

# Consumer behavior at the Slovak dairy market

## *Spotrebitel'ské správanie na slovenskom trhu mlieka a mliečnych výrobkov*

Z. KAPSDORFEROVÁ, L. NAGYOVÁ

*Slovak University of Agriculture, Nitra, Slovak Republic*

**Abstract:** The marketing concept in the Slovak dairy industry used to be production focused and the only task was to produce the cheap bulk commodities. Nowadays markets become more and more segmented. The number of foreign and domestic competitors has increased enormously. This new market approach requires: improved product quality, the sales management with good customer relations and effective marketing information system to collect data about customer needs and competition. The consumers represent the last but the most important component within the food chain. Therefore, they deserve a special attention. The study of consumers helps firms and organizations to improve their marketing strategies by the understanding of the issues such as consumers thinking, influence of the consumer by the environment or consumers's shopping behavior. The answers serve to marketers to adapt and improve their marketing campaigns and marketing strategies in order to reach the consumer needs in the most appropriate way. The role of the marketing in the future in the dairy industry will be focused around two main topics: market segmentation and price differentiation.

**Key words:** dairy trends, consumer behavior, marketing research

**Abstrakt:** Slovenský potravinársky priemysel plní významné poslanie: zabezpečovanie výživy obyvateľstva. Úspechy či neúspechy sa prejavujú predovšetkým v samotnom odbyte potravín na domácom a zahraničnom trhu. Začiatok 90. rokov bol poznamenaný prispôbovaním sa produkcie potravinárskeho priemyslu, ktorá výrazne po roku 1989 klesala, predovšetkým z dôvodu poklesu reálnych príjmov obyvateľstva. Ponuka sa prispôbovala zmenám v štruktúre spotreby, ktorá nastala substitúciou drahších potravín lacnejšími, zmenami spotrebiteľských preferencií a zvýšeným dovozom lacnejších zahraničných potravín. Pod vplyvom týchto faktorov sa výroba potravín v SR neustále znižovala. Uvedené problémy sa prejavili i v mliekarenskom priemysle v SR. Dlhá pretrvávajúca nízka spotreba mlieka má negatívny vplyv na spotrebiteľské zvyky konzumentov, čo vyplýva aj z prieskumu spotrebiteľov. Z 207 opýtaných iba 72 respondentov (35 %) konzumuje mlieko a mliečne výrobky v dostatočnom množstve a viac ako polovica opýtaných uviedla, že mlieko nekonzumujú z dôvodov vysokej ceny, nezvyku konzumácie mliečnej stravy, produktu nepotrebného pre dospelý ľudský organizmus alebo z obáv o chorobu BSE. Kvalita, chuť a cena sú faktory, ktoré spotrebiteľov najviac ovplyvňujú pri kúpe mlieka a mliečnych výrobkov. Prekvapujúce je zistenie, že spotrebiteľia kladú väčší dôraz na pôvod výrobku a preferujú slovenské výrobky pred zahraničnými. Z realizovaného spotrebiteľského prieskumu vyplynuli nasledovné trendy na slovenskom trhu mlieka a mliečnych výrobkov: stagnácia segmentu jogurtov a rast segmentu mliečnych dezertov, rast záujmu o smotanové jogurty, pokles dopytu po bielych jogurtoch na úkor ovocných a čokoládových príchuťí, orientácia spotrebiteľov na označenia light a probio, rast záujmu o informácie na obale (zloženie), rast objemu balenia jogurtov zo 100 g na 125–150 g balenie, s tendenciou ďalšieho rastu, rast záujmu o výrobky s predĺženou dobou spotreby.

**Kľúčové slová:** mliekarenský priemysel, spotreba mlieka, trendy na trhu mlieka a mliečnych výrobkov, marketingový výskum

## INTRODUCTION

The Slovak dairy industry has passed through a very complicated period during last decade. There are some common problems of the Slovak dairy enterprises: seasonal shortage and surplus of raw milk, economics changes on the market, the changes of consumer be-

havior, quantitative and qualitative changes of demand and growing power of competitiveness. Development of dairy industry into a Slovak dairy market was affected during last 5 years by:

– entering foreign investors into a Slovak dairy market enterprises (mainly the period of 2001–2003)

- increasing competition,
- growing hygienic conditions and modernization
- higher quality and implementation of international standards
- wider assortment of dairy products,
- increasing the marketing level (Nagyová et al. 2003).

## MATERIAL AND METHODS

This paper is focused on the evaluation as well as on the study of consumer's behavior at the market of milk and dairy products. The principal aim of this paper is to examine the factors of dairy consumer behavior and to identify the trends on the Slovak dairy market, based on the survey, which was carried out among 207 respondents in the Slovak Republic. Statistical file was created from the data included in the respondent

answers. The results were evaluated in the statistical – mathematical program SAS version 8.2. The elementary statistics was counted by data analysis. The differences in attitudes were tested by  $\chi^2$ -test. The survey was done between September–November 2003.

## RESULTS AND DISCUSSION

### Consumption of dairy products and reasons of low milk consumption

Information is the most important factor from the point of view of efficient firm management. Each enterprise needs a wide spectrum of data, starting with information about clients and suppliers through accounting data concerning costs and sales and ending with the data concerning the effects of promotional campaigns. Data about marketing ac-

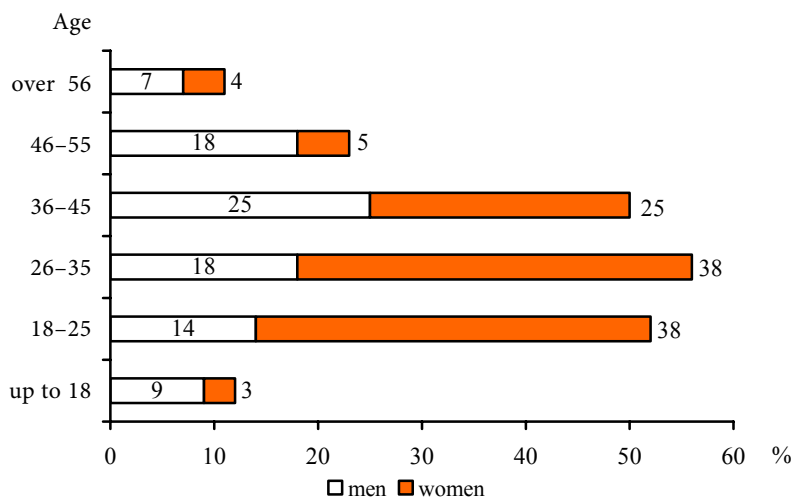


Figure 1. Consumption of dairy products by gender and age

Source: Own research

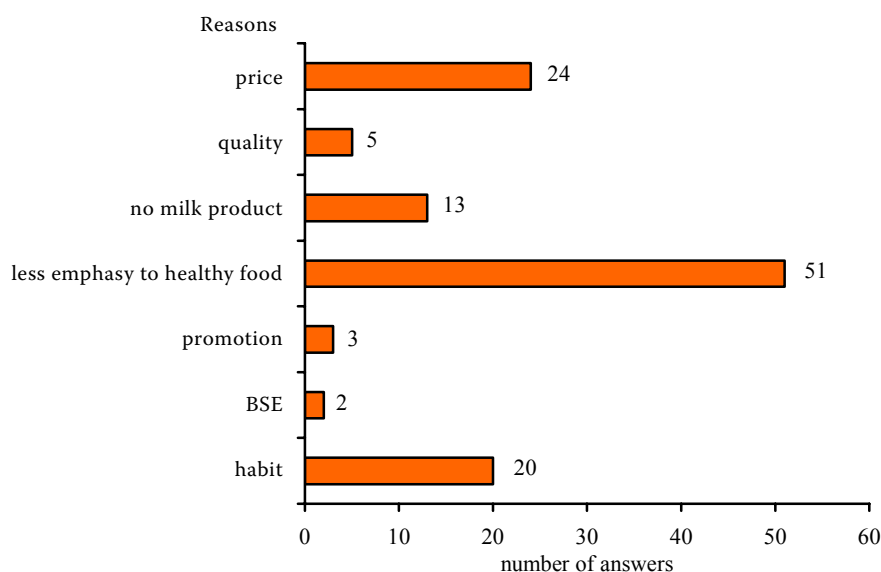


Figure 2. Reasons of low milk consumption

Source: Own research

tivities of a firm are one of the more important elements of efficient information system (Krasnodebski, Cieslik 2001).

Out of total 207 respondents, 204 consumers (99%) replied that they consume milk and dairy products (Figure 1). The most of milk was consumed by people in the age category between 26–35. On the contrary,

the least milk consumption has been found with the people with age over 56. Three respondents (1%) do not consume milk at all due to allergy to milk or different consumer habits. These respondents are men, workers with secondary level education.

The second question in the survey has been asked about the sufficient amount of milk consumption

Table 1. Strengths of Slovak and imported dairy products defined by the survey participants (in %)

Strengths of the Slovak products	Strengths of the imported products
Price 81 (23%)	Package 40 (11%)
Quality 80 (23%)	Price 12 (3%)
Taste 27 (8%)	Assortment 11 (3%)
Lower amount of emulsifier 20 (6%)	Taste 12 (3%)
Healthy 19 (5%)	Emulsifier 11 (3%)
Visual aspect 6 (2%)	Advertisement 8 (2%)
Home produced 3 (1%)	Durability 3 (1%)
	Artificial taste 3 (1%)
No difference 14 (4%)	

Source: Own research

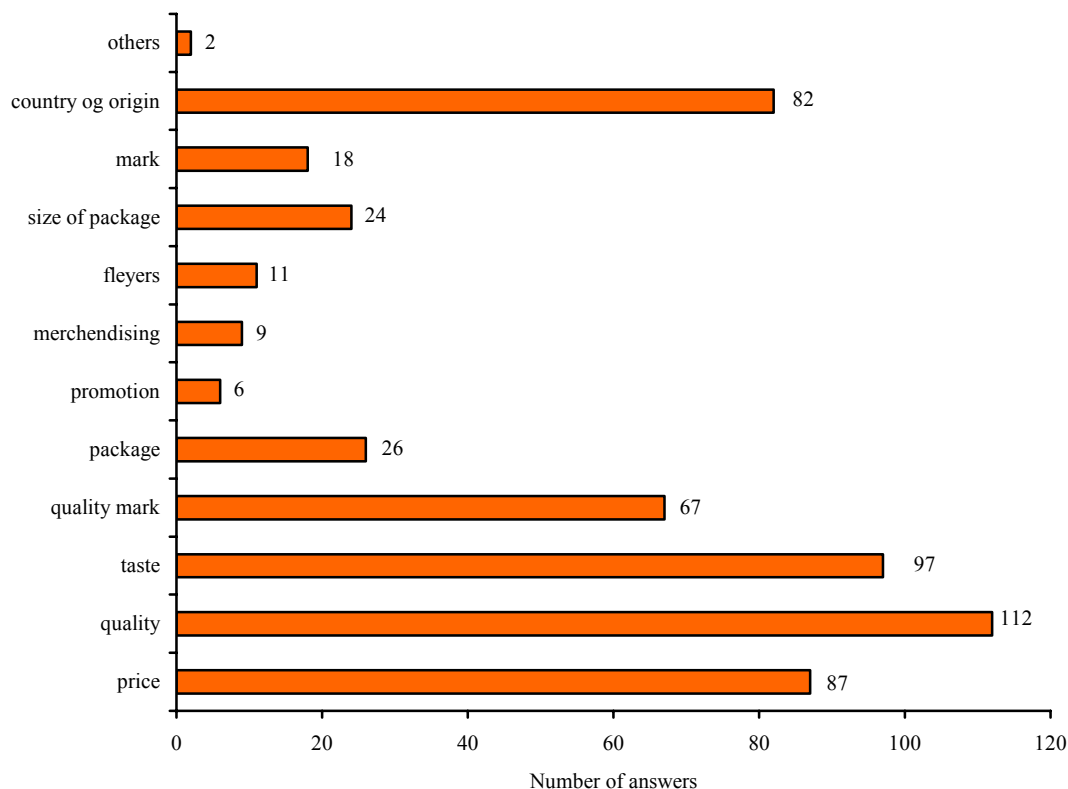


Figure 3. Consumer behavior factors of the milk and dairy products

Source: Own research

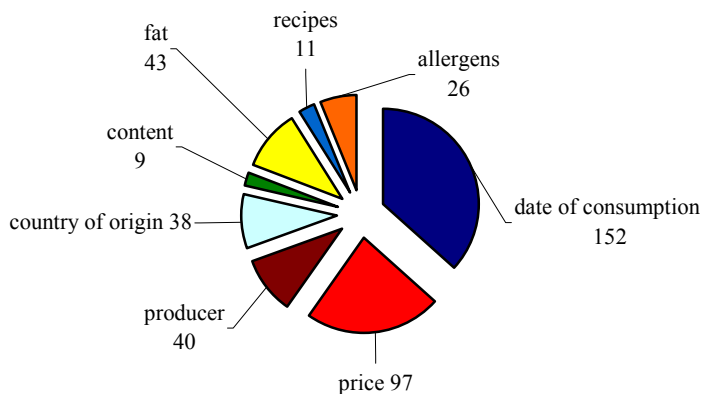


Figure 4. Importance of consumer information on milk and dairy package

Source: Own research

(recommended ration is 220 kg/person/year). 72 respondents (35%) pointed out that they consume milk in recommended ration. More than half out of 204 respondents (165 consumers or 65%) consumed less than the recommended ration. The consumers mentioned among the reasons for their lower consumption price, quality, less emphasis on healthy food, fear of BSE, low milk promotion (Figure 2).

The survey pointed out that the Slovak consumer of milk and dairy products prefers dairy products produced in the Slovak Republic. 183 respondents (88%) confirmed this opinion. 9 consumers (4%) mentioned that they prefer imported dairy products. 11 respondents (5%) buy the Slovak and foreign dairy products. The strengths of the domestic and foreign dairy products are shown in the Table 1.

The most important factors in the consumer behavior are: quality, taste, price, home made production, quality mark, wrapping, package volume/size, trade mark, promotion and merchandising (Figure 3).

133 consumers (49%) prefer to do their shopping in retail shops while 84 respondents (31%) prefer to do their shopping in hypermarkets. There are still 23 respondents (9%) who prefer to buy milk and

dairy products in the company stores. The high rate of preference to do shopping in the company stores is in the Eastern part of Slovakia due to milk prices.

On the dairy product packages, the consumers do most often pay attention to the date of consumption, price, content, name of producer and recipes (Figure 4).

The most often missing data on the package are: the time of the consumption of opened package, suitability of consumption for the allergic people and kids, recipes, protein and carbohydrate content, the origin of the product, quality grade and price.

The Slovak consumer of milk and dairy products can be considered as a consumer with the positive attitude to the new or innovated products. That has been declared by 111 respondents. 85 of respondents prefer known products. Seven respondents do not mind if it is a new or known product.

Women prefer new products more than men. Clerks, unemployed and pensioned people belong to the group which does not like the innovations. Entrepreneurs, students and state officials (women) belong to those who like the new product. The respondents are informed about the new product mainly

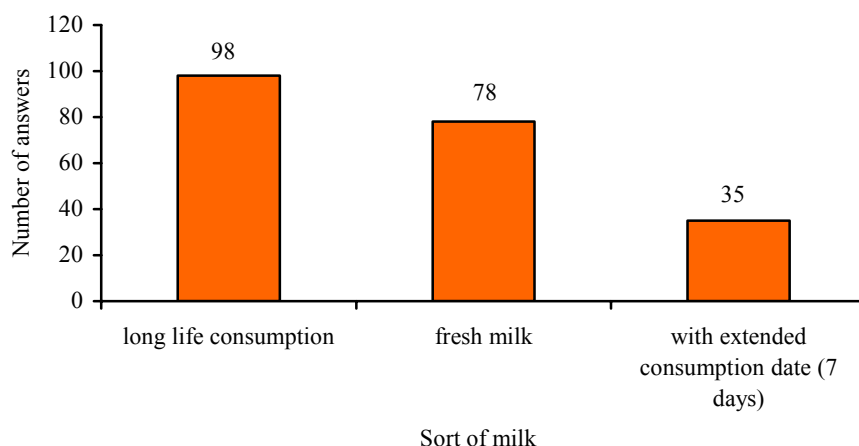


Figure 5. Comparison of fresh and long life milk in the Slovak Republic

Source: Own research

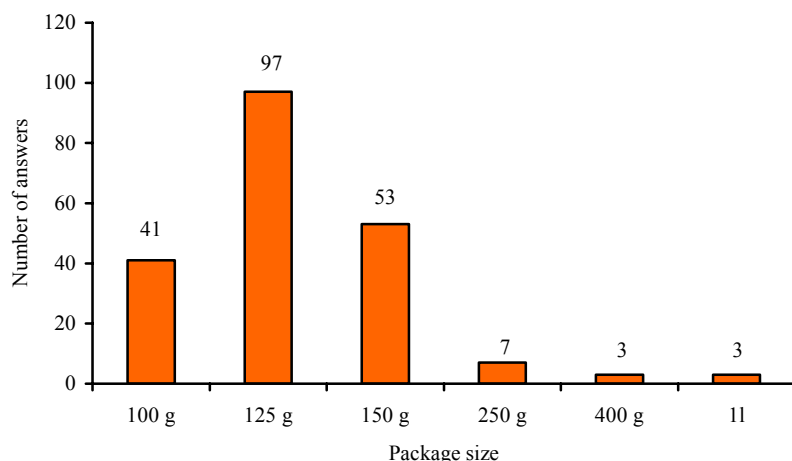


Figure 6. The yogurts package size by the respondent answers

Source: Own research

from TV advertisement (43%), flyers (29%) and from acquaintances (27%).

### Fresh milk

The large group of Slovak consumers is used to buy milk three times a week what stated 75 interviewed (36%). Once a week the milk is purchased by 42 respondents and once a month by 52 consumers (25%). The most favorite is half-fat milk what was pointed out by 135 consumers (66%). During the last years, we can observe growing consumption of milk with extended consumption date. By the results of the survey 98 of the Slovak consumers (45%) prefer milk with extended consumption date. 78 respondents (36%) buy fresh milk and 35 respondents (16%) prefer fresh milk with 7 day shelf life. 8 consumers (4%) do not make any difference between the fresh or milk with extended consumption date (Figure 5).

The most preferred milks with extended date are: Rajo, Babička, Milkagro and Sole. 12 respondents prefer the milk sold under the retail brand of Tesco and Jednota.

### Consumption of dairy products

Yogurts and cream deserts belong to the most favored dairy products consumed in Slovakia. Yogurts are classified as classic or creamy. Classic yogurts are characterised by the ripening process in the consumer package. Creamy yogurts ripen in the factory in the dairy containers. Afterwards, they are filled into the consumer package.

We recognize three categories of classic yogurts: high fat yogurts (10–12% of fat), skimmed yogurts (up to 3% of fat) and low fat yogurts (up to 0.5%).

The preference problem of fat or low fat yogurts depends on consumer habits. The fat makes the taste softer. Therefore, the consumer thinks that the high fat yogurts are more delicious than the low fat ones. Consumers who are used to consume low fat yogurts do not feel so much difference. By sorting the market on the low and high content of fat, we can consider that the market is equally differentiated. 38 respondents (19%) prefer fat yogurts and 41 consumers (21%) prefer low fat yogurts. At the Slovak market, we can observe two categories of yogurt consumers. Those who prefers fat yogurts and desert whips. These are mainly from Eastern part of Slovakia where the local dairy company produces mainly yogurts with high content of fat. The second category is from Western part of Slovakia where consumers prefer light and pro-biotic yogurts. Therefore, it is very difficult to sell products from the dairy companies based in Western Slovakia in Eastern part of Slovakia, which are mainly producing low fat and pro-biotic yogurts.

Slovak consumers prefer fresh yogurts with shorter shelf-life what was confirmed by 105 respondents (51%). 83 consumers (41%) prefer dairy products with the expiry date within 21 days and 16 consumers (8%) prefer expiry over 22 days. The most favorite yogurts are Rajo, Danone and Sabi and among desert whips Danone, Milkagro and Zott .

The consumer package size of yogurts is enlarged with the further tendency to grow. The consumers prefer 125–150 g size package rather than 100 g as it used to be in the past (Figure 6).

The following trends have been concluded by the survey at the Slovak market of the milk and dairy products:

- stagnation of the segment with yogurt products and growth on segment with dairy deserts,
- higher interest for the cream yogurts,

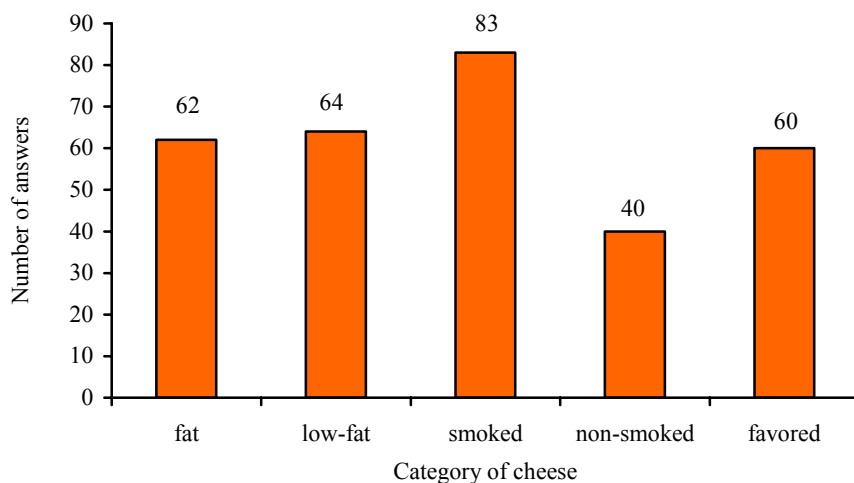


Figure 7. Cheese consumption by respondents

- drop of demand for white yogurts in favor of fruit and chocolate flavors,
- orientation of consumers on products marked as light or pro-bio,
- increased concern about information presented on package (content),
- growth of package sizes from 100 g to 125–150 g packages with tendency of further growth,
- rising interest for longer period of consumption of the products.

### Consumption of cheese

Similarly like yogurts, the consumption of cheese is focused on fresh products. 98 of consumers buy cheeses with the date of consumption up to 15–30 days from production. 87 consumers buy cheeses up to 14 days from production date. 18 respondents prefer cheeses with the time of consumption up to 31 days which is mainly processed cheese. Respondents buy the most often a 250g package followed by a 100g packages. Only 12 respondents buy more than 500g in one shopping.

By the fat content, we divide cheese as follows:

high content of fat	minimal 60% of fat,
full cream	from 45–60%,
half fat	from 25–45%,
low fat	from 10–25%,
skimmed	low then 10%.

The cheese market is equally divided. There is a small disparity in the cheese taste. The low fat cheese is commonly purchased by the 20% of respondents and 19% of respondents buy cheeses with the high content of fat. Traditionally, Slovak cheeses are

smoked. Therefore, the consumer habits are focused on smoked cheeses.

There is a growing demand for cheeses with different flavors and of different origin, cheeses like “Camembert” and “Roquefort” (Figure 7).

The most favorite cheeses are: “Karička”, “Lunex”, “Syrokrém” (processed cheese), “Eidamská tehla”, “Niva”, “Parenica” and “Oravský oštiepok” (of Slovak origin).

### Classifying of Slovak consumer of dairy products

Categorizing of the dairy consumer is not a easy task. There are different criteria to be considered: gender, age, income, health etc. Based on the results of the marketing survey, Slovak consumers of dairy products can be classified into two groups:

- *Conservative consumers* – represented by older consumers. Consumer habits are extremely important for this group of consumers. They prefer dairy products, which they consumed traditionally. Consumers do not like innovation and they try new products very rarely. Conservative consumer is hardly over changing its behavior. The most important decision factor is taste, price and also health education plays an important role. They are very price sensitive. Milk consumption stagnates in this category of consumers.
- *Progressive consumers* – characterized by younger age group. Consumers can adopt the consumer behavior very easily. Typical characteristics are: low brand loyalty, preferences for new products and innovation. Progressive consumers are highly demanding. There is a need to classify them by gender. Females demand quality dairy products

with high nutritive value, low fat, yogurts enriched by fiber or vitamins, and consume dairy desserts. Males prefer milk drinks and fat yogurts.

## CONCLUSION

The survey, which has been carried out among 207 consumers at the Slovak market of the milk and dairy products, shows the following trends: stagnation of segment with yogurt products and growth of segment with dairy desserts, the lower significance of milk consumption for adults and consumption of milk with higher fat content, higher interest about the cream yogurts, drop of demand for white yogurts in favor of fruit and chocolate flavors, orientation of consumers on products marked as light or pro-bio, increased concern about information presented on package (content), growth of package sizes from 100g to 125–150g packages with tendency of further growth, rising interest in products with the longer period of consumption.

The systematic use of the tools of marketing mix becomes inevitable for the maintaining of the adequate interest of consumers about the purchase of milk and

dairy products. The executed survey shows that dairy companies must put more emphasis on effective sales policy, adoption of new know-how and knowledge, monitoring, controlling and evaluation of innovation and modernization processes. Continuing education of managers becomes key priority in problems solving process and developing of dairy companies future strategies. For many reasons, food production and processing have been continuously changing. People consume a wider range of food, food ingredients and food additives than ever before.

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Arrived on 20<sup>th</sup> June 2005

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### Contact address:

Ing. Zuzana Kapsdorferová, PhD., doc. Ing. Ludmila Nagyová, PhD., Slovenská poľnohospodárska univerzita v Nitre, Tr. A. Hlinku 2, 949 01 Nitra, Slovenská republika  
tel.+421 376 508 131, +421 376 508 102, e-mail: zuzana.kapsdorferova@uniag.sk; ludmila.nagyova@uniag.sk

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