



## **Analysis of the consumption frequency of dairy products in Hungary**

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### **ABSTRACT**

*The consumption frequency of Hungarian consumers was analyzed as part of the analysis of a 1000-strong representative survey in Hungary. It can be stated that 74.1% of consumers consume some kind of dairy product with some frequency. Despite this, the number of non-consumers of different dairy products is considerable. Liquid milk is the most frequently consumed dairy product among Hungarian consumers, and butter, butter cream and different kinds of ripe cheeses also play a significant role. At the other extreme ice creams and yogurt of natural taste are consumed only about every other week of the year. Margarine was also part of the analysis. 56% of those questioned agreed more or less with the statement that it is a product of milk. If we compare its consumption frequency to the consumption frequency of the dairy products then it surpasses all of them. It is consumed the most frequently, but it is done so in the belief that it is a dairy product.*

(Keywords: analysis of the consumption frequency, dairy products, Hungary)

### **ÖSSZEFOGLALÁS**

#### **Tejtermékek fogyasztási gyakoriságának vizsgálata Magyarországon**

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*A magyar vásárlók tejtermék fogyasztási gyakoriságát e termékek hazai piacán végzett 1000 fős reprezentatív felmérés elemzéseként vizsgáltuk. Megállapítottuk, hogy a magyarok 74,1%-a valamilyen gyakorisággal fogyaszt tejet, illetve valamilyen tejterméket. Mégis azt lehet mondani, hogy az egyes tejtermékeket vizsgálva jelentős a nem fogyasztók aránya. Leggyakrabban a tejet fogyasztják hazánkban, emellett jelentős szerepet játszik a vaj, a vajkrém, illetve a különböző érlelt sajtok. A másik végletet a jégkrémek, illetve a natúrjoghurtok képviselik, ezek fogyasztására átlagosan kéthetente kerül sor éves szinten. A kutatás részét képezte a margarin vizsgálata is. A válaszadók 56%-a többé-kevésbé egyetértett azzal, hogy ez tejtermék. Összehasonlításunk eredményeként, a margarin fogyasztási gyakorisága megelőzi a tejtermékekét. Ezt fogyasztják a leggyakrabban, de abban a hitben, hogy ez tejtermék.*

(Kulcsszavak: tejtermékek, fogyasztási gyakoriság vizsgálat, Magyarország)

### **INTRODUCTION**

It is common knowledge that milk and dairy products play a significant role in sanitary regulations and public health. The consumption of this kind of products has started to

increase due to the publicity („Milk is life, power and health.”) and considerable state funds since 1960. This tendency came to a sudden stop due to more and more acute crisis, the increasing inflation and unemployment – following the height of 199 kg/person/year in 1987, and the consumption of dairy products declined drastically. After the lowest point of 133 kg/person/year in 1995 a slow increase came, but the present consumption with about 142 kg is behind the desirable nutritionbiology level or the level of the developed countries (*De Crook*, 1995; *KSH*, 2002).

Our work aims at the recognition of the milk consumption and the consumption of dairy products habits concening them in Hungary. In this summary the first part of the evaluated questions related to consumption habits are presented

## **MATERIALS AND METHODS**

Our survey is based on a 1000-strong representative questionnaire inquiry. The base of the representative sampling were the figures of 2002 census, and their help we chose one-one county in the seven regions of Hungary. The quotasystem is drawn up representing the Hungarian population in sex, age, educational qualification. The request of answerers happened on the basis of this quota. The questionnaires are filled in the homes of answerers. A questionnaire took about 20-25 to answer. The data were analyzed by SPSS for Windows suite.

## **RESULTS AND DISCUSSION**

### **Non-consumers**

First the consumption of different dairy products or margarine were examined, then the consumption frequency and we were curious to know how the consumption/non-consumption, then consumption frequency was formed.

The margarine consumption was examined because it is an important competitor of butter products (N.N., 1999), on the other hand a big part of the consumers think it is a dairy produce.

Let's examine first how the non-consumption of different products is formed. 56.3 percent of the answerers said they never consume any yogurt of natural taste and 42.1 percent was the non-consumption of flavoured milk from the most frequent diary products, as can be seen in Figure 1. It is in harmony with the popularity value of these two products.

At the other end of the pole there are the sour cream with a value of 2.5%, the curds of 5.7%, riped cheese of 6.7%. This goes to show that the rate of non-consumers in case of these products is low, that we can explain with a Hungarian national dish, noodles with cottage cheese as well as the Hungarian nutrition habits.

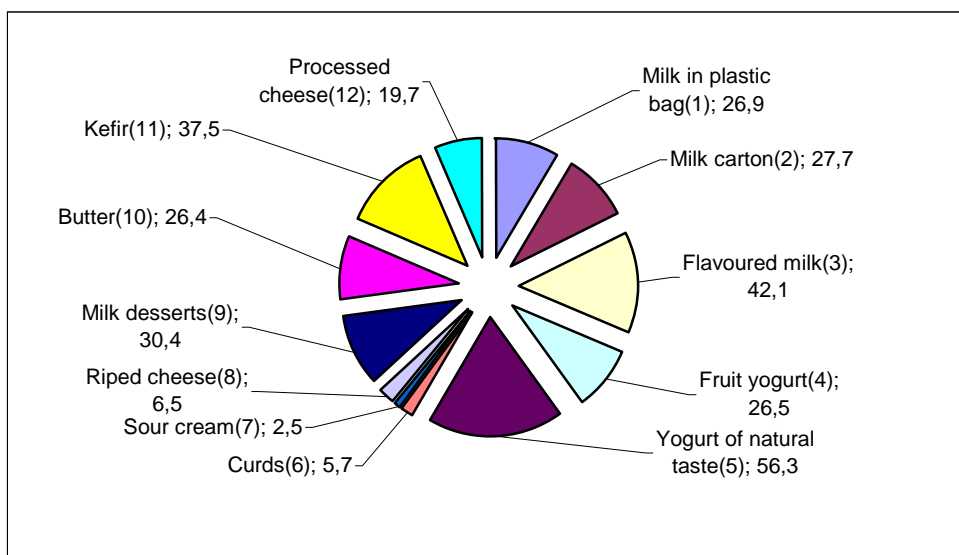
The rate of those who do not consume butter and liquid dairy products is 26.9% in case of milk in plastic bag, 27.7% milk carton, 26.4% butter. The rate of margarine non-consumers, which is 11.9% is shown in Figure 1. The reason for this is Hungarian nutrition habits, because plenty of consumers eat these much liked dairy products for breakfast or supper.

If milk and diary products are examined together, and we want to know how many people do not consume any diary products, we practise that this number is 25.9%. However, it can be proved that the owerwhelming majority of the population consume some kind of diary product.

If we compare it with the fact that 24.4% of the population absolutely do not buy any dairy product (Szakály, 2001), then we can draw a paralell between these two facts, that the two values do not necessarily have anything in common, but the big similarity is notable.

**Figure 1**

**The rate of non-consumers of different dairy products, plotted against frequencies (%) n=1000**



1. ábra: A különböző tejtermékeket nem fogyasztók aránya a gyakoriságok függvényében

Zacskós tej(1), Dobozos tej(2), Ízesített tejtermékek(3), Gyümölcsjoghurt(4), Natúrjoghurt(5), Túró(6), Tejföl(7), Érett sajtok(8), Tejdesszert(9), Vaj(10), Kefír(11), Ömlesztett sajt(12)

### Analysis of the consumption frequency of milk and dairy products or margarine

The consumption frequency of these products was examined on an eight-part frequency scale. Consumers had to mark how often they eat these and margarine on this scale (e.g.: 1: the product is never consumed, 4: it is consumed at the weekends, 8: it is consumed several times a day).

The received results on a frequency scale were compared with an index worked out by Szakály (1994) and modified by us. This index can show how often margarine and different kind of dairy products are consumed during a year or which day the different products are consumed on.

The results on Figure 2 show how often these products in order of decreasing consumption frequency get on the table of the consumers.

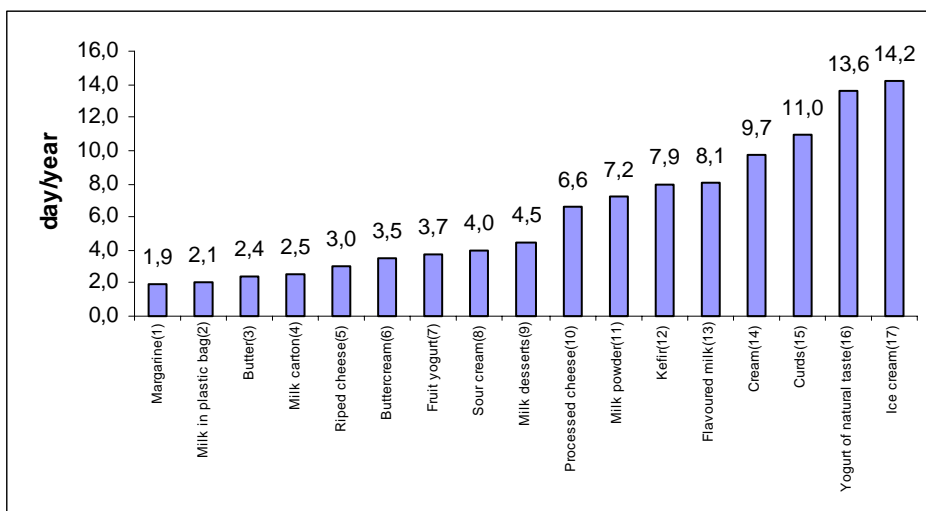
So, it can be stated that milk in plastic bag belongs to the lower price category and is consumed every other day, and margarine consumption stands nearest to it.

Butter and milk carton which is thought more expensive but of higher quality by consumers, are consumed every two and a half days on average. They are followed by riped cheese, butter cream, fruit yogurt, sour cream. These products are consumed every fourth day.

Milk desserts, processed cheese and milk powder are consumed at least once a week. The latter one, to consumers' mind, is used mainly with coffee.

**Figure 2**

**How often do you consume any kind of dairy products or margarine? (in days),  
n=1000**



2. ábra: Milyen gyakran fogyaszt bármilyen tejterméket vagy margarint? (napokban kifejezve)

Margarin(1), Zacskós tej(2), Vaj(3), Dobozos tej(4), Érett sajt(5), Vajkrém(6), Gyümölcsjoghurt(7), Tejföl(8), Tejdesszertek(9), Ömlesztett sajt(10), Tejpor(11), Kefír(12), Ízesített tejtermék(13), Tejszín(14), Túró(15), Natúrjoghurt(16), Jégkrém(17)

Yogurt of natural taste and ice cream stand at the end of the series. The latter one is consumed every second week.

To sum the figures of Table 2: Hungarian people consume liquid dairy products every second day, it is followed by butter, cheese, fruit yogurt and sour cream, but ice cream is consumed every second week. Our results are propped up by a Gfk survey (Progresszív, 1999).

### **Percentage demonstration of the inhabitants' consumption frequency**

The demonstration of the consumption frequency of the population in percentage makes possible a more detailed analysis of milk, dairy products and margarine. Therefore it is necessary to examine the data separately, in other words to compare the percentage value of the different answers.

The division of the inhabitants according to the consumption frequency can be seen in *Figures 3a* and *3b*. For the sake of graphic quality some categories like „several times a day”, „daily”, or „three-four times a week” frequency values were contracted, and only „daily” and „several times a week” categories were used. The category „never” cannot be found, because it has already been conducted.

53.6% of the Hungarian population consume milk in plastic bag daily or several times a week, in the case of milk carton this number is 47.1%. Milk carton is preferred by people with higher salary.

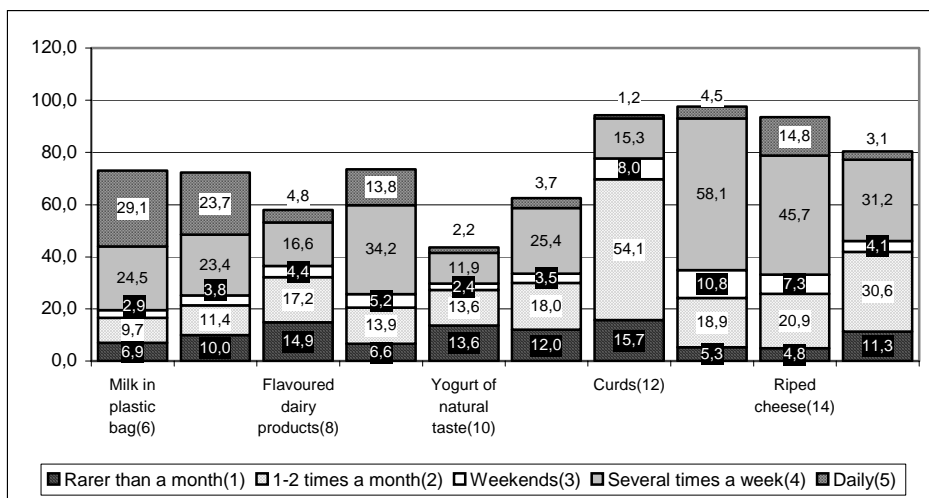
The proportion of the only weekend consumers is low of both dairy products, but that of „occasional milk drinkers”, who consume milk monthly or rarer is quite high: 16 and 21%. If the dairy industries could get these consumers to consume these products more frequently with intensive advertising and means of market segmentation, then their utilization would highly increase.

The proportion of daily or weekly consumers do not reach 20% in case of flavoured dairy products, yogurt of natural taste, curds, milk powder, ice cream and cream. The listed products are consumed rarer than a month.

Finally it can be stated, that milk powder consumption is low. Consumers prefer whipped cream because of the wider range of goods, higher quality and the change in coffee drinking habits.

**Figure 3a**

**Percentage division of consumers according to consumption frequency of dairy products, (n=1000)**



*3a. ábra: A fogyasztók százalékos megoszlása a tejtermékek fogyasztási gyakorisága szerint*

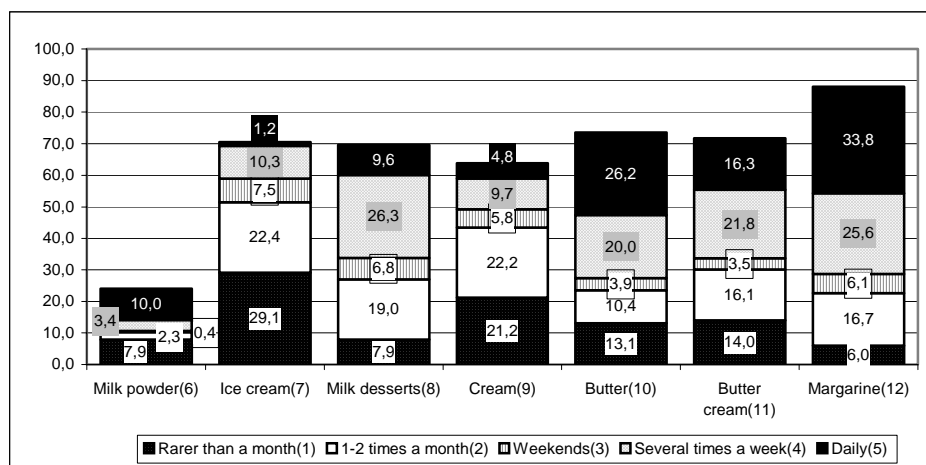
*Ritkábban mint havonta(1), 1-2 alkalommal havonta(2), Hétvégenként(3), Hetente többször(4), Naponta(5), Zacsós tej(6), Dobozos tej(7), Ízesített tejtermék(8), Gyümölcsjoghurt(9), Natúrjoghurt(10), Kefír(11), Túró(12), Tejföl(13), Értelt sajt(14), Ömlesztett sajt(15)*

The consumption of kefir and sour cream happens in an interesting way, too. The rate of daily consumers is low in case both of them, on the other hand there are plenty of consumers, who consume them several times a week. In case of kefir this number is 25.4%, while same value of sour cream is especially high 58.1%. The explanation for the vast difference perhaps, is that the younger generation group do not like the sour taste of kefir, while the sour cream is preferred by both the younger and older generation.

The consumption of riped cheese and fruit yogurt is extremely favourable. 14.8% of the inhabitants consume riped cheese daily, 45.7% several times a week. Fruit yogurt is consumed by 13.8% daily and 34.2% several times a week. The proportion of the consumers who eat these products at the weekends, does not diverge to a great extent either. The rate of the consumers who consume the mentioned products rarer than this, and probably belong to the price sensitive consumer group, can be regard the same, too.

**Figure 3b**

**Percentage division of consumers according to consumption frequency of dairy products or margarine, (n=1000)**



*3b. ábra: A fogyasztók százalékos megoszlása a tejtermékek, illetve a margarin fogyasztási gyakorisága szerint*

*Ritkábban mint havonta(1), 1-2 alkalommal havonta(2), Hétvégenként(3), Hetente többször(4), Naponta(5), Tejpor(6), Jégkrém(7), Tejdesszert(8), Tejszín(9), Vaj(10), Vajkrém(11), Margarin(12)*

Butter and butter cream consumption can be said favourable, according to the survey. 46.2% of consumers consume butter and butter cream daily, while 38.1% of them consume them several times a week. The relatively high value of the Hungarian butter consumption is surprising because it is well-known that the national butter consumption level is low (Szakály, 2001), which has not changed for years.

When analyzing of butter consumption, we have to take the fact into account, that a part of the Hungarian consumers are not aware of the differences between butter and

margarine. A great part of them consume different kinds of margarine presumably in the belief of consuming a product of dairy origin.

Different consumer opinions were asked during the research. 27.1% of the answerers agreed fully, 9.9% partly, 19.9% chose the categorie „yes and no”, when they were said: „Margarine is a dairy product.”, so 56% of the consumers is under the delusion that margarine is a dairy product.

Hardly more than a third of the consumers (37.8%) do not know that margarine is not a dairy product. It is an important information for dairy companies, so our achievements are not surprising in the light of this. The data of Table 1 show that we should inform consumers about it.

**Table 1**

**Agreement of asked consumers with statement „margarine is a dairy product”  
(n=1000)**

<b>Value of agreement(1)</b>	<b>Agree fully(3)</b>	<b>Agree partly(4)</b>	<b>Yes and no(5)</b>	<b>Do not agree partly(6)</b>	<b>Do not agree fully(7)</b>
Altogether (%) (2)	27,1	9,9	19,0	6,2	37,8

*1. táblázat: A megkérdezett fogyasztók egyetértése azzal az állítással, miszerint a margarin is tejtermék*

*Az egyetértés foka(1), Összesen(2), Teljes mértékben egyetért(3), Részben egyetért(4), Egyet is ért meg nem is(5), Részben nem ért egyet(6), Egyáltalán nem ért egyet(7)*

59.4% of the answeres consume margarine daily or several times a week, giving reason for thought, with this margarine surpasses butter and butter creme consumption. It can raise the question that what kind of product people want to consume, when they eat margarine.

## CONCLUSIONS

This survey aimes to get to know Hungarian consumption frequency of milk and dairy products, based on a 1000-strong representative questionning by questionnaire inquiry. Data processing happend with SPSS for Windows suite and the following conclusions were concluded on the basis of these data.

- It can be stated in the respect of milk and dairy products consumption that 74.1% of the inhabitants consume milk and dairy products with some sort of frequency.
- Whereas, there is a large scale of non consumers in the respect of many dairy products. If we can urge consumers to increase the consumption with methods of tendentional marketing and advertisements putting stress on the health protecting role of dairy products, then it will be able to increase the consumption frequency and the quantity of consumption, too.
- The results show that milk in plastic bag belongs to the lower price category and is consumed every other day and that margarine consumption stands nearest to it.
- Butter and milk carton – which is thought by consumers more expensive but of better quality – are consumed every other and a half day. These are followed by riped

cheese, butter cream, fruit yogurt and sour cream. The consumption frequency is every third or fourth day in case of the mentioned products.

- Milk desserts, processed cheese and milk powder are consumed at least once a week. The last one is consumed for almost only coffee-drinking. Curds, yogurt of natural taste and ice creams stand in the last place in this series. The last one is usually consumed every other week.
- We have to call your attention, in the light of the high rate of butter consumption, to consumers are not aware of the differences between butter and margarine. Considerable part of them consume margarine in belief that it is a dairy product.

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