# BEHAVIOUR OF CZECH CUSTOMERS WHEN BUYING FOOD PRODUCTS

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#### **Abstract**

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This paper presents partial results of the primary research conducted through a questionnaire survey focused on the behaviour of Czech consumers when buying food, with regard to the behaviour of men and women. Specific objectives included are a brief outline of the theoretical issues examined and secondary research on the buying behaviour of consumers when buying food, based on available statistical data and information. After 1989, the quality of the market has changed, sales space has increased as well as the level of sales conditions. Offer in stores has widened. Recently the results of inspections of supervisory authorities show a lot of negative information, mainly relating to foreign chains. The supply of poor quality food is more common. Some food is offered even though it's expired. The proposed premises are based on the current situation in the Czech retail market. Despite increased consumer awareness about the quality of food, the majority of respondents buy food in large commercial units (supermarket, hypermarket, discounts). The majority of respondents do not follow information on the packaging of food products, but follow the expiration date. Sales of food with expired shelf life or expiration date re-taped is usually notified by the supervisory authorities, therefore, is noticed by consumers. Buying behaviour of men and women shows some differences. Our results, however, have not proved any significant ones, although a small difference has emerged.

buying behaviour, sale of food products, preference of shop type, food quality satisfaction, information on the package, expiration date monitoring, buying behaviour of men and women

A successful trader needs a good knowledge of human behaviour. It can be applied when creating shopping atmosphere and in conducting business negotiations and sales talk, as well as during the preparation and offer of goods. A number of marketing decisions cannot be made without the knowledge of customers' buying behaviour. The trader needs to know why customers come to the shop, how to communicate with them, how to respond to their queries and objections, how to motivate them to buy. Understanding customer motivation and behaviour is a prerequisite for lasting customer relationships. This relationship should be a two-way to allow it to benefit both parties. The aim is to cultivate these relationships and increase their value. Therefore, marketing experts both academic and practitioners are constantly trying to examine and evaluate customer behaviour.

Transformation of the Retail in the Czech Republic after 1989 has amongst others manifested mainly in the growth in the width and depth of trading range and quality. The behaviour of  $\bar{\mbox{Czech}}$ consumers has changed due to globalization trends. Proof of this are the survey results of criteria that are most preferred by customers during purchasing decisions (Hes et al., 2008). If we know the character of the shopping behaviour of consumers, we can gain a competitive advantage. Also, modern marketing concept can be defined as an effort to gain and maintain a competitive advantage by satisfying customer needs, while providing comfort for the customer and an acceptable cost level for the company. Without knowledge of customer preferences and buying behaviour we cannot determine key customers (Starzyczná, Kauerová, Pellešová, Svoboda et al., 2007). Marketing-oriented

companies nowadays seek to learn as much as possible about their customers (Pilík, 2008).

Supervisory authorities in the Czech Republic contributed recently to greater customer awareness of the controls carried out at the stores and the findings relating to food quality. This information may induce changes in customer behaviour when buying food.

The main aim of this paper is to present partial results of primary research conducted through a questionnaire survey focused on the behaviour of Czech customers when buying food, with regard to the behaviour of men and women. Specific objectives included are a brief outline of the theoretical issues examined and secondary research on shopping behaviour when buying food, based on available statistical data and information. According to data availability, the results were compared with other existing studies.

Purchasing decisions of consumers are influenced by many factors. Personal factors and derived behaviour are influenced by customer age, gender, education and employment, the stage of his life cycle, the economic conditions of life, lifestyle and of course the personality of the customer. For primary research we determined 4 research premises and 2 hypotheses.

#### 1 THEORETICAL BASIS FOR THE RESEARCHED ISSUE

The issue of buying behaviour is addressed quite a lot in academic literature. In general terms, the purchasing behaviour is the point of focus of a number of specific publications on marketing and consumer market. Human behaviour is engaged in many scientific disciplines: psychology, sociology, cultural anthropology, economics, history, etc. (Pražská, Jindra, 1997; Vysekalová, 2011). Theoretical and practical knowledge of these sciences were used in marketing that focuses on consumers and their purchasing behaviour. One of the main representatives of marketing P. Kotler devotes considerable attention to this issue, much like L. Schiffman and L. Kaňuk of Tobin College of Business at ST. John's University, who mainly specialize in buying behaviour (Kotler, 1991; Kaňuk, Schiffman, 2004). Influences affecting buying behaviour are being addressed by other authors, such as D.W. Hoyer, D. Macinnis (2008). Some publications also deal with the specifics of the shopping behaviour of women (Hudleston, Minahan, 2011). Recognized expert in Germanspeaking countries is H. Meffert (1996), one of the founders of higher education marketing in general, dealing with marketing of services, international marketing, research of consumption and consumer behaviour, as well as issues of organizational behaviour.

Buying (consumer) behaviour could be seen as a sub-discipline of many scientific disciplines (or fields of study), whose formation is associated with the development of marketing and marketing concept that has evolved from manufacturing, product design and sales. Consumer behaviour is the behaviour of people – the final customers – that relates to the acquisition, use and discarding of consumer products (Koudelka, 2006). In this context, the concepts of customer and consumer are defined. The customer is a person who orders the goods, purchases it and pays for it. The consumer is broader and more general term, because there can also be products that we do not buy ourselves. Consequently we can draw the concepts of shopping behaviour and consumer behaviour.

The origins of the marketing concept dates back to the 50's, when in established market economies the change from the producer market to the consumer market occurred, the market showed a greater or lesser oversupply. Consumers gain a dominant position and companies try to fight for their favour. Study field of shopping behaviour can be historically dated back to the 60's.

Some experts point to the pragmatism of marketing and consumer behaviour, which means internal causal link, the search for the causes of events, especially psychological (Velký slovník naučný, 1999). The practical application of sciences of human behaviour is largely subordinated to pragmatic purposes (choice of practical methods of market research, examining the structure of incentives for marketing strategy, modelling of consumer behaviour in relation to the tools of marketing mix and promotion selection, etc.).

Before a potential customer buys a product, he needs to know something about it. His actions may differ, they may manifest actively or passively. With active behaviour, he seeks information and selectively processes it. Typically, he needs to go through complex decision making. With passive behaviour, he gets to the information casually, he only passively collects it. No purchasing decisions are usually involved. Passive cognition is associated with behaviourist theories of J.B. Watson (Velký slovník naučný, 1999; Vysekalová, 2004), active cognition is closer to learning, in which the consumer's behaviour is viewed as rational and complex. The way customers access information is also influenced by the channel, such as the Internet, which allows purchasing of almost anything all over the world.

#### Individual buying behaviour

Each of us is an individual with their personality traits and temperament. Although we are members of a nation, a particular social group, allowing a degree of generalization of consumer behaviour, consumer behaviour is still a specific individual complex issue.

Purchasing decisions of consumers are affected by a number of factors. Most of these factors are knowable, but uncontrollable, which means that we cannot control them, but we have to accept them. Cultural factors are associated with the

process of cultural formation. They are given by the environment in which a person was born, where he lives and is brought up. Among the cultural factors the most influential are: culture in the broader sense, subculture (social subgroups) and membership of a particular social group. These are shared values, ideas, attitudes that a person has taken from his family that he is initially closest to, then from the other social institutions, such as schools, special interest organizations, church, etc. Great influences on consumers' decisions have social factors. Membership of a particular social group (ethnic, religious, etc.) or social group is also coupled with similar opinions, interests and behaviour, which is reflected in purchasing behaviour. The buying and consumer behaviour is influenced by reference groups, roles and social status (Kotler, Wong, Saunders, Armstrong, 2007). Personal factors and derived behaviour is influenced by customer age, gender, education and employment, the stage of his life cycle, the economic conditions of life, lifestyle and of course the personality of the customer. Psychological factors are motivation, perception, experience and attitudes.

Consumer behaviour usually varies depending on the nature of the purchased product. If the consumer buys basic consumer goods, he behaves differently than when buying an expensive camera or a car. Given these facts, consumer behaviour can be divided into four types (Koudelka, 2006; Kotler, Wong, Saunders, Armstrong, 2007):

- 1. Complex purchasing behaviour.
- 2. Buying behaviour reducing (decreasing) mismatch.
- Consumer behaviour searching for diversity (diversity).
- 4. Stereotypical behaviour (conventional buying behaviour).

Complex purchasing behaviour of a consumer is buying behaviour in situations characterized by high customer involvement in the purchase and perception of significant differences among brands (Kotler, Wong, Saunders, Armstrong, 2007). The consumer buys expensive, risky and rarely purchased products. Significant involvement in the purchase requires a lot of information. Buying behaviour reducing mismatch is the consumer behaviour in situations characterized by high exposures, but poor perception of differences among brands (Kotler, Wong, Saunders, Armstrong, 2007). This behaviour is similar to the previous one,

but the consumer does not give much attention to brands, because they can relate to products for which the consumer considers almost all brands of goods equivalent if they are in the same price range (e.g. purchase of floor coverings). Consumer behaviour searching for diversity is reflected in consumer behaviour in situations characterized by low consumer involvement, but with strong feelings for differences between brands (Kotler, Wong, Saunders, Armstrong, 2007). Change of a brand is not the result of consumer dissatisfaction. This is more of an emotional affair changing the brand of sweets due to changes in customer tastes. Stereotypical or conventional consumer behaviour takes place in situations characterized by low commitment and poor consumer perception of differences between brands. Usually purchase of food, which is done on a daily basis. Consumers do not need the brand information, they passively accept advertising messages and create awareness of the product (e.g. purchase of salt, flour, etc.) (Kotler, Wong, Saunders, Armstrong, 2007).

Marketers must also know the theory and reality of the shopping behaviour of customers. The aim of marketing is to meet and satisfy customer needs better than the competition. Marketers must thoroughly understand how customers think, feel, act and offer a clear customer value (Kotler, Keller, 2012).

#### 2 MATERIALS AND METHOD

Research, preferences and buying behaviour of customers are in the centre of attention not only to the companies themselves, but also various consulting firms or specialized departments of universities. These entities are both domestic and foreign. The results of their research are presented in various scientific publications (Lieskovská, Gazda, 2005; Hes *et al.*, 2008; Meixner, Knoll, 2012; Lang, Hooker 2013). Research on food buying and consumer behaviour is also carried out by the Czech Agriculture and Food Inspection Authority¹ (further as SPZI) and other supervisory authorities. The starting point for our research activities was thus secondary research on selected already completed research.

The intention to carry out primary research was mainly influenced by the results of supervisory authorities' inspections relating to food quality.

Primary research through a questionnaire survey was conducted during March-May 2012, mainly

<sup>1</sup> *Vyhodnocení anket.* (2008–2012) [on-line]. 2012 [cit. 2012-08-04]. Available at: http://www.szpi.gov.cz/lstInq.aspx?nid=11319&cpi=3;

Zpráva o činnosti SZPI 2009. 18. 02. 2010. [on-line]. [cit.2012-08-05]. Available at: http://www.szpi.gov.cz/docDetail.aspx?docid=1021215&docType=ART&nid=11386;

Zpráva o činnosti SZPI 2010. 23. 03. 2012 [on-line]. [cit. 2012-08-05]. Available at: http://www.szpi.gov.cz/docDetail. aspx?docid=1029558&docType=ART&nid=11386;

Zpráva o činnosti SZPI 2011. 27. 02. 2012. [on-line]. [cit. 2012-08-05]. Available at: http://www.szpi.gov.cz/docDetail.aspx?docid=1036091&docType=ART&nid=11386.

in the Moravian-Silesian region (more than 90% of respondents). The sample includes 518 valid questionnaires. The questionnaire survey was carried out by personal questioning. Random choice was used.

### Characteristics of the sample – identifying questions

The sample consists of 42.8% male and 57.2% female respondents. Absolute numbers of respondents and their relative rate in % is presented in Tab. I.

I: Gender structure of the sample

Gender	Absolute rate	Relative rate		
Male	215	41.50		
Female	298	57.53		
No answer	5	0.97		
Σ	518	100		

Source: own calculations

The structure of the questionnaire had a wider scope, questions for respondents were focused on buying behaviour of consumers when buying food, quality of food, buying regional food and organic food. Given the focus of the article, we will select the relevant answers of respondents (men, women) on the following main areas:

- Preferred type of store.
- The frequency of food buying.
- Satisfaction with the quality of food.
- Following the information on product packaging.
- Following the shelf life of food.
- Following of additives in food.

When evaluating research, we have used descriptive statistics. Individual questions were evaluated using absolute and relative rates in MS EXCEL with regard to the comparison of answers according to some personal characteristics of respondents (gender, education, etc.). For this article we have created two-dimensional tables of responses by gender of respondents. We have also determined 4 research premises and 2 hypotheses.

### Research premises (related to the chosen field of research):

- P1 Most customers are dissatisfied with the quality of food products.
- P2 Most customers follow the information on the packaging of food products.
- P3 Most customers monitor shelf life of food.
- P4 Most customers follow additives on food labels.

The proposed premises are based on the current situation and the most pressing problems of food on the Czech consumer market. Consumer awareness regarding food quality is being increased by the supervisory authorities. Consumers receive a number of negative information about the results of food monitoring. This may lead, in our opinion,

to more cautious purchasing of food products, especially those which appear in the monitoring reports of supervisory authorities. For these reasons, we believe that consumers generally follow the information on the packaging of food products and also its expiration date.

Hypotheses were determined with regard to the relationship between gender and following information on packaging and shelf life.

#### **Hypotheses:**

- H<sub>01</sub>-There is no relationship between gender and following information on the packaging of food products.
- H<sub>02</sub> There is no relationship between gender and following shelf life of food products.

#### Alternative hypotheses:

- H<sub>11</sub>-There is a relationship between gender and following information on the packaging of food products.
- H<sub>12</sub> There is a relationship between gender and following shelf life of food products.

To assess the dependence of one of the characteristics on the other we used chi-square test based on the difference between the empirical (observed) and theoretical (expected) rates (Wonnacott, T. H., Wonnacott, R. J.,1998).

Four steps of calculation:

- 1. Calculation of two-dimensional probability  $(P_{ii} = P_i P_i)$
- 2. Calculation of theoretical rates ( $E = nP_{ij}$ )
- 3. Calculation of deflections (O E)
- 4. Calculation of  $(O E)^2/E$

Chi-square = 
$$\Sigma\Sigma \frac{(O-E)^2}{E}$$

(Wonnacott, T. H., Wonnacott, R. J., 1998)

#### **3 RESULTS AND DISCUSSION**

After 1989, the centrally planned economy in Czechoslovakia transformed into a market economy with plural ownership relations. Despite the problems of the transition period the trade ranked among the fastest evolving industries in the national economy. The quality of the market has changed, sales space and the level of sales conditions have increased. Offer in stores widened. Market of manufacturer has changed to consumer market (Krásný, Kuchař, 1999). In particular, the food retail market was already saturated around 2004 (Maloobchodní trh nasycen, 2004). Traders in the fast moving consumer goods therefore had to focus on the growth of labour productivity per square meter of sales area and continue intensive development so that they can ensure growth trends. Another option to increase retail were the own branded products that enabled chains to differentiate themselves from the competition and strengthen the loyalty of its customers. In the last period, results of inspections of supervisory

II: Ove	rview of the	store type whe	n buying foo	d (in %)
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Туре	1997	1999	2001	2003	2005	2007	2011
Hypermarket	1	16	29	37	36	38	44
Supermarket	24	23	26	19	15	16	18
Discount	9	15	18	19	23	25	21
Small stores	66	46	27	25	26	21	17

Source: [Shopping Monitor 2012]

authorities bring negative information relating primarily to foreign chains. Poor quality food appears on sale. Some food is offered, even with already expired warranty period.

### 3.1 Consumer behaviour when buying food – secondary research

#### Preference of type of store when buying food

Preference of high capacity stores increased gradually (see Tab. II). Overall 83% customers preferred to purchase food in high capacity stores (hypermarkets, supermarkets and discounters) in 2011. Czech consumer began to like rather quickly these types of stores because they brought new modern sale conditions right from the beginning of the 90's. Smaller stores (17% preference), in which we include a small supermarket, counter stores and specialty shops, are on the other hand gradually losing their positions. These smaller stores were mostly operated by domestic traders. The International Study of Central and Eastern Europe (Shopping Monitor 2012) claims that a hypermarket is for Czechs the most popular shopping place for food. For Poles the most popular shopping place are discount stores (36%) and for Slovenian's it is supermarket (47 %). Slovaks prefer hypermarkets (28 %), supermarkets (27%) and are less interested in discounts (13 %). Surprising is the proportion of smaller stores preferences by Slovak customers, which is higher than of the supermarkets or discounts (32 %).

Richterová (2001) presented the research results of shopping behaviour in large stores at the conference of the University of Economics in Bratislava and Slovak marketing research institute. The results have also confirmed addictive (stereotypical) behaviour when buying food (Richterová, 2001). This is to some extent indirectly confirmed by some results of our research, in the case of following information about food products.

#### Satisfaction with the quality of food products

Satisfaction with the quality of goods in high capacity stores is according to Hes et al. (2008) relatively even at all retail formats. With hypermarkets are satisfied 94% of customers, with supermarkets it is 95% of customers and with discounts 94%. These numbers are relatively high, despite the fact that in 2003 the first significant quality problems reported by the control authorities have appeared. The lowest level of satisfaction was reported in smaller stores, namely 90%. While this number is not low, it could be higher. Smaller stores could build its competitive advantage to large retail chains on the high quality.

#### The frequency of food buying

What about the frequency of food buying?<sup>2</sup> A significant majority of respondents purchase food regularly as needed (81.01%). Purchasing goods with large purchases is being done by only 16.2% of the customers. This number is quite surprising, because it does not confirm the general trend. Also, the study conducted by Hes *et al.* (2008) confirms that the vast majority of consumers purchase food several times a week and only 7% of the customers surveyed buy food less than once a week with large purchase.

#### Following food information on packaging

As for the general following of information on food labels, SZPI3 found that 48.79% of customers follow the information on the package during every purchase. 45.67% of respondents read the information on the packaging only if they do not know the food, which is quite understandable. As an unnecessary waste of time consider following information on food packaging 5.54% of respondents. SZPI also asked the respondents whether they follow food additives, called "E's".4 The survey results confirm that 32.55% of respondents follow the information about additives on the packaging. The sample consisted of 51.74% of people who prefer food without additives, on the other hand 15.71% of respondents do not care about them at all.

<sup>2</sup> Vyhodnocení anket. (2008–2012) [on-line]. 2012 [cit. 2012-08-04]. Available at: http://www.szpi.gov.cz/lstInq.aspx?nid=11319&cpi=3.

<sup>3</sup> Vyĥodnocení anket. (2008–2012) [on-line]. 2012 [cit. 2012-08-04]. Available at: http://www.szpi.gov.cz/lstInq.aspx?nid=11319&cpi=3.

<sup>4</sup> Vyhodnocení anket. (2008–2012) [on-line]. 2012 [cit. 2012-08-04]. Available at: http://www.szpi.gov.cz/lstInq.aspx?nid=11319&cpi=3.

#### Shopping behaviour of men and women

Differences in the shopping behaviour of men and women are also engaged in many studies (Hes et al., 2008). Zamazalová highlights some differences in her publication (Zamazalová, 2009). Men are judged as more conservative customers. They usually do not like buying at all. If they buy, it is usually more planned. They are faster in decision making. They do not need any discounts. Women are more inconstant when buying. They are rational when buying, often buying items that are on sale. They devote enough time to buying, comparing products and following all the information about the products.

### 3.2 Consumer behaviour when buying food – primary research

#### Preference of type of store when buying food

As expected, the largest proportions of respondents buy in high capacity stores (supermarkets, hypermarkets and discounts). Overall the large stores are preferred by 75.87% of the sample (see Tab. III). Smaller stores are preferred by 23.36%. There are no big differences between the preferences of men and women, as shown in the following table.

#### The frequency of food buying

Nearly ¾ of the sample buy food regularly (72.78 %). Large purchases made once a week or at different time intervals are popular for one quarter of the sample (see Tab. IV). This means that a significant proportion of customers buy smaller quantities

of food in large stores. Comparing the results of the responses of men and women, they do not differ. Significant difference can be observed for large purchases. This purchase is realized by greater proportion of males than females, almost 4 percentage points. In a sample of women, larger share purchases regularly as needed, by 6.06 percentage points. According to Zamazalová (2009), men do not like shopping. We can therefore speculate that men prefer less frequent but larger purchases.

Comparing the results of our research with research done by SPZI, the proportion of respondents who buy food regularly is about 8.23 percentage points lower. But the proportion of those who make large purchases is about 8.12 percentage points higher. The differences cannot be competently commented because we do not know the structure of their sample. Our sample is dominated by people with secondary school graduation and university graduates.

### Satisfaction with the food quality in preferred store

It can be assumed that customers will be satisfied in their preferred type of store, although clearly positive answer has been admitted by only 16.99% of respondents (see Tab. V). A large majority of respondents are rather satisfied. Comparing the responses of men and women, we see no big differences. The biggest difference is the answer "rather yes" (–3.54%), where men admit lower level of satisfaction with the quality of food.

III: Preference of type of store by absolute and relative rate (whole sample, men and women)

		Gen	Tarl . l l.				
Type of store	M	Men		Women		Whole sample	
	abs. r.	rel. r.	abs.r.	rel. r.	abs. r.	rel. r.	
High capacity stores	162	72.30	231	77.00	393	75.87	
Counterstore	10	4.59	9	3.00	19	3.67	
Specialized store	17	7.80	18	6.00	35	6.76	
Smaller convenience store	27	12.39	40	13.33	67	12.93	
No answer	2	0.92	2	0.67	4	0.77	
Σ	218	100	300	100	518	100	

Source: own calculations

IV: The frequency of food buying by absolute and relative rate (whole sample, men and women)

		Ger	- Whole sample			
Frequency of buying	Men				Women	
	abs. r.	rel. r.	abs. r.	rel. r.	abs. r.	rel. r.
Large purchases in certain time interval	58	26.60	68	22.67	126	24.32
Regularly, as needed	151	69.27	226	75.33	377	72.78
Else	9	4.13	6	2.00	15	2.90
Σ	218	100	300	100	518	100

Source: own calculations

₩.	Rate of satisfaction with	h the food anality	(whole sample mer	and women)

		Gei	Tayla ala accomala				
Rate of satisfaction	M	Men		Women		- Whole sample	
	abs. r.	rel. r.	abs. r.	rel. r.	abs. r.	rel. r.	
Yes	38	17.43	50	16.67	88	16.99	
Ratheryes	142	65.13	206	68.67	348	67.18	
No	15	6.88	17	5.66	32	6.17	
Rather no	21	9.63	26	8.67	47	9.07	
No answer	2	0.92	1	0.33	3	5.79	
Σ	218	100	300	100	518	100	

Source: own calculations

VI: Following the information on the product packaging (whole sample, men and women)

		Ger	- Whole sample			
Following the information	Men				Women	
	abs. r.	rel. r.	abs. r.	rel. r.	abs. r.	rel. r.
Yes	49	22.48	91	30.33	140	27.03
Ratheryes	89	40.82	129	43.00	218	42.08
No	27	12.39	26	8.67	53	10.23
Rather no	51	23.39	51	17.00	102	19.69
I do not care	2	0.92	1	0.33	3	0.58
No answer	0	0	2	0.67	2	0.39
Σ	218	100	300	100	518	100

Source: own calculations

VII: Following the food shelf life (whole sample, men and women)

	Gender				TATIL -1 1 -	
Following the food shelf life	Men		Women		- Whole sample	
	abs. r.	rel. r.	abs. r.	rel. r.	abs. r.	rel. r.
Yes	133	61.01	227	75.67	360	69.50
Ratheryes	61	27.98	62	20.67	123	23.75
No	9	4.13	5	1.67	14	2.70
Rather no	14	6.42	4	1.33	18	3.47
No answer	1	0.46	2	0.67	3	0.58
Σ	218	100	300	100	518	100

Source: own calculations

### Following the information on the product packaging before buying

Despite the alarming results of inspections of supervisory bodies in chains operating networks of supermarkets and hypermarkets, customers are not cautious when buying food. Definite following of the information on the label was confirmed by 27.03% of respondents (see Tab. VI). A significant proportion of respondents (42.08%) rather pay attention to the information on the packaging of the goods. Approximately 30% of respondents do not read the information on the package at all, or rather not. There are not very big differences between the responses of men and women. For women, the proportion of responses on the definite following of the information on the package is higher than

for men by 7.85 percentage points. Proportion of women who do not follow the information on the packaging of food products at all, is about 6.39 percentage points less than of men.

In SPZI research, the percentages of definite following of the information on the package are higher. Negative response was given by almost 25% fewer respondents.

#### Following the food shelf life

Respondents pay considerable attention to the food shelf life (see Tab. VII). Almost 70% of the entire sample clearly chose answer yes. If we add the answer rather yes, we get 93.25%. When comparing men and women, we see that the proportion of women with definite following of food shelf life is up to 75.67%, a whole 14.66 percentage points more

VIII·	Following of additive	es in food (whole sample.	men and women)

		Gen	- Whole sample			
Following of additives in food	Men				Women	
	abs. r.	rel. r.	abs. r.	rel. r.	abs. r.	rel. r.
Yes	29	13.30	58	19.33	87	16.80
Ratheryes	41	18.81	67	22.33	108	20.85
No	83	38.07	90	30.00	173	33.40
Rather no	52	23.85	71	23.67	123	23.75
Do not know this	2	0.92	4	1.33	6	1.15
No answer	11	5.05	10	3.33	21	4.05
Σ	218	100	300	100	518	100

Source: own calculations

than men. For men, there is a higher proportion (+7.55%) of those who do not follow the shelf life of food at all, or rather not. The fact that a significant proportion of the respondents follows the shelf life of food when purchasing it, can be influenced by increased awareness created by supervisory control authorities, mainly about the re-taping of expiry date done by some of the retail chains, which are preferred by some of the respondents when buying food.

#### Following of additives in food

The majority of respondents do not follow additives on the labels of food products. Definitely not following are 33% of respondents, rather not was chosen by 23%. Only 1% admitted that they do not know what it is, and 4% do not care. Differences in the structure of the responses of men and women are not large, although women who follow the additives had 6.03 percentage points more for the clearly positive response and 3.52 percentage point for the rather yes answer. Clearly negative response was identified by 30% of women, representing an 8.07 percentage points less compared with men (see Tab. VIII).

If we compare our results with SZPI studies, we can say that they are to some extent comparable in terms of following of the information by respondents. The proportion of our respondents following additives is higher by 5.1%, if we consider the answers yes and rather yes. If we take only definitely positive answers, it would be different, because they make only 16.8%.

#### **CONCLUSIONS**

Necessary knowledge of the buying behaviour of customers is indispensable for decision-making of traders. Customers are influenced in their purchase by various factors, external environment, cultural, social and personal factors such as age, sex, education, economic conditions, social status, etc. Buying behaviour is also influenced by the type of assortment. In our research, we examined the food, because it is a relatively recent problem of the Czech consumer market. At the beginning of the research,

we have established 4 research premises and 2 statistical hypotheses.

#### Verification of the research premises

### P1 – Most customers are dissatisfied with the quality of food products.

This research premise cannot be confirmed, because most customers are satisfied with the quality of food, definitely satisfied 16.99% and rather satisfied 67.18% of the customers (total of 84.17%). Unsatisfied are only 15.84% of customers (answers no and rather no). If we look at the responses of men and women, we may find larger proportion of satisfied women (see Tab. V).

### P2 – Most customers follow the information on the packaging of food products.

This research premise can be confirmed, because 70.1% of the sample follows the information on the packaging. 27.03% follows the information on the packaging with the answer of strong yes and 42.08% rather yes (see Tab. VI). Women are more active. The proportion of women pursuing information is higher than for men.

#### P3 - Most customers monitor shelf life of food.

We can confirm this premise, since almost 70% of respondents monitor shelf life, as presented in Tab. VII. Even with this response, women are more active in monitoring shelf-life of food.

#### P4 – Most customers follow additives on food labels.

We cannot confirm this premise, because on the contrary, the majority does not follow these additives. As was answered by the whole 57.15% of the respondents, as shown in Tab. VIII (answers no and rather no). The proportion of women pursuing additives is again higher.

#### Verification of statistical hypotheses

## HO1 - There is no relationship between gender and following information on the packaging of food products.

When applying the test (chi-square) we calculated test criterion (8,082) and the critical value (9,488). We can therefore conclude that on the significance level of 5% the null hypothesis (HO1) on the independence of the characters is accepted.

HO2 – There is no relationship between gender and following shelf life of food products.

When applying the test (chi-square) we calculated test criterion (18,992) and the critical value (7,815). We can therefore conclude that on the significance level of 5% the null hypothesis (HO2) on the independence of the characters must be rejected and we accept the alternative hypothesis H12, which says that there is some relationship between gender and following shelf life of food products.

Still we can more or less confirm some of the results of the research realized in 2004–2007 by Department of Trade and Finance (Hes *et al.*, 2008), SPZI or INCOMA GfK Praha (Shopping Monitor, 2008, 2012). First of all, we find almost total consensus in preferences of high capacity stores, although mainly in these find inspection authorities problems with the quality of individual retail formats

Regarding the level of satisfaction with the quality of food in our research, it is relatively lower in preferred types of stores compared to the results of studies by A. Hes. While customers still prefer large stores, the degree of satisfaction according to our results decreased. We speculate that the cause could be the published results of the checks conducted by the supervisory authorities?

Publication of inspection results contributes to greater customer awareness. The results are specific, with disclosure of the company names that sell poor quality food to customers. To the question of following the information on the packaging of food products, we have not had a clearly positive response. Maybe the question was too general, because the question of whether respondents follow shelf life of products has been clearly answered positively by the majority (almost 70 %). Shelf life is in the centre of attention of supervisory authorities and is well covered by media.

Buying behaviour of men and women, as already mentioned, has some differences. Our results, however, did not show any significant differences, although small differences have emerged. The proportion of men satisfied with the quality of food is lower. The most significant are the differences in following of information on the packaging, shelf life and additives. A larger proportion of women follow the information on packaging and shelf life of food products and additives on food labels. Increased activity of women may result from their rational approach to shopping, trying to familiarize themselves with the products and their comparison. Testing hypotheses about dependency of gender and following information on the product packaging did not confirm this dependency. Dependence, however, was confirmed for following shelf life of food products, which corresponds well with the aforementioned higher activity of women.

#### **SUMMARY**

The main aim of this paper is to present partial results of primary research conducted through a questionnaire survey focused on the behaviour of Czech customers when buying food, with regard to the behaviour of men and women. Specific objectives included are a brief outline of the theoretical issues examined and secondary research on the buying behaviour when buying food, based on available statistical data and information. According to data availability, the results were compared with some existing studies.

The issue of purchase behaviour is addressed quite a lot in academic literature. Consumer purchasing decisions are influenced by many factors. Personal factors and derived behaviour is influenced by customer age, gender, education and employment, the stage of his life cycle, the economic conditions of life, lifestyle and of course the personality of the customer.

Primary research through a questionnaire survey was conducted during March–May 2012 mainly in the Moravian-Silesian region (more than 90% of respondents). The sample includes 518 valid questionnaires. For primary research we determined 4 research premises and 2 hypotheses. Research premises were evaluated on the basis of relative frequency and related to the satisfaction of respondents with food quality, following information on the packaging of food products, following shelf life of food and the presence of additives in food. Hypotheses focused on the relationship between gender and responses were verified using the chi-square.

Results of the research have not confirmed dissatisfaction of respondents with the quality of food in preferred stores. The majority of respondents followed the information on the packaging of food products and shelf life of food, although did not follow the presence of additives in food. The differences in the responses of men and women were not large, but the proportion of women was higher in the level of satisfaction with the quality of food, in the following of information on the packaging, shelf life and additives in food products.

When testing hypotheses by Chi-square, we found that there is no dependence between gender and following information on the packaging of food products, on the other hand we confirmed relationship between gender and following shelf life of food.

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