

CONSUMER BEHAVIOUR ASPECTS RELATED TO VEGETABLE OIL CONSUMPTION

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ABSTRACT: Changes in consumer behaviour related to vegetable oil in the last several years, show that consumers diversify their cooking oil usage, introducing in their diet different kind of vegetable oils. Consumers use several kinds of vegetable oils for a healthy and nutritious diet, for a variety of gastronomy and other purposes. Vegetable oil producers and merchants from the Romanian market should realize that in order to face their competition they have to understand what are the needs and wants of their customers related to vegetable oils. Their research results should reveal what kind of vegetable oils are preferred and used by consumers, what are the purposes of the vegetable oil usage, how important is for the consumers the quality of the used oils, how consumers appreciate to use different kind of oils for different purposes, what are the wants of consumers related to vegetable oils, what are the place and frequency of purchases, etc. Based on marketing research related to vegetable oil consumption, organizations can become able to create and offer value for their customers using socially responsible marketing, and can become able to adapt their offers to the consumption styles of their customers. The author presents the results of a primary; exploratory research related to different aspects of vegetable oil consumer behaviour. For this purpose it was elaborated a questionnaire, which was administered on-line for a non-representative sample of consumers from Oradea.

Key-words: vegetable oil consumption, consumer behaviour, consumer awareness, marketing, responsible marketing

1. INTRODUCTION

In order to become and remain competitive, companies which produce and/or commercialize vegetable oils should obtain information about their potential and actual consumers' preferences and consumer behaviour. They can obtain this kind of information through a variety of marketing research methods and tools, both qualitative (focus group interviews, deep interviews, projective techniques) and quantitative methods (questioning, observation, experiments), which they consider proper for their consumers and their own company (Prutianu – Anastasiei – Jijie, 2002).

Organizations from the vegetable oil and natural fat producing industry use raw materials of animal origin or vegetal origin. Vegetable oils are obtained from oleaginous plants, which have the capacity of accumulating oil in their diverse parts. (Muntean et al, 2008).

Oleaginous plants contain fat of which 96-99% represents glycerides, and 1-4% complementary substances of glycerides. Glycerides are esters of glycerol with higher aliphatic monocarboxylic acids. Glycerol is a syrupy liquid, which has sweet taste, and which is hygroscopic. (Domuța - Domuța, 2010)

Changes in consumer behaviour related to vegetable oil in the last several years, show that consumers diversify their cooking oil usage, introducing in their diet different kind of vegetable oils. Consumers use several kinds of vegetable oils for a healthy and nutritious diet, for a variety of gastronomy and other purposes. We can observe differences in preferred types of vegetable oils in different geographical regions, countries, cultures. At global level consumers use vegetable oils obtained from different plants, but the most used ones are palm oil, soybean oil, canola oil and sunflowerseed oil. Global vegetable oil consumption reflects a continuously increasing trend, especially due to increasing palm oil consumption. While in 2010 global vegetable oil consumption was 145.34 million tons, in 2015 global vegetable oil consumption was 176.88 million tons. In 2010 vegetable oil consumption by oil type was: palm oil 47.63 million tons, soybean oil 40.74 million tons, canola oil 23.27 million tons, sunflowerseed oil 11.75 million tons, other types of vegetable oils 21.95 million tons. In 2015 vegetable oil consumption by oil type was: palm oil 61.5 million tons, soybean oil 51.2 million tons, canola oil 27.09 million tons, sunflowerseed oil 14.14 million tons, other types of vegetable oils 22.95 million tons. (Statista, 2016 a)

In 2010 sunflowerseed oil production represented 13% of global oil production, and sunflowerseed oil was the most used type of oil by consumers in Romania, being appreciated for its taste, colour, consistency, and being high in A,D,E,K vitamins (Domuța - Domuța, 2010).

Sunflowerseed was introduced in Romania in the middle of the XIX. century in Moldavia, and became the most important source for obtaining vegetable oil for consuming in households. The costs related to producing sunflowerseed as raw material for vegetable oil production are not very high. The sunflowerseed oil can be easily extracted by pressing; the normal extracting efficiency is situated roughly at 45%. 1 hectare tillage of sunflowerseed can offer at actual producing capacities raw material for roughly 900-950 kg of sunflowerseed oil. (Bîlteanu, 2001)

Vegetable oil producers and merchants from the Romanian market should realize that in order to face their competition they have to understand what are the needs and expectations of their customers related to vegetable oils. Their research results should reveal what kind of vegetable oils

are preferred and used by consumers, what are the purposes of the vegetable oil usage, how important is for the consumers the quality of the used oils, how consumers appreciate to use different kind of oils for different purposes, what are the wants of consumers related to vegetable oils, what are the place and frequency of purchases, etc. (Datculescu, 2006)

Based on marketing research related to vegetable oil consumption, Romanian organizations can become able to create and offer value for their customers using socially responsible marketing, and can become able to adapt their offers to the consumption styles of their customers.

2. SECONDARY RESEARCH REFERRING TO VEGETABLE OIL CONSUMPTION IN ROMANIA

Based on secondary information sources we can find out several aspects and characteristics of vegetable oil consumption in Romania, and we can make comparisons with vegetable oil consumption characteristics of inhabitants of other countries.

A complex legal frame related to vegetable oils and fats regulate in Romania the nature; content; production, packaging, labelling, storing and selling conditions; quality and quality control; hygiene and sanitary rules; food additives and flavours; etc. in case of vegetable oils (Penciu, 2012).

In 2005-2006 the vegetable oil consumption in Romania was characterised by the following aspects: the annual consumption per capita was about 11 litre (in comparison this indicator in Hungary was 7 litre per capita, in Austria 5 litre per capita), and 95% of the consumption was represented by sunflowerseed oil. A report of BCR-Erste Bank suggests that in 2005-2006 the price of oil decreased in Romania, and as a result consumers reoriented themselves in the direction of consuming higher quality vegetable oils. (Cristea, 2008)

Before 2007 Romania succeeded to export annually 10-20% of own vegetable oil production (especially in Israel, Egypt, Turkey, Italy), but in 2006-2007, due to bad weather and drought conditions, oil production in Romania decreased (Cristea, 2008). A Nielsen study underlined that as a result, in comparison with year 2006, in 2007 in Romania oil prices increased roughly with 80%, sales also increased with 96.6% to 516.2 million RON (152.3 million Euro), but this was caused by increased prices, the volume of sales remained at roughly the same level, oil consumption was 260,000 tons (Cristea, 2008). In 2007 the average price of 1 litre sunflowerseed oil raised from about 3.8 RON to roughly 6 RON (Ardelean, 2009). Because the differences decreased between the price of sunflowerseed oil and olive oil, Romanian consumers started to consider olive oil a very good substitute to sunflowerseed oil, as a result the sales of olive oil in 2007 increased with 200% in comparison with year 2006 (Ardelean, 2009).

In 2008 Romanian inhabitants' sunflowerseed oil consumption was 2.2 times higher than Hungarian inhabitants' sunflowerseed oil consumption (Cristea, 2008).

It seems that Romanians remain traditional in vegetable oil consumption behaviour, in 2008 sales of vegetable oil raised to about 200 million Euro, from which 90% was sunflowerseed oil (Ardelean, 2009).

The market volume of different types of vegetable oils in Romania depends on the consumers' cultural background, consumer behaviour, consumer awareness, etc. (Ardelean, 2009). Taking in view the cultural background of vegetable oil consumption in Romania, we can affirm that most of Romanians prefer sunflowerseed oil, but we can observe changes in consumer behaviour, as more and more consumers use a variety of vegetable oils (Ardelean, 2009). In Romania the main type of vegetable oil consumed in the households is sunflowerseed oil, but on the Romanian market there are offered also other types of vegetable oils, like simple olive oil, virgin olive oil or extra virgin olive oil (Bilteanu, 2001).

In 2009 Romanians vegetable oil consumption per capita was about 11 litre, and from this quantity about 2-3 litre represented other types of oils than sunflowerseed oil (Ardelean, 2009). We can also mention that in the European Union besides sunflowerseed oil, consumers use especially olive oil, soybean oil, canola oil, and of course we can find regional differences in oil consumption (Ardelean, 2009).

Due to other sources in 2009 vegetable oil and fat consumption in Romania was 10 kilograms, while in other European countries were the followings: in Italy 28 kilograms, in Portugal 21 kilograms, in The Netherlands 18 kilograms, in Hungary 15 kilograms, in France 15 kilograms, in Spain 15 kilograms, in Malta 13 kilograms, in Lithuania 5 kilograms, in Poland 5 kilograms, in Luxemburg 5 kilograms) (Statista, 2016 b).

Romanian consumers consider canola oil and soybean oil as being cheap and of lower quality, with unpleasant taste and smell. They are also afraid that for soybean oil production companies use genetically modified raw materials. Regarding olive oil, Romanian consumers can't really make the difference between the different types, like virgin and extra virgin olive oil, and don't appreciate the taste and smell of extra virgin olive oil. Specialists consider that there is a need of educating consumers about different types of vegetable oils. (Ardelean, 2009)

Socially responsible marketing (Kotler – Keller, 2008) should have an important role in educating consumers to become aware and conscious about the advantages of consuming different types of vegetable oils, for different purposes (for example: healthy diet, maintaining fitness or health, preventing diseases, etc.).

Some researches revealed that for Romanian consumers the main criteria in buying decisions is represented by the price of the vegetable oil, and quality. Quality is appreciated through a variety of characteristics of the vegetable oil, for example: colour, consistency, clarity, smell, taste, resistance at reutilisation, content. Brand is considered a guarantee for quality of vegetable oil, especially in case of loyal consumers. Generally females are the buyers in case of vegetable oil, who cook for their families. Consumers prefer PET bottles, especially of 1 litre. (Ardelean, 2009)

The market of olive oil in Romania in 2001 was dominated by 3 important foreign companies: Minerva (Greece), Cost d'Oro (Italy) and Borges (Spain) (Bîlteanu, 2001).

Two American companies: Bunge and Cargill dominated the Romanian vegetable oil market in 2007, with sales of 200 million Euros, which correspond to a production of about 250,000 tons of vegetable oil per year, covering roughly half of vegetable oil consumption. The main Romanian producers on the vegetable oil market in Romania are: Argus Constanța, Ultex Țândărei and Ulerom Vaslui. Due to the estimation of Business Standard the market leader is Bunge, which has about 45% market share, followed by Cargill and Argus Constanța, with a market share of 11%. Companies try to diversify their offers of vegetable oils, introducing new types of vegetable oils, generally under local, regional or national brands, in order to serve different consumer segments. (Piulice, 2007)

3. PRIMARY RESEARCH REFERRING TO VEGETABLE OIL CONSUMPTION IN ROMANIA

The main objective of the primary research is to reveal aspects of vegetable oil consumption among consumers from Romania.

The following information regarding consumer behaviour regarding vegetable oils should be gathered through marketing research (Datculescu, 2006):

- types of vegetable oils consumed;
- purpose of use of different types of vegetable oils;
- profiles of consumers who prefer different types of vegetable oils;
- place and approach of vegetable oils acquisitions;
- frequency of purchasing vegetable oils;
- preferences regarding different types and dimensions of packages in case of vegetable oils;
- impact of marketing communication on consumers' behaviour;
- consumers' concerns regarding environment protection;
- protection and education of consumers;

experiences regarding vegetable oil consumption, etc.

In order to analyse most of above mentioned aspects of vegetable oil consumers' behaviour the author used an exploratory primary research, based on the method of survey. For this purpose the author developed a questionnaire, which was applied online in October 2015. The questionnaire contains questions related to vegetable oil consumption in general, and sunflowerseed oil consumption (because in Romania consumers traditionally use mostly this type of vegetable oil).

The small sample of respondents from Oradea is a non-representative one, in consequence the results are interpreted at the level of the sample, which was formed by women (66.7%) and men (33.3%), of different ages (50% have 18-25 years, 31% have 26-35 years, 9.5% have 36-45 years, 9.5% have 46-55 years, 0% have over 55 years). Respondents have different occupations (47.6% are employees, 38.1% are students at master level, 11.9% are students at bachelor level), different level of studies (97.6% have studies at higher education level, 2.4% have studies at medium education level). 52.4% of the respondents have incomes between 1050-2000 RON, 28.6% under 1050 RON (minimal salary in Romania at the time of the research), 16.7% between 2001-3000 RON, and only 2.3% over 4000 RON.

88.1% of the respondents cook at home, in their households, and only 11.9% answered that they don't cook at home (both category of respondents can offer valuable information regarding vegetable oil consumption).

The results reveal that respondents use several types of vegetable oils: sunflowerseed oil is the most used type of vegetable oil (95.2% of respondents), followed by olive oil (66.7% of respondents), coconut oil (16.7%). Use of soybean oil is the lowest (2.4% of respondents). The most preferred vegetable oil is sunflowerseed oil for 78.6% of respondents, olive oil for only 16.7% of respondents, coconut oil for 2.4% of respondents, and other types of vegetable oils for 2.3% of respondents.

For soup cooking respondents use mostly sunflowerseed oil (90.5%), but they also use olive oil (19%), canola oil (4.8%), and coconut oil (2.4%).

For roasting/baking purposes respondents use mostly sunflowerseed oil (85.7%), but they also use olive oil (23.8%), coconut oil (9.5%), canola oil (4.8%), soybean oil (2.4%), and other types of vegetable oils (2.4%).

For salads respondents use mostly olive oil (88.1%), but they also use sunflowerseed oil (21.4%), pumpkin seed oil (7.1%), canola oil (4.8%), soybean oil (4.8%), grape seed oil (4.8%), and coconut oil (2.4%).

For mayonnaise preparation most of respondents use sunflowerseed oil (97.6%). Some respondents use olive oil (7.1%), and few respondents use soybean oil (2.4%).

In order to prepare cakes most of respondents use sunflowerseed oil (95.2%). Other types of vegetable oils used for preparing cakes are: coconut oil (16.7%), olive oil (7.1%), pumpkin seed oil (2.4%), and grape seed oil (2.4%).

As more and more consumers in Romania started to consume freshly prepared fruit and vegetable juices, in the questionnaire was introduced a question in order to reveal what kind of oils are used for preparing them. 38.1% use sunflowerseed oil, 21.4% use olive oil, 9.5% use coconut oil, 4.8% use grape seed oil, and 2.4% use soybean oil.

The results show that respondents use a variety of vegetable oils in their households, but they prefer mostly sunflowerseed oil for cooking soups, roasting/baking, preparing mayonnaise and cakes. In order to prepare salads respondents use mostly olive oil. For preparing fresh vegetable and fruit juices respondents use mostly sunflowerseed oil and olive oil.

In order to reveal consumer awareness regarding the use of a variety of vegetable oil the questionnaire has a question regarding the importance of using alternatively a variety of vegetable oils. Only 9.5% of the respondents consider this is very important, other 9.5% of the respondents consider this is important, 50% of the respondents have neutral attitude toward using a variety of vegetable oils, 16.7% consider this is not important, and 14.3% consider this totally unimportant.

Regarding the expectations of consumers regarding vegetable oils, the research results revealed that the most important for respondents is that producers should use healthy raw materials (69%). It is also important for them that vegetable oils should have good taste (64.3%), to be produced from quality raw materials (47.6%), to have pleasant colour (38.1%), to have transparent texture (23.8%), to contain vitamins (23.8%), to reduce cholesterol (11.9%), and to contain natural antioxidants (9.5%).

The majority of the respondents prefer as packages PET bottles, and they prefer to buy 1 litre packages (88.1%).

Regarding the place where consumers buy vegetable oils, research results reveal that respondents prefer to buy especially in hypermarkets (45.2%) and supermarkets (40.5%). 11.9% affirmed that they prefer to buy vegetable oils in a grocery, and only 2.4% of the respondents prefer to buy in a mall. Regarding the frequency of purchases, most of the respondents buy vegetable oils at least once a month (42.9%). 23.8% of the respondents buy vegetable oils at least once a week, 21.4% of the respondents buy vegetable oils at least once at two weeks, and only 11.9% of the respondents buy vegetable oils rarely than monthly.

59.5% of the respondents don't follow promotions in case of their preferred sunflowerseed oil brand, 40.5% of respondents follow the promotions regarding their preferred sunflowerseed oil brand. This can indicate that more than half of the respondents buy their preferred brands, even if they cannot find it at promotional prices.

The majority of the respondents affirmed that if they can't find their preferred sunflowerseed oil brand in the store they buy another brand, only 16.7% of respondents answered that they will search their preferred brand in other stores, until they find it. This indicates that vegetable oil producers should cooperate with merchants in order to pay attention to inventory management and to prevent exhaustion of products through sales.

52.4% of respondents prefer to buy sunflowerseed oil at weekend, and 47.6% of respondent prefer to buy sunflowerseed oil during weekdays.

57.1% of respondents look at product labels in order to obtain information about sunflowerseed oil products, 47.6% obtain information from family members, 26.2% of respondents from friends, 26.2% from TV commercials, 23.8% from printed promotional materials, 21.4% from websites, 14.3% from cooking magazines, 4.8% from TV programmes, and only 2.4% from social networks and also only 2.4% from radio commercials. It seems that the most important information source for the respondents is represented by the label of the product; in consequence vegetable oil producers and sellers should offer proper information in necessary amount through product labels.

The main criteria in buying decision for 35.7% of respondents is the quality of the vegetable oil, for 33.3% represents health related criteria, for 26.2% is price, and only 4.8% affirmed that for them the brand is the main criteria.

4. IN CONCLUSION

Analysing aspects of consumers' psychology and consumer behaviour (Datculescu, 2006) related to vegetable oil consumption should be a priority for those Romanian companies which produce and/or sell different types of vegetable oils, for a variety of market segments of their target market. These organizations should identify different market segments, which have specific needs, expectations and consumer behaviour related to vegetable oils, and should develop proper marketing strategies and activities in order to serve them better than their competitors (Kotler – Keller, 2008).

Vegetable oil producers and/or sellers can use different demographic, geographic, economic criteria for segmentation, but it would be useful for them to use especially psychographic and lifestyle criteria (Datculescu, 2006).

Differentiation is very important (Kotler – Keller, 2008), but very difficult to do in case of a product like vegetable oil, but producers and/or merchants could differentiate their products especially through brands, product and corporate image, attached services (for example recipes attached to the products), and experiential marketing (for example cooking at different special events/exhibitions/competitions etc).

Using experiential marketing (Kotler – Keller, 2008) in case of vegetable oils, producers and/or merchants can be creative in offering pleasant experiences for their consumers, which can increase their loyalty. For example they can offer for their consumers the possibility of becoming creative in the kitchen during cooking and share their cooking knowledge with others, to obtain admiration of family members and friends, to become able and successful in preparing delicious foods using attached recipes, etc.

Although Romanian consumers mostly use sunflowerseed oil, there is a trend of increasing the variety of vegetable oils used for different purposes, and they use local, regional and national brands, too.

The present paper, through an exploratory research, revealed some aspects of vegetable oil consumers' behaviour, by gathering information on a small, non-representative sample of consumers from Oradea, Romania. Further research should be done on representative samples at local, regional, and national level, which would be useful for vegetable oil producers and/or merchants to take proper marketing decisions in order to create and offer value for their consumers and other stakeholders, and to remain competitive (Kotler – Keller, 2008).

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