals;
- Consumers are concerned about the sustainability of the environment;
- Consumers want to have a healthy life;
- Consumers like to follow the practices of society;
- Consumers consider the organic food safer than the other;
- Consumers ate one and liked it.

The options on the characteristics of the packaging were: shelf life, chemical composition, packaging shaping, presence of the name organic on the package, seal of organic certification, and nutrition facts. About the local retail (companies) / acquisition (consumers) four options were available to choose: fairs, supermarkets and hypermarkets, specialty grocery and box home. The market of organic food is expected to expand in the future. Stimulating its growth is necessary provide information about these products. The consumers were asked about which source of information about organic foods. Five options were available: newspaper, magazines, television, friends and Internet. The most frequent response was Internet. Thus, the companies were asked if they have email address.

According to Aaker et al. (2001) at the end of questionnaire formulation, it is recommended to do a pre-test with the objective to assure the researcher that the questionnaire achieves his expectations for capturing the required information. The pre-test should start with the researcher, filling out its own questionnaire, and later with a small sample selected. Some relevant points must be observed in the pre-test such as the question meaning, difficulty in answering, interest and attention of the respondent, questionnaire flow and non-fulfillment patterns. Thus, ten people were selected by accessibility criterion to do the questionnaire pre-test. After obtaining the answers necessary corrections were made and the questionnaire was sent for sampling people from the study's target audience.

3.2 Sample Characterization

The Brazilian Regulation on organic production was established in the Ministry of Agriculture, Livestock and Food Supply to develop all aspects of organic farming. Organic farm began to be governed by law number 10831, promulgated on December

23, 2003. Under this regulation, all certified organic producers in Brazil and certifiers operating in Brazilian territory, shall work in accordance with that regulation. Others Brazilian regulation cover organic systems of animal and plant production, sustainable extraction organic. In addition, Brazilian regulation presents technical regulations for the processing, storage and transportation of organic products (ANACLETO, 2011).

In Brazil, all kind of organic food sold in markets stores and specialty stores must be certified by three accredited organizations by brazilian government. In other words, certification rights have been obtained by the following agencies: Ecocert, Tecpar and IBD (MAPA, 2011).

Initially, the accredited certifiers were asked in order to quantify the total number of certified companies in Brazil. By the end of the first half of 2011, approximately 515 companies were certified to represent the population of this research. Data from these companies are available in the electronic addresses of the certifiers. As the most scientific research is virtually impossible to evaluate all the elements of a study population of interest, we proceeded to calculate the sample being investigated. Thus, considering the tolerable sampling error of 5%, it calculated the size of the sample with a final score of 201. The final sample, 201 companies, was formed by randomly that sets simple random sampling.

The number of people who formed the non-probabilistic sample was defined by accessibility or convenience criterion. According to Gil (2002), in this sampling criterion the researcher selects the respondents who have access, assuming that they can somehow represent the universe. It should be noted that each participant was selected based on representativeness criteria which mainly involved aspects such as gender, income, age and educational level. The sample was directed at consumers or potential

consumers of organic products. In addition, previous studies on the organic food consumer profile, e.g., Barnes et al. (2009), Berlin et al. (2009), Brown et al. (2009), Chen (2009), Gonzalez (2009) and Yin (2010), provided the basis for sample selection. Thus, the questionnaire was sent by e-mail to a sample of 450 people from 12 of the 27 Brazilian states. These twelve states together represent more than half of the Brazilian population.

3.3 Data Processing

The time required for responses collection spanned a two-month period. To ensure the sample representativeness, the questionnaires were sent on different days to respondents (consumer and companies) of the various regions of Brazil. Respondents were chosen randomly and emails submitted to a database at random. A total of 280 questionnaires returned to the tool, answered by the consumers. The return rate of questionnaires was 62.22%. About the companies, 61 completed questionnaires returned to Google Docs platform. In this case, the return rate is 30, 34%.

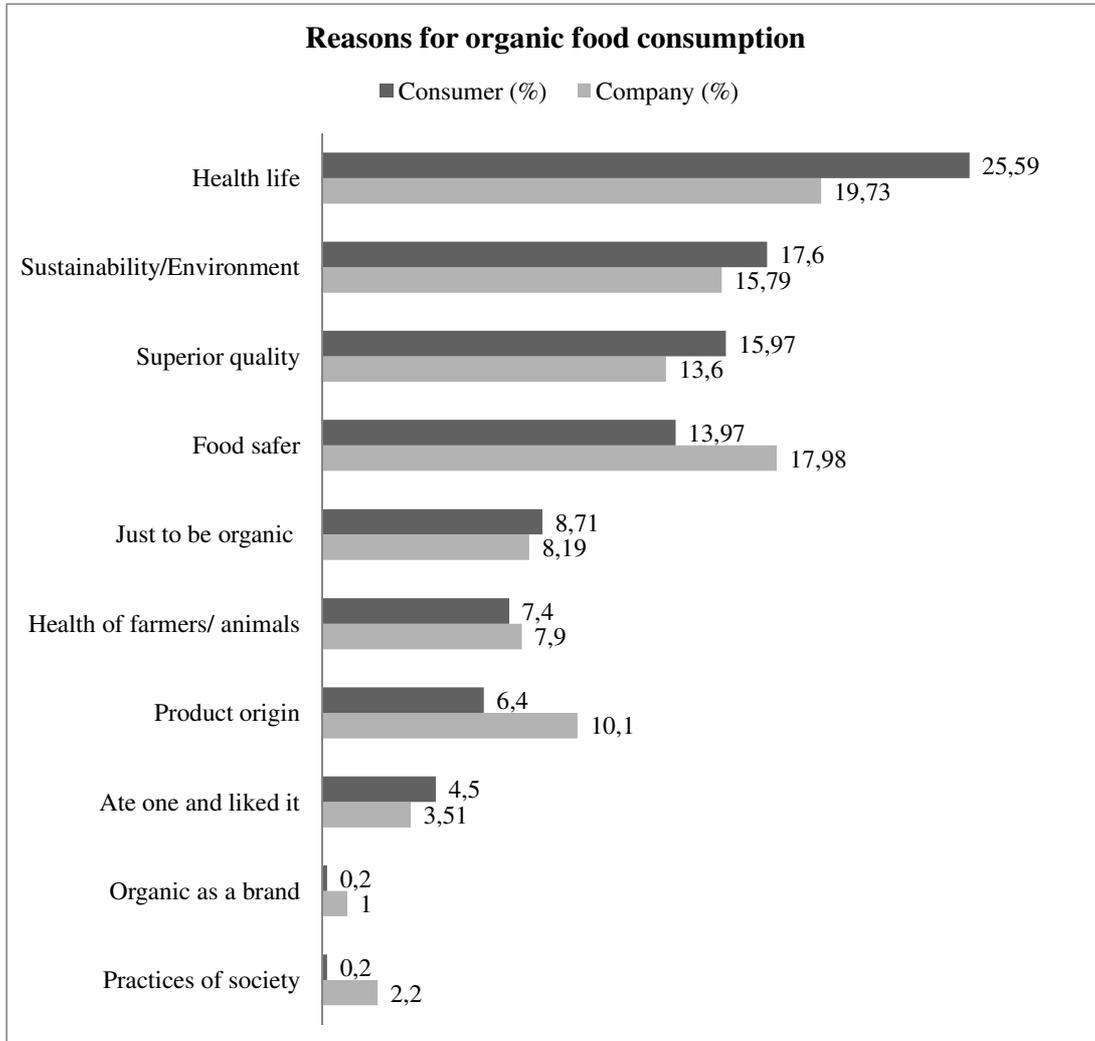
After returning the questionnaires, we proceeded the data analysis using descriptive statistics. To this end, we used the software Microsoft Office Excel 2007. The quantitative approach predominates at this research stage. Data from the first part of the questionnaire were expressed as percentages.

4. Results and discussion

The results show that of four variables, three had similar responses between the producers of organic food and consumers of these products. For the variable "reasons for drinking" organic food consumers answered more frequently they consume these products because they want a healthier life. This was also the most

frequent response in the survey of the companies producing these products, as shown in Figure 1. For both consumers and producers to the frequency of responses was very similar in reverse order to that variable.

Figure 1 – Reasons for organic food consumption

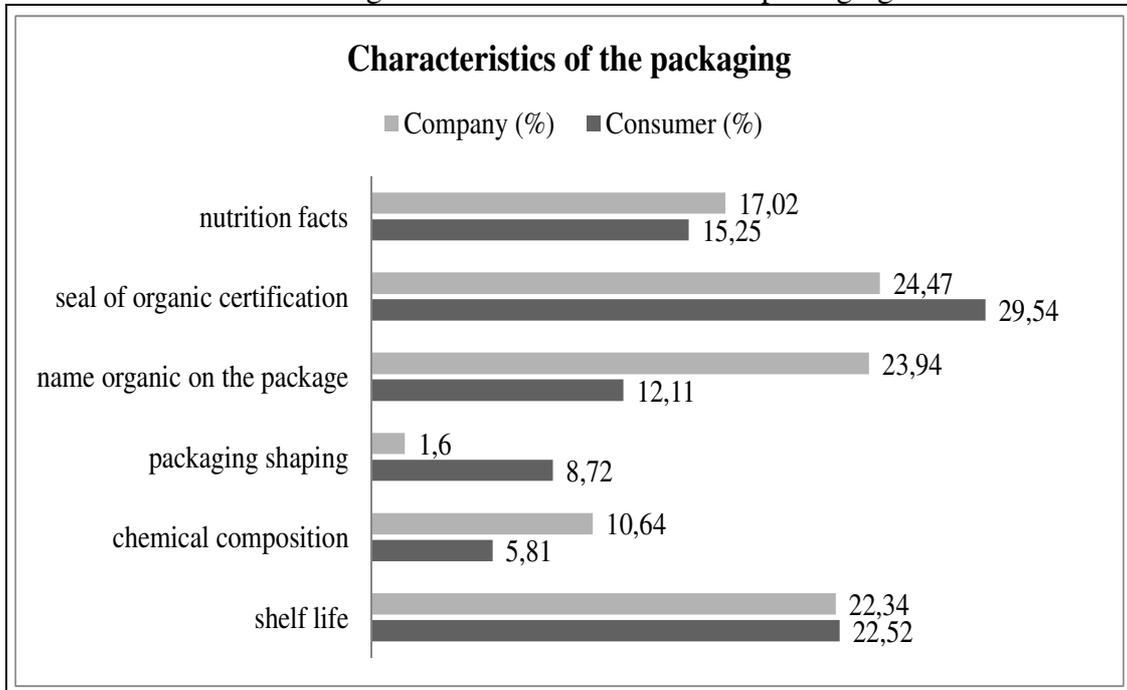


Source: research data

For the characteristics of the packaging, the first one considered by the consumer is the seal of organic certification, as shown in Figure 2. Similarly, this is also the element with the highest frequency of responses by producers. The second characteristic that consumers find most important in packaging is the shelf life. This response is also second to the producers. The least interest to the consumer in the characteristics of the packaging is the presence of organic chemical products. However,

this was not the feature that had the lowest frequency of responses to the producers. However, consumers underline the shape of the packaging when buying these producers, a feature that is not as relevant to the producers (1.6%).

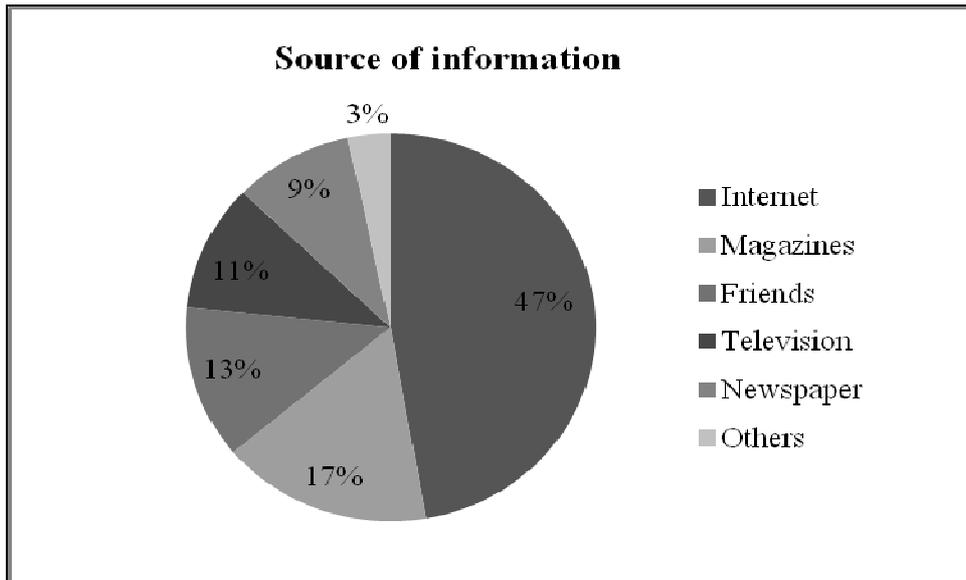
Figure 2 – Characteristics of the packaging



Source: research data

To expand the market for organic food products is necessary to disclose this in main stream media. In the case studied, it was found that the Internet is the main source of information for consumers consulted, as shown in Figure 3. The magazines are also a source of information for consumers of organic foods. The study also points out that there are other sources of information about this product, value of 3.3%, which is not relevant due to its low value. The producers of organic food have been investigated in relation to the website. Most of them answered that they have their own website, as shown in Figure 4.

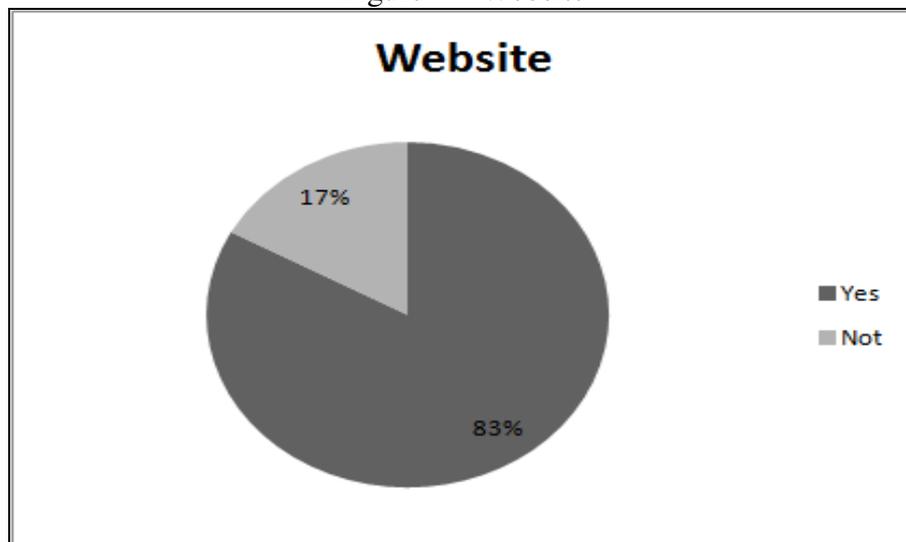
Figure 3 – Source of information



Source: research data

The website the information about the products they sell as well as points of sale is presented in a summary way to the public. Through on line sales can also be performed. This fact may be auxiliary to expand the market for such products. But it is necessary for producers to provide that option to their customers.

Figure 4 – Website

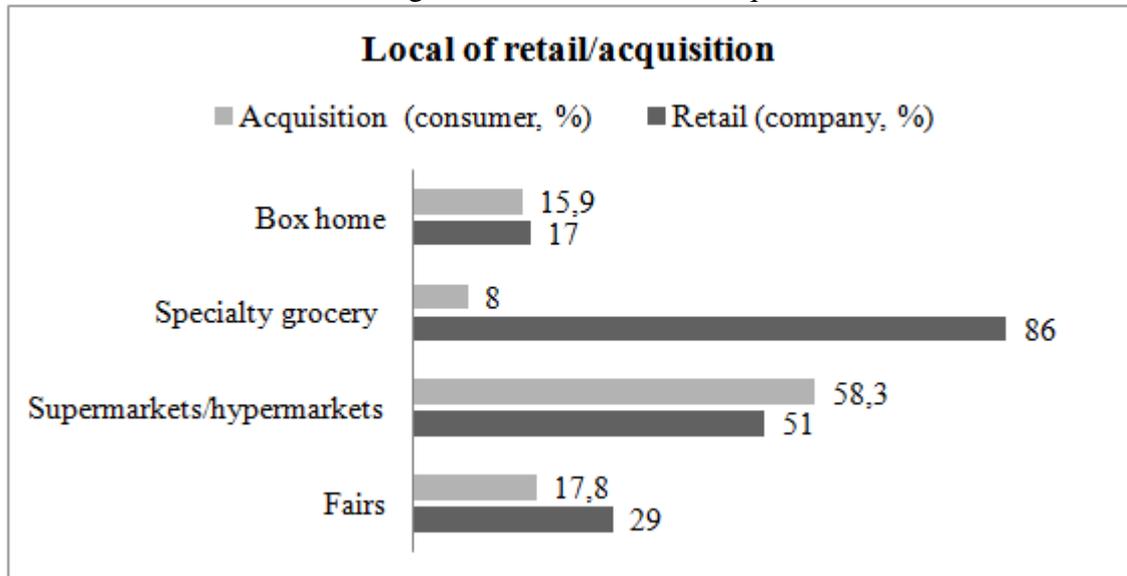


Source: research data

On the other hand, the main local marketing of organic foods based on data from the companies, was specialty grocery. While consumers have pointed out that the place of purchase of organic food is the dominant supermarket or hypermarket, as shown in Figure 5. This information reflects the missing information of producers on the

local preferred by consumers to purchase their products can interfere with the leverage of sales and increased market share.

Figure 4 – Local of retail/acquisition



Source: research data

In the next section presents the conclusions of this work.

5. Conclusions

The aim of this study to identify how close is the knowledge of Brazilian companies producing organic foods on consumers of these products as a function of four variables: reasons for purchase, characteristics packaging, local marketing / acquisition and source of information about the products. To achieve that goal, a structured questionnaire was constructed in four multiple choice questions. We analyzed the data using descriptive statistics.

It is concluded that the Brazilian producers know the reason for the consumption of their products: Brazilian consumer buying organic food mainly because of his concern for his health. The sales of these products can be increased if producers disclose information about their producers on the Internet since this is the

primary means for obtaining information about organic food consumers. In addition producers should expand their marketing places, mainly to supermarkets.

The present study has some limitations, for example, one cannot generalize the data obtained here to the universe of the organic food consumer population. In order to identify the perspectives for future work, we suggest further research on this topic, extending the survey of the consumer profile of organic food for a broader sample. Moreover, it is suggested to increase the comparison of the results found in this study with other studies conducted elsewhere in the world. The identification of specific methodologies to improve the development of new organic food products is also required.

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