Abstract: In today’s highly informed, competitive and saturated market, a key to success of any business depends on knowing consumer and his consumption patterns and recognizing and understanding factors influencing his decision-making for the purpose of developing an attractive offer of products, supporting services, communication means and other marketing tools that would fit like a glue to customer’s needs. Study of consumer behaviour belongs to a group of very wide and strong subjects of marketing attention and its examination requires ongoing approach. Milk, as one category of dairy products, belongs to the group of basic daily-consumed products characterized by relatively high purchase frequency. On the other hand, its production and consumption is experiencing certain negative trend in Slovakia what inevitably calls for a scientific attention and examination in order to reverse this unfavourable development having a negative impact on the milk companies in Slovakia. Therefore, we focus our attention on studying various factors influencing consumers when purchasing this specific product. Our research in this stage resulted in the compilation of literature review on factors influencing consumers when purchasing milk and determination of boundaries and guidelines for our future research activity.

Keywords: consumer behaviour; factors influencing milk purchase behaviour; milk.

JEL Classification: M31

1. Introduction and Theoretical Background

The need for through study and examination of consumer behaviour is now becoming more and more topical. Current situation on a market has put a consumer into the position of major decisive and leading element of a market. Therefore, the adoption and success of developed marketing strategies, marketing mix and other marketing programs among consumers strongly depends on the company’s ability to correctly understand consumer’s needs and expectations as well as to properly detect and identify individual factors and stimuli influencing consumers when purchasing products for the purpose of reaching their satisfaction. Consequently, studying, understanding and knowing consumers and their behaviour should belong to major and most important tasks of marketers. Considering this, within following article, we concentrate our attention on studying consumer behaviour and examining the influence and impact of various factors affecting consumers when purchasing products. Specifically, at the beginning of the article, we introduce some general theoretical knowledge on consumer, consumer behaviour and factors influencing consumer behaviour and then present the review of scientific literature and outcomes of various research articles, papers, reports and studies related to the issue of our chosen scientific attention, namely the issue of factors influencing milk purchase behaviour.
Marketing represents “an organizational function and set of processes for creating, communicating and delivering value to customer and for managing customer relationships in ways that benefit the organization and its stakeholders” (Burrow, 2012, p. 9). Or simply said, marketing is performing all commercial affairs in the terms of the final results, i.e. in the view of consumer (Gilaninia et al., 2013). Resulting from these definitions it is obvious that customer or generally consumers play a critical role in marketing management and therefore the main aim of marketing within an organization is to create a value for consumers, embodied in produced goods and services, through which a consumer will meet his needs and reach desired satisfaction (Barmola and Srivastava, 2010). Consumer is a cornerstone to the success of any organization because it is a consumer who makes decision whether to buy or not offered products and by this he ultimately influences the existence and prosperity of an organization in the future. If an organization wants to do marketing successfully and effectively, i.e. to “produce” satisfied and loyal consumers, it has to know its consumers and understand their consumer behaviour thoroughly.

Consumer behaviour forms one of important parts of human behaviour (Kita et al., 2002). Every single living person plays a role of a consumer who has to purchase various goods and services, on a daily basis, for the purpose of satisfying existing and emerging needs. Exactly, reaching satisfaction through the consumption of purchased products is the main driving motive why consumers come to the marketplace. However, it is important to note here, that consumer behaviour does not only relate to the very act of purchasing product. According to the definition of Hoyer et al. (2013; p. 3), “consumer behaviour reflects the totality of consumer’s decisions with respects to the acquisition, consumption, and disposition of goods, services, activities, experiences, people and ideas by human decision-making units”. From this definition, it is therefore obvious that consumer behaviour relates to three key processes or acts, i.e. an acquisition (the process of obtaining products), consumption (the process of using products) and disposition (the process of discharging products).

When a consumer considers and decides about what he is going to acquire in order to satisfy incurred need, his purchase considerations and subsequent consumer behaviour and actions applied in purchasing process are influenced and affected by a great variety of factors. In marketing literature, there are many different ways how to categorize individual factors having some impact on consumer behaviour. For an instance Lake (2009) introduced the classification of factors influencing consumer behaviour according to the source of their origin into internal (psychological) factors originating from inside of a consumer such as attitudes, beliefs, motivation or emotions; and external (socio-cultural) factors resulting from external environment surrounding a consumer such as culture, social groups or household structure. Sandhusen (2008) classified factors or stimuli that influence consumer behaviour into interpersonal, i.e. those operating between consumers, such as cultural and social groups; and intrapersonal, i.e. those operating within consumers, such as drives, perceptions and attitudes. Kotler and Armstrong (2004) specified classification consisted of four factors influencing consumer behaviour, namely cultural factors (i.e. culture, sub-culture and social class), social factors (i.e. member groups, reference groups, family, role and status), personal factors (i.e. age, family life cycle, occupation, economic situation, lifestyle, personality and self-concept) and psychological factors (i.e. motivation, perception, learning, attitudes and beliefs). Jain (2010) published the four-category classification of factors or determinants, as he stated in his framework, consisted of economic determinants including factors like income, liquid assets, credit, living standard, government policy and economic conditions; than sociological determinants involving factors such as family, reference groups, opinion leaders, social class and culture; psychological determinants comprising of factors like motivation, perception, image, learning, attitudes, beliefs, personality and lifestyle; and finally personal determinants containing the factor of age, education, occupation, family life cycle, role and status. Finally, Schmitz (2012) divided factors influencing consumer behaviour into the four groups of factors encompassing situational factors, like store’s environment, social situation, time, reason for purchase and mood; personal factors, such as personality, self-concept, gender, age, stage of family life and lifestyle; psychological factors, like motivation, perception, learning and attitude; and societal factors, such as culture, subcultures, social class, reference groups, opinion leaders and family. In conclusion we may see that there is relative conformity about the factors among various authors.
2. Aims, Materials and Methodology

This article focuses on studying various factors influencing consumers when purchasing a specific product, namely milk. The reason why we choose milk as the target of our attention lies in the fact that milk, as one category of dairy products, belong to the group of basic daily-consumed products characterized by relatively high purchase frequency, and on the other hand, their production and consumption in still low and insufficient in Slovakia what inevitably calls for a scientific attention and examination in order to reverse this unfavourable development having a negative impact on individual consumer’s health but also on the Slovak economy as whole. In the connection to this, the main aim of this article is to undertake an examination of scientific and research literature on factors influencing consumers when purchasing milk for the purpose of compiling a summary literature review, pointing out the health and economic importance of its consumption and production in Slovakia and determining a group of factors and stimuli having significant impact on consumer milk purchase behaviour, that would help us to set boundaries and guidelines for our future research activity. To do this literature review we exploited a wide range of secondary data sources including vocational domestic and foreign articles, publications, reports, researches, studies, and statistics.¹

3. Literature Review on Factors Influencing Milk Purchase

Milk represents one of irreplaceable and most fundamental food ingredients for all mammals. Since the beginning of the life of every single mammal kind, milk becomes essential and the only component of food income. Regarding human beings, mother’s milk is usually a part of daily food during the first years of baby’s life and then in the following years of its life mother’s life is replaced by milk gained from other mammal species such as cow, sheep, goat, buffalo or camel. In Slovakia, with the consumption level of more than 98 %, cow’s milk represents the top consumed kind of milk, followed by sheep and goat milk. What refers to the nutrition content (see Figure 1 – Nutritional Composition of Milk), milk is considered to be a very complex and balanced food (Bartošovičová, 2011). Overall, the content composition of milk can be divided into five categories, namely proteins, vitamins, minerals, fats and carbohydrates. We are aware that there exists discussion about the questionable benefits of cow milk for human body but we deal with this issue rather from marketing point of view and take milk as a traditional part of Slovak household consumption, hence we will focus mainly on positive information about its consumption.

The most important nutritional components of milk are proteins. Proteins represent natural substances, consisted of amino acids, which are important for the construction of tissues in human body, the execution of body functions and the functioning of body organs (milkfacts.info, 2014). Milk proteins contains 18 out of 22 essential amino acids that cannot be created by human body itself and that are inevitable for running of human body; and are divided into two basic groups, i.e. caseins and whey proteins (Gonda, 2009; The Dairy Council, 2007-2014). Except of proteins milk is rich in vitamins, namely vitamin A, B (especially B1, B2, B3, B6 and B12), C, D, E and K. Vitamin A is good for human eyes, immune system and health development of body tissues; vitamins B1, B2, B3, B6 and B12 ensure transformation of carbohydrates into energy, functioning of hearth, muscles and nerves and building and maintenance of red blood cells and health immune system; vitamin C plays important role in building structure and maintaining blood vessels, white blood cells, cartilage, muscles and bones; vitamin D helps human body with the absorption of calcium and phosphorus and is important substance in growing bones and teeth; vitamin E supports the creation, growth and regeneration of body tissues; vitamin K provides correct blood clotting (The Dairy Council, 2014). Considering the structure of minerals, milk contains, in significant quantities, the mineral of calcium, magnesium, phosphorus (substances important for the development of bones, teeth, cells and muscles), potassium (substance essential for ensuring fluid balance, supporting muscle contraction and correct functioning of hearth and nerve system) and sodium (substance inevitable for the regulation of liquids and the level of ph in human body), and in trace elements, it contains mineral of copper, iron, manganese, selenium or zinc. Last two essential nutrition components of milk are carbohydrates (especially lactose) and fats. Lactose is simply a certain kind of sugar presented in milk and milk

¹The article presents partial results of the research financed by the grant of Ministry of Education in Slovakia VEGA 1/1351/12 “Exploitation of consumer ethnocentrism effects by the support of purchase and consumption of domestic production under globalization influences”. 

products. It is characterized by easy digestibility whereas it encourages the creation of healthy bacteria in human gut; than supportive absorption properties because it helps human body to retain calcium and phosphorus; and substantial source of energy for the execution of important life functions (Nestlé, 2007). Similar to lactose, milk fat represents also important substance for energy creation and vitamins absorption but in addition it ensures production of hormones and secures protection and warming of human body (The Dairy Council, 2014).

Figure 1 – Nutritional Composition of Milk

![Nutritional Composition of Milk](http://lactalis.com.ua/en/healthy/milkConsists)


Except of the fact that milk has notable positive nutritional impact on human body, it is characterized by pleasurable effect on health and disease prevention. Although a lot of various researches and studies on health aspects and disease prevention effects of drinking milk and consuming milk products are still in progress, there are a number of interesting conclusions and findings which came to light. In the first case, it was found that milk and other milk products have positive impact on the construction and growth of bones and teeth due to high content of calcium, phosphorus and proteins. Except of this, it was confirmed a positive correlation between consumption of milk and milk products and prevention of osteoporosis, i.e. disease of losing bone, occurrence that is caused by leakage of calcium and other minerals important for bone structure (Deakin University Australia, 2013). In the second case, based on a number of international dietary studies (such as e.g. Dietary Approach to Stop Hypertension diet or WELL diet) it was detected that the consumption of low-fat milk products in combination with fruits and vegetables contributed to reduction of blood pressure (The Dairy Council, 2014). In the third case, consumption of milk products was linked to lower risk of type 2 diabetes occurrences. More specifically e.g. the CARDIA study demonstrated that overweight people who consumed greater than 5 servings/day of milk products had an approximately 70 % lower incidence of type 2 diabetes than those who consumed a few milk products, i.e. less than
1.5 servings/day (The Dairy Council, 2014). In the fourth case, milk products appeared to be the right food for protecting human body against several types of cancers. Specifically, higher consumption of milk and milk products was positively associated with reduced occurrence of breast cancer, colon cancer and rectum cancer (The Dairy Council, 2014; Kajaba et al., 2007). In the last case, English researchers recognized the positive influence of milk on cognitive behaviour of human due to its high concentration of vitamin D. From the practical point of view, researchers substantiated this claim by interesting finding that from the Swedish population that annually consumes in average 340 kg of milk per capita (i.e. world’s per capita highest consumption) comes 33 Nobel laureates while from Chinese population whose annual consumption accounts for in average 25 kg of milk per capita does not have any winner of Nobel Prize (William Reed Business Media SAS, 2013).

In addition to health importance milk has an economic significance, too. This means that milk plays a crucial role in the growth and development of not only human body but also national economy. Milk production belongs to fundamental and, from the point of view of its participation in the creation of gross domestic product, substantial sectors of agriculture in Slovakia (Ministerstvo spravodlivosti SR, 2011). The structure of milk industry is consisted of two sectors, i.e. the sector of primary milk production and the sector of milk processing. The sector of primary milk production creates the supply side of raw milk and represents the group of cooperatives, farms and other business units dealing with dairy cow farming, milking and primary processing and raw milk (Ministerstvo spravodlivosti SR, 2011). The development of average number of dairy cows in the territory of Slovakia over the years 2000 – 2012 is shown in the Graph 1 – Average Number of Dairy Cows in Slovakia (2000 – 2012). From the graph, it can be seen that the average number of dairy cows during years 2000 – 2012 had a negative trend with an average rate of decline accounting for 3.76 % per year.

Graph 1. Average Number of Dairy Cows in Slovakia (2000–2012)

![Graph 1. Average Number of Dairy Cows in Slovakia (2000–2012)](image)

Source: ŠÚ SR.

Except of the number of dairy cows, another important indicator of milk production monitored in the sector of primary milk production is milk yield or utility of dairy cows. The development of milk yield in Slovakia reflected a positive direction except for the years of 2009 and 2010 (see the Graph 2 – Milk Yield per One Dairy Cow in Slovakia (2000 – 2012)). Average rate of milk yield in Slovakia within the period of 2000 – 2012 reached the level of 2.95 % meaning that the annual effectiveness of dairy cow utility increased what is generally attributed to foreign investors and inflows of foreign capital spent on reconstruction and modernisation of dairy farms as well as application of innovative production methods. All in all, the sector of primary milk production is considered to be one of the weakest components of milk production chain whose existence and development is conditioned by support and contributions from national state budget and euro funds (Ministerstvo spravodlivosti SR, 2011).
Raw milk gained from dairy cows is consequently processed and used for the production of a whole range of milk products. Figure 2 – Milk Products Made from Fresh Cow Milk depicts simple process of fresh milk processing as well as a list of milk products produced from it. All the business units dealing with this process of milk processing are grouped in the second sector of the chain of milk production, i.e. the sector of milk processing. On the market, they act on the demand side regarding the purchase of raw milk for processing purposes as well as on at the same time on the supply side regarding the offer of final milk and milk products on the milk market. According to the official updated list of approved milk buyers from February 2014, in Slovakia there are 51 registered milk processing companies what represents in the comparison with year 1940, when in Slovakia there was 116 milk companies, above 50 % shrinking (Pôdohospodárska platobná agentúra, 2014; Mlieko.sk, 2014). Currently, the development of Slovak milk market is in hands of more or less twenty milk companies (Levické mliekarne, a. s.; Milsy, a. s.; Rajo, a. s.; Senoble Central Europe, s. r. o.; Tatranská mliekareň, a. s.; etc.) whose are mostly owned by foreign investors from Austria, France, Germany or Italy.

Production of milk and milk products has a long tradition in Slovakia. Its origins date back to the middle ages when milk production was introduced and started in Europe. From the history of milk production, it is known that in early years of milk production sheep milk was processed for the production of milk products and after some time it was started to be predominantly utilized cow milk (Herian, 2013). This pattern of processing essentially cow milk for the production of drinking milk and milk products has been preserve in milk production to this day. Considering contemporary development of milk production, i.e. development within years 2000 – 2012, it has a very volatile character (see the Graph 3 – Milk Production in Slovakia (2000 – 2012)). The most significant reductions of milk production that was observed in years 2004, 2007 and 2009 what was explained by considerable reduction of the number of dairy cows. In the European Union, Europe and even in the world, Slovakia with its annual milk production ranges among one of the latest positions in the list of milk producers. For a better imagination, as an example, we can mention ranking of milk producers from the year 2011 within which Slovakia with its annual milk production of 928 000 tons was placed on the 20th position within European Union, 27th position within Europe and 51st position within the whole world (Milkproduction.com, 2013). From the ranking it is obvious that milk production in Slovakia is low and lags behind the rest of developed countries. This unfavourable situation was caused by influence of socialist regime that for the period of more than 40 years set back the development and progress of milk production. Fortunately, after the collapse of communism and entry into the European Union, Slovakia opened to inflow of foreign investments so needed by milk companies.
In the connection to low production level of milk, Slovakia has been assigned one of the lowest milk quotas within the European Union. National milk quota represents maximum amount of milk that a quota holder can supply or sell to milk purchaser before being liable for a levy (Rural Payments Agency, 2012). Milk quotas were introduced within the European Union with the intention to prevent overproduction and waste of milk. What refers to the development of milk quota fulfilment, Slovakia after entering the European Union was unable, even in a single year, to meet the quota allocated (see Table 1 – Development of Milk Quota Fulfilment in Slovakia (2004 – 2012)). Average rate of total quota fulfilment within the period 2004 – 2012 accounted for 87.3 % per year. In 2015 it is planned to abolish the quota system in the European Union with the intention to ensure unboundedness of milk market (SITA, 2013). Some of member countries, including Slovakia, are
afraid of this act due to high competitive pressure and emergence of milk surpluses. Except of imposing the obligation of meeting settled national milk quotas, the influence of state is also reflected in the imposition of hygiene standards related to milk production, processing and sale as well as in the provision of financial support for the preservation and development of milk production in the country.

### Table 1. Development of Milk Quota Fulfilment in Slovakia (2004 – 2012)

<table>
<thead>
<tr>
<th>Period (Quota Year)</th>
<th>Supply Quota Fulfilment (%)</th>
<th>Sale Quota Fulfilment (%)</th>
<th>Total Quota Fulfilment (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004/2005</td>
<td>94.5</td>
<td>70.0</td>
<td>94.3</td>
</tr>
<tr>
<td>2005/2006</td>
<td>97.6</td>
<td>44.1</td>
<td>97.2</td>
</tr>
<tr>
<td>2006/2007</td>
<td>93.9</td>
<td>78.5</td>
<td>93.7</td>
</tr>
<tr>
<td>2007/2008</td>
<td>95.2</td>
<td>78.2</td>
<td>95.0</td>
</tr>
<tr>
<td>2008/2009</td>
<td>89.6</td>
<td>74.9</td>
<td>89.4</td>
</tr>
<tr>
<td>2009/2010</td>
<td>79.3</td>
<td>64.0</td>
<td>79.0</td>
</tr>
<tr>
<td>2010/2011</td>
<td>76.9</td>
<td>62.1</td>
<td>79.4</td>
</tr>
<tr>
<td>2011/2012</td>
<td>79.1</td>
<td>54.9</td>
<td>78.3</td>
</tr>
<tr>
<td>2012/2013</td>
<td>80.1</td>
<td>65.4</td>
<td>79.3</td>
</tr>
</tbody>
</table>


All in all, it can be said that the production of milk in Slovakia has a good potential for a number of reasons. In the first case, Slovak country has a favourable climatic conditions and natural environment for breeding dairy cows at its disposal. In the second case, production of milk and milk products has a long tradition here and therefore Slovakia managed to gain plentiful experiences with processing milk and introduce a great variety of quality and tasty products on consumer markets. In the last case, after becoming a member state of the European Union, Slovakia opened its economy and by thus enabled it to gain a number of great benefits including e.g. supply of financial means important for revitalisation and modernisation of milk companies and their production techniques and processes or enhancement of quality and healthiness of milk products and outstanding opportunities like e.g. a possibility to place Slovak milk products on European milk market more easily. On the other hand, potential barriers for Slovak milk producers may be the presence of rough foreign competition and the power of retail chains manifesting in charging high profit margins for placing their milk products to the most visited shopping outlets by consumers.

Development of per capita milk consumption in Slovakia exhibits a negative trend from the long-term point of view. Within the period of 2000 – 2012 the consumption of drinking milk mostly decreased annually except of years 2006, 2009, 2010 and 2012 when it was recorded a modest increase (see the Graph 4 – Development of Milk and Milk Product’s Consumption in Slovakia (2000 – 2012)). Slightly better situation occurred in the connection with milk products (including butter, cheese, cream, curd and fermented milk products) whose consumption in the period of 2000 – 2012 was variable with a growth rate in years 2001, 2002, 2005, 2007, 2008, 2010 and 2012 and with decline rate in rest of years. From this, it is obvious that Slovak consumers like consuming butter, cheese, curd or yoghurts more than drinking milk alone. All in all, considering the total consumption of milk and milk products in observed period, it could be said that it was very unstable. The annual amount of milk and milk products consumed by Slovak consumers, during the period of 2000 – 2012, ranged from the level of 152.4 kg per capita in 2006 to 166.2 kg per capita in 2002. The lowest amount of consumed dairy products was observed in the year of 2006 and then in 2008, i.e. beginning year of global economic and financial crisis that by its power and consequences caused a significant decrease of purchasing power in general and subsequent increase of prudence in the volume of consumption expenditures. In following years of crisis, i.e. 2009 and 2010, the consumption of dairy products gradually increased what was unusual considering weakening purchasing power of consumers. According to provided researches, this upward consumption trend was caused by decreasing price of milk products that stimulated consumers towards their higher purchase (Hroncová, 2011).
Consumption of dairy products by Slovak consumers is very low compared to other countries in European Union, Europe and the world. For a better imagination, in year 2007 per capita annual milk consumption in Slovakia reached the level of 153.4 kg what was in the comparison with the world’s highest annual consumption of 361.2 kg per capita observed in Finland what was lower by 207.8 kg/capita/year (FAO Statistics Division, 2011). The recommended intake of milk products consumption was set on the level of 220 kg per capita annually (Francisciová, 2014). Considering this, it could be said that per capita Slovak annual milk consumption was not sufficient within years 2000 – 2012 what can be considered as a negative aspect interconnected with a number of unfavourable consequences. On one side, i.e. demand or consumer side, insufficient consumption of milk and milk products impoverish human organism by necessary nutrition ingredients, such as vitamins, minerals, proteins and healthy fats what may lead to emergence of various diseases such as osteoporosis, cardiovascular diseases or diseases of digestive tract (Hulinová, 2008). On the other side, i.e. supply or producer side, low consumption of milk products causes considerable problems to their processors and primary sector, e.g. problems with their existence and growth on the market. Specifically, for the last seventy years the number of dairies in Slovakia declined by more than half of its number and the proportion of foreign participation in the ownership of Slovak milk companies increased several fold. This may be considered as not very positive situation in terms of agricultural output, employment, flow of profits and development of national economy as whole.

One of the main reasons for low consumption of milk and milk products it is considered a low demand of consumers. Therefore, it is important to study factors stimulating and influencing consumers when purchasing milk and milk products in order to support their consumption as well as to study factors that prevent consumers in their purchasing and consumption in order to deal with them and transform such barriers into enablers. In the connection with examining factors affecting consumers in purchasing and consuming milk and milk products it was realized a number of researches and studies home and abroad (see the Table 2 – Review of Researches on Factors Influencing Dairy and Milk Buying Behaviour). We decided to present the results and findings of several selected studies to point out what factors may have an impact on the demand for milk and milk products.

Kumar and Babu (2014) realized a research on brand preference, customer satisfaction and influencing factors regarding dairy products purchase behaviour in Pondicherry State, India. Through the research, they examined the importance of six selected factors, namely advertisement, brand preference, product availability, product pricing, product quality and product variety on consumer dairy purchase behaviour. By using weighted average method, it was found that ranking of factors influencing purchase of dairy products was following (from the most to the least important): product quality, product availability, product pricing, product variety, brand image and finally advertising. Resulting from these findings it was obvious that for Pondicherry State consumers, quality (i.e.
freshness, taste and texture), availability (i.e. variety and offer) and price represent three major decisive factors in purchasing dairy products.

Table 2. Review of Researches on Factors Influencing Dairy and Milk Buying Behaviour

<table>
<thead>
<tr>
<th>Year</th>
<th>Author/s</th>
<th>Framework</th>
<th>Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>Adam and Ali</td>
<td>Impact of Visual Elements of Packaging of Packed Milk on Consumer Buying Behavior</td>
<td>Key package factors determining purchase of packed milk: packaging cap, rectangular packaging design, convenience of handling package material (Tetrapack), package colour (green, blue and red) and package size (1.5l, 1l, 500ml).</td>
</tr>
<tr>
<td>2014</td>
<td>Bingham et al.</td>
<td>Demographic and Economic Factors Affecting Demand for Brand-Level Milk in Texas (USA)</td>
<td>Key factors influencing demand for brand-level milk: income, age of a shopper, age of children, region, race and price.</td>
</tr>
<tr>
<td>2014</td>
<td>Dharmasena and Capps</td>
<td>Unraveling Demand for Dairy – Alternative Beverages in United States. The Case of Soymilk</td>
<td>Key factors predicting purchase of soymilk: income, age, employment status, education, race, ethnicity, region and presence of children in household.</td>
</tr>
<tr>
<td>2014</td>
<td>Kumar and Babu</td>
<td>Factors Influencing Consumer Buying Behavior with Special Preference to Daily Products in Pondicherry State (India)</td>
<td>Key factors predicting purchase of dairy products: quality, availability, pricing, variety, brand image and advertisement.</td>
</tr>
<tr>
<td>2014</td>
<td>Senadisai et al.</td>
<td>Model of Factors Influencing the Intention to Purchase Lactose-free Milk for the Population of Bangkok (Thailand)</td>
<td>Key factors influencing purchase of lactose-free milk: health, age, knowledge about product, public relations, reputation, price and milk attributes.</td>
</tr>
<tr>
<td>2014</td>
<td>Trung et al.</td>
<td>Factors Influencing Milk Consumption of Rural Households in Northern Vietnam</td>
<td>Key factors influencing milk purchase: household income, household composition, age, gender, education, perception of milk price and origin and convenience of purchase place.</td>
</tr>
<tr>
<td>2013</td>
<td>Tuan et al.</td>
<td>Powdered Milk Consumers’ Buying Behavior (Vietnam)</td>
<td>Key factors predicting purchase of imported powdered milk: product brand, advertisement, country of origin, age and income.</td>
</tr>
<tr>
<td>2012</td>
<td>Bonaventure and Umberger</td>
<td>Factors Influencing Malaysian Consumers’ Consumption of Daily Products</td>
<td>Key factors determining purchase of dairy products: location (cleanliness, position, availability of higher quality products), label information, health benefits, certificate, brand, perceptions (good source of protein, calcium, vitamins), age, ethnicity, nutrition, reference from family and friends and social status.</td>
</tr>
<tr>
<td>2012</td>
<td>Santoso et al.</td>
<td>Analysis Various Factors that Influence the Purchasing Behavior of Goat Milk in Bogor Renency, Indonesia</td>
<td>Key factors predicting purchase of goat milk: role, family, reference groups, motivation and perception (impact on purchasing interest), personal data (education and occupation) and purchasing interest (impact on factual purchasing).</td>
</tr>
<tr>
<td>2012</td>
<td>Yayar</td>
<td>Consumer Characteristics Influencing Milk Consumption Preference. The Turkey Case</td>
<td>Key factors influencing purchase of packed and unpacked fluid milk: age, education, household income, size of household, household composition and employment status of wife.</td>
</tr>
<tr>
<td>Year</td>
<td>Authors</td>
<td>Title</td>
<td>Key factors</td>
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<tr>
<td>2010</td>
<td>Ates and Ceylan</td>
<td>Effects of Socio-economic Factors on the Consumption of Milk, Yoghurt and Cheese (Turkey)</td>
<td>Key factors determining purchase of milk: income, age, education and occupation.</td>
</tr>
<tr>
<td>2009</td>
<td>Alwis et al.</td>
<td>Analysis of Factors Affecting Fresh Milk Consumption among the Mid-country Consumers (Sri Lanka)</td>
<td>Key factors determining purchase of fresh milk: package, brand, price, design, taste, nutrition, availability, age, education, income and health.</td>
</tr>
<tr>
<td>2007</td>
<td>Mc Knight et al.</td>
<td>Organic Milk: Consumers and their Purchasing Patterns (Australia)</td>
<td>Key factors predicting purchase of organic milk: household size, number of children, income and age.</td>
</tr>
<tr>
<td>2007</td>
<td>Mannerbro and Wallin</td>
<td>Determinants of the Demand for Eco-labelled Milk and Fair Trade Coffee</td>
<td>Factors determining demand for eco-labelled milk: perceived health, taste attributes, altruistic character, environmental effect, social groups, gender, age, income and education.</td>
</tr>
<tr>
<td>2006</td>
<td>Hsu and Lin</td>
<td>Consumption and Attribute Perception of Fluid Milk in Taiwan</td>
<td>Key factors determining fluid milk consumption: income, education, household size, household structure, taste, flavour, fat, nutrition, certification and brand.</td>
</tr>
<tr>
<td>2004</td>
<td>Hatirli et al.</td>
<td>Factors Affecting Fluid Milk Purchasing Sources in Turkey</td>
<td>Key factors affecting fluid milk purchasing: number of children, household size, education, income, price and usage.</td>
</tr>
<tr>
<td>1998</td>
<td>Nagyová et al.</td>
<td>Faktory ovplyvňujúce rozhodovanie zákazníka pri kúpe mlieka a mliečnych výrobkov</td>
<td>Key factors predicting purchase of milk and milk products: taste, health, habit, availability, wide utilization in household, gender, brand, quality, price, package and advertisement.</td>
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</table>

Source: own collaboration

Next researches who dealt with the issue of factors influencing consumption of dairy products were Bonaventure and Umberger (2012). Within the research, they focused on investigating drivers of the demand for dairy products (specifically demand for fresh fluid milk, powdered milk, butter, cheese, yoghurts and ice-creams) on the sample of Malaysian consumers. Based on the answers of respondents gained via face-to-face interviews and outcomes obtained via statistical calculations researchers identified a group of most significant factors influencing consumers and their dairy consumption that could be divided into three clusters according to the subject they are related to, i.e. consumer, product and environment-related one. Considering the cluster of consumer-related factors, the research showed that were four factors having significant and positive impact on the consumption of dairy products among Malaysian consumers, namely an age, ethnicity, nutrition benefits for human body (i.e. source of nutrients and proteins) and social groups (i.e. family, friends and social status). In the relationship to the product, respondents as the most important denoted the factor of label information, perceived health benefits and presence of Halal logo (i.e. logo denoting that a food's consumption is allowed by Islamic Law). Finally, with respect to purchasing, i.e. store environment, consumers highlighted that the cleanliness, convenient location of store and the availability of higher quality product offer represents the most important criteria influencing their dairy purchase intentions.

Further research findings worth for mentioning in the connection to studied issue was provided by Krešić et al. (2010). They aimed their research attention on reviewing purchase habits, behaviour and motives when selecting dairy beverages by consumers from the region of Kvarner, Croatia. The research showed that the factor of gender and education played an important role in explaining certain purchase and consumption patterns. Specifically, regarding the gender influence, it
was proven higher demand of women for purchasing low-fat dairy beverages and even all dairy products in comparison with men and conversely it was observed that men had higher loyalty towards purchasing favourite brands of milk beverages in comparison with women. Considering the impact of education, it was found that educated group of consumers reflected higher interest in trying whey-based beverages. In addition to this, it was known that the taste was considered to be the most important motive stimulating the purchase and consumption of dairy beverages followed by health benefits, brand, weight control and price.

Specific group of milk production, i.e. the group of fresh milk was examined by Alvis et al. (2009). In the research, they subjected eleven selected product-related factors (i.e. packaging, price, brand, appearance, taste, relative taste, convenience, nutrition value, relative nutrition quality, availability and availability) and eight consumer-related factors (i.e. age, income, health problems, ethnicity, household composition, education, household size and gender) to the study of their influence and impact on the consumption of fresh milk among consumers of Sri Lanka. Research results demonstrated that with respect to consumer-related factors, statistically significant positive correlation, meaning increasing fresh milk consumption with increasing numerical value of studied factor, was presented in the case of age, education, household composition and income. Conversely, statistically significant negative correlation, meaning decreasing fresh milk consumption with increasing numerical value of examined factor, was observed in the case of ethnicity and health problems. With respect to product-related factors, nutritional importance, sensory factors appeared to have a positive impact on purchasing fresh milk and high price level and poor availability showed up to have a negative impact on fresh milk consumption. This research showed us other important factors that should be taken into the consideration when marketing not only fresh milk but also other dairy products.

The last research containing important findings especially for Slovak dairy market is the research provided by Nagyová et al. (1998). They studied milk and milk products purchasing patterns applied by Slovak consumers. Results obtained via questionnaire survey pointed to a number of interesting realities. First of all, they showed that among the major reasons for purchasing milk belong taste, healthy lifestyle, habit, product availability and its wide usage in household (for the purpose of cooking). Considering the presence of dependencies between most common demographic variables (i.e. age, gender, number of family members, education, occupation and functional classification of breadwinner) and the consumption of milk, as the only one was detected the dependency in the connection with gender (specifically, in case of male consumers was manifested higher demand for a whole milk, while, in case of female consumers it was higher demand for skimmed milk). Except of milk, the subject of research was the group of milk products, too. Statistically significant dependency was uncovered between consumption of milk products and five studied demographic variables, namely age, gender, number of family members, occupation and functional classification of breadwinner. What refers to other than demographic factors, consumers identified brand, quality and packaging as other decisive factors of milk and milk product purchase. In addition to this, the research focused on examining consumer attitudes towards innovations and evaluation of offered assortment of milk and milk products. More than half of asked consumers introduced that they are interested and like innovations. Those who were not positively inclined towards innovations stated that it is because of their distrust towards novelties, usage habits, traditions and brand loyalty. Regarding milk and milk product assortment, more than three-quarters of consumers evaluated it as sufficient and the rest of them lacked yogurts with fruit pieces, yogurt milks, flavoured curd, etc.

In addition to researches, it is suitable to mention also trends that are propelling domestic and foreign dairy market. In the European dairy market, there are three trends that deserve attention. The number one trend is an aging population. In Europe, a number of older people gradually doubles compared to younger ones. Resulting from this, it is obvious that producers and marketers should pay a special attention to this growing market segment and do the best to satisfy their needs, specifically a need for high content of nutrients, especially for calcium, phosphorus, proteins, vitamin D, etc.; than a need for smaller packaging, whereas old people tend to live alone and a need for easy-to-open solutions because most of them has a problem with difficult openings (Harrison-Dunn, 2013). Next trend is interest in preserving a good health. To meet this, today consumers increasingly search for products rich in probiotics having beneficial effects on digestive mechanism, than products containing substances, such as active bacteria, calcium and vitamin D, important for building immune system as
well as products possessing nutrients inevitable for keeping bones strong and healthy, like calcium, magnesium, phosphorus, proteins, vitamin D and K and zinc (Harrison-Dunn, 2013; Searby, 2012). The last trend is higher demand for products with lower sugar content. Sugar is recently perceived as an evil ingredient causing problems with weight control. For this reason, consumers, mostly women consumers, started to be increasingly interested in purchasing milk, cheese, yogurts and other products with reduced proportion of sugar and fat (Harrison-Dunn, 2013). Considering the most preferred products on the European dairy market, these are, for example, flavoured milks, yogurts, drinking yogurts and cheese (Searby, 2012; European Commission, 2006). In Slovakia, except of mentioned trends, it has begun to show ethnocentric behaviour, meaning that consumers started to favour domestic over foreign products. According to surveys, it was found that more than 60 % of respondents said that they are able to pay extra money for milk products produced in Slovakia (Sedlák, 2012).

4. Conclusions and Guidelines for Future Research Activity

Consumer behaviour represents one of main components of the human behaviour since every man needs certain set of tangible and intangible products that are essential for his daily life. Today, the study of consumer behaviour is becoming more actual and acute issue in the field of marketing. This is happening because a consumer thanks to free availability and flow of information, wide competitive offer of alternative products and high technological advancement became the dominant personality of a market who firmly hold a power over a market in his hands and have a decisive say about what should be produced and offered on a market. For this reason, it is the consumers who know a secret recipe for success and therefore the knowledge about consumers and their behaviour represents one of main ingredients for their accomplishment. However, understanding consumers and their purchase behaviour is a very complicated. This is caused substantially because of the complex nature of consumer behaviour what means that consumer decision-making and purchase behaviour is influenced by a wide range of stimuli, factors, events, information and elements resulting from internal nature of consumers and external character of an environment in which a consumer live. Exactly, the study of such factors enables to advert and signalize organizations the most critical ones that should be incorporated into the marketing strategy and its related marketing activities and tools in order to not only catch the attention of consumers but also to stimulate them towards purchase and deliver them satisfaction.

Satisfied consumer is the core of a success of marketing strategy; therefore an effective marketing strategy formulation and later modification should be based on thorough and actual knowledge of all the factors influencing consumer during the whole process of purchase cycle. Except of complexity, consumer behaviour is characterized for its heterogeneity meaning that it is changing from consumer to consumer and from one product category to the other one. This practically implies that there exists no instruction that would prescribe uniform comprehensive list of factors ranking them according to the degree of importance that could be universally used for all product groups and applied on all consumer segments. In the connection to this, we selected one specific product, i.e. milk as the target research subject.

We went through a number of various domestic and foreign research articles, papers, reports and studies, essentially, for the purpose of studying and knowing how various factors influence consumers and their milk purchase behaviour. Our main intention of this secondary research activity, whose outcome took a form of above presented literature review, was to determine a source background or an initial base that would act as a jumping-off point for the realization of our future consumer research activity in the field of milk purchase. In the connection to this, we, based on the information and knowledge gained by the study of scientific literature and the development of above literature overview, narrowed the research intention only to the group of relevant factors influencing milk purchase behaviour and formulated a number of hypotheses whose validity and acceptance status will be verified within our oncoming planned research (see the Table 3 – Future Research Hypotheses, Studied Factors and Functional Variables).
Table 3. Future Research Hypotheses, Studied Factors and Functional Variables

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Factor</th>
<th>Variable</th>
</tr>
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| **H₁**: There exists relationship between product factor and consumer behaviour applied when purchasing milk. | **F₁** – Product Factor | V₁ – Assortment  
V₂ – Brand  
V₃ – Country of Origin  
V₄ – Fat  
V₅ – Freshness  
V₆ – Nutrition  
V₇ – Package  
V₈ – Processing  
V₉ – Quality  
V₁₀ – Sensory Appeals  
V₁₁ – Utility |
| **H₂**: There exists relationship between price factor and consumer behaviour applied when purchasing milk. | **F₂** – Price Factor | V₁₂ – Bargains  
V₁₃ – Price  
V₁₄ – Price Strategy  
V₁₅ – Advertisement  
V₁₆ – Competition  
V₁₇ – Coupons  
V₁₈ – Leaflets  
V₁₉ – Press Advertisement  
V₂₀ – Price Packages  
V₂₁ – Public Relations  
V₂₂ – Samples  
V₂₃ – Seller  
V₂₄ – Web Page |
| **H₃**: There exists relationship between information factor and consumer behaviour applied when purchasing milk. | **F₃** – Information Factor | V₂₅ – Arrangement  
V₂₆ – Cleanliness  
V₂₇ – Location  
V₂₈ – Orientation  
V₂₉ – Tradition  
V₃₀ – Children  
V₃₁ – Experts  
V₃₂ – Family and Relatives  
V₃₃ – Friends |
| **H₄**: There exists relationship between social factor and consumer behaviour applied when purchasing milk. | **F₆** – Social Factor | V₃₄ – Age  
V₃₅ – Animal Possession  
V₃₆ – Gender  
V₃₇ – Education  
V₃₈ – Family Status  
V₃₉ – Household Size  
V₄₀ – Number of Children  
V₄₁ – Income |
| **H₅**: There exists relationship between personal factor and consumer behaviour applied when purchasing milk. | **F₇** – Personal Factor | V₄₂ – Attitude  
V₄₃ – Learning  
V₄₄ – Motivation  
V₄₅ – Perception |
| **H₆**: There exists relationship between psychological factor and consumer behaviour applied when purchasing milk. | **F₈** – Psychological Factor | V₄₆ – Age  
V₄₇ – Animal Possession  
V₄₈ – Gender  
V₄₉ – Education  
V₅₀ – Family Status  
V₅₁ – Household Size  
V₅₂ – Number of Children  
V₅₃ – Income |

Source: own collaboration.

References


Literature Review on Factors Influencing Milk Purchase Behaviour


