

BREAD CHOICE AND CONSUMPTION TRENDS

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Abstract

The consumption of bread per capita has been declining in Latvia for several decades. What could change the consumption behaviour of residents to increase the consumption of bread? The research aim is to identify trends in the choice and consumption of bread by consumers in Latvia. To achieve the aim, two specific research tasks were set: to identify the trends in the consumption of bread and to ascertain the opinion of Latvia's residents on determining factors in their choice of bread. An Internet survey of Latvia's residents on bread quality and consumer choice was conducted in November 2016. The survey involved 919 respondents aged 15-74. The main results showed that the consumption of bread declined, yet a stabilisation trend emerged. The reasons for the consumer choice, which were related to the quality and price of bread as well as the confidence and behaviour of consumers, were diverse for different kinds of bread. In choosing wheat bread, the determinant factor was price, while the choice of rye bread was determined by previous experience, i.e. the producer of the bread consumed. Consumers believed that an increase in bread consumption could be achieved by producing tastier breads.

Keywords: bread choice, consumption, Latvia.

Introduction

Bread production is not constant – it is variable and persistently adapts to consumer wishes, which are not always understandable and – what is even more important – are difficult to predict (Bread ..., 2013; World ..., 2009). The consumption of bread and bakery products steadily increases in the world (Market ..., 2008; AIBI, 2015). This is mainly associated with the growing populations. At the same time, a decrease in bread consumption is observed in developed countries. In the last 20 years, the consumption of bakery products persistently decreased in Latvia as well (Eglite, Kunkulberga, 2015; Partikas ..., 2016). In the world, forecasts of bread consumption are based on the average consumption in an average developed country, which totals approximately 70 kg of bread per capita per year, and on population increase forecasts. The number of countries where the production, distribution and prices of bakery products are regulated by the government and most of the quantity of bread is produced by order of the central and local governments, often for distribution among the poor, increases (Competition ..., 2009; Bread ..., 2013; Eglite, Kantike, 2012; German ..., 2009; Innovation ..., 2009).

The per capita consumption of bread is very diverse across European countries. After AIBI (The International Association of Plant Bakers) information the highest consumption of bread per capital is reported in Turkey (104 kg) and Bulgaria (95 kg), while the lowest one is in Great Britain (approximately 32 kg). European residents consume on average 59 kg of bread per year and this level was stable in recent years (AIBI Bread Market..., 2015) (Table 1). Although the bread consumption in general is stable, it is important to analyse consumer preferences for bread in order to increase bread consumption by launching successful targeted bread promotions initiatives at national level.

Table 1

Bread consumption per capita per year in European countries (2013)

Country	Consumption, kg	Trend with the previous year
Belgium	55.0	stable
Bulgaria	95.0	stable
Denmark	45.0	stable
Finland	42.0	stable
France	57.0	stable
Germany	56.0	stable
Greece	68.0	stable
Italy	52.0	stable
Netherlands	62.0	-1.0%
Russia	55.0	+2.0%
Slovenia	42.0	stable
Spain	37.0	+4.2%
Turkey	104.0	-10.0%
Ukraine	89.0	-7.5%
Great Britain	32.0	-1.0%
Average	59.4	

Source: construction based on AIBI Bread Market ..., 2015

The research aim is to identify trends in the choice and consumption of bread by consumers in Latvia. To achieve the aim, two specific research tasks were set: to identify the trends in the consumption of bread and to ascertain the opinions of Latvia's residents on determining factors in their choice of bread.

Materials and Methods

The present research was performed by applying the quantitative approach to statistical data analyses and the survey of residents. The sociological survey was done owing to the responsiveness of residents, who were not reluctant to fill in a questionnaire on their choice of bread and consumption habits, in the Internet environment. The survey involved 919 respondents aged 15–74. Most of the respondents represented

multi-person households, and only 7% of them represented single-person households. The respondents were selected employing the method of multistage stratified random sampling. This sampling method ensures a representative sample from the general population. The maximum statistical error for a sample of 919 respondents was $\pm 5\%$. The survey was conducted in November 2016; the respondents were aged 15–74. The survey data were processed by statistical analysis methods.

Results and Discussion

In the last two decades in Latvia, the consumption of bread decreased not only owing to the declining population but also, and mainly, because of a decrease in the per capital bread consumption (Eglite, Kantike, 2012; Partikas ..., 2016). The per capital consumption of rye bread decreased the most over the last 20 years (Figure 1). A positive fact is that the decrease cannot be precisely described by a linear function, as some stabilisation is observed; the function is as follows:

$$y = 0.0779x^2 - 2.9262x + 42.932 \quad (1)$$

$$R^2 = 0.9938, \text{ where}$$

x – year number;
 y – rye bread consumption, kg/capita per year;
 R^2 – determination coefficient, which indicates the proportion of the variance in the dependent variable that is predictable from the independent variable.

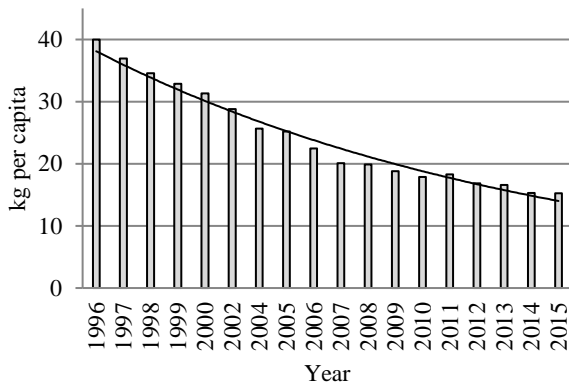


Figure 1. Consumption of rye bread in Latvia in 1996-2015, kg per capita

In the last two decades, the decrease in the per capita consumption of rye bread – from 39.96 kg in 1996 to 15.25 kg in 2015 – was the largest, i.e. at 62%. A decrease in the consumption of wheat bread was almost linear in Latvia in the last 20 years; however, the decrease could be more precisely described by a polynomial function.

The per capita consumption of wheat bread decreased from 32.76 kg in 1996 to 15.71 kg in 2015, i.e. by 52% over the last 20 years (Figure 2).

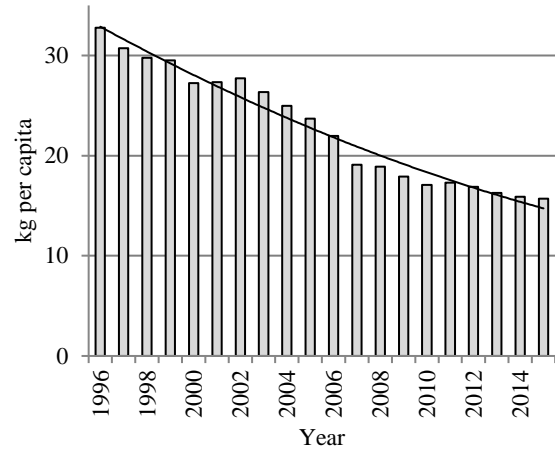


Figure 2. Consumption of wheat bread in Latvia in 1996–2015, kg per capita

The decrease in the consumption of bread could be explained by a number of factors that are described in the scientific literature by a lot of research studies conducted in developed countries (Langhauser, 2009; World ..., 2009; Market Trends..., 2008). The pressure of other alternatives available for breakfast and food consumption outside the home are considered to be global trends that result in the decrease in bread consumption. A global demographic change is an increase in the number of single-person households, which are also ageing. The number of mobile and flexible employees whose modern lifestyle promotes the understanding of foreign cultures and culinary diversity increases as well (AIBI, 2015; Bread and Bakery ..., 2015). It is believed that a cyclical lack of dynamic growth in developed countries make household incomes stagnate and lead to an inert demand for bread and bakery products. In the last decade, it was associated with changes in shopping behaviour that took the forms of a growing demand for bakery products with value added (snacks, convenience food) and food consumed outside the home as well as one-stop shopping at a supermarket due to the lack of leisure time; a greater diversity and making a particular decision began playing greater roles when shopping, and the demand for organic food and internationally recognisable food products, at the expense of traditional ones, increased as well (Innovation and Market ..., 2009; Culinard, 2009).

A sociological survey of Latvia’s residents on the choice and consumption of bread was conducted to identify the global trends that influenced Latvia too. In our survey of the respondents, 60% earned a monthly income ranging from EUR 200 to 600 per household member. During the last year, incomes did not change for 58%, decreased for 17% and increased for 25% of the respondents. Of them, 81% were aged 25–54, 6% were under 24 and 13% were over 55 years of age. Of the respondents, 83% were women and 17% were men. On the one hand, this may be regarded as a research imperfection, while on the other hand it allows more objectively assessing shopping habits, as traditionally women take care about food at home and they usually

determine the menu, trends in food consumption and conviction about the right foods for their family. To better understand prejudices and stereotypes that were present in Latvia's society in respect to the nutritional value of bread, the survey included a number of assertions, like "I choose a bread that I (my family members) like", "Rye bread is better suited for those doing physical work" and others. The survey revealed that 97% of the respondents preferred the bread they or their family members liked. Of them, 72% believed that bread was an essential source of carbohydrates in their nutrition. However, for lunch, 16% would replace potatoes and sauce with bread, and 60% believed that hot lunch could not be replaced with bread and butter (Figure 3).

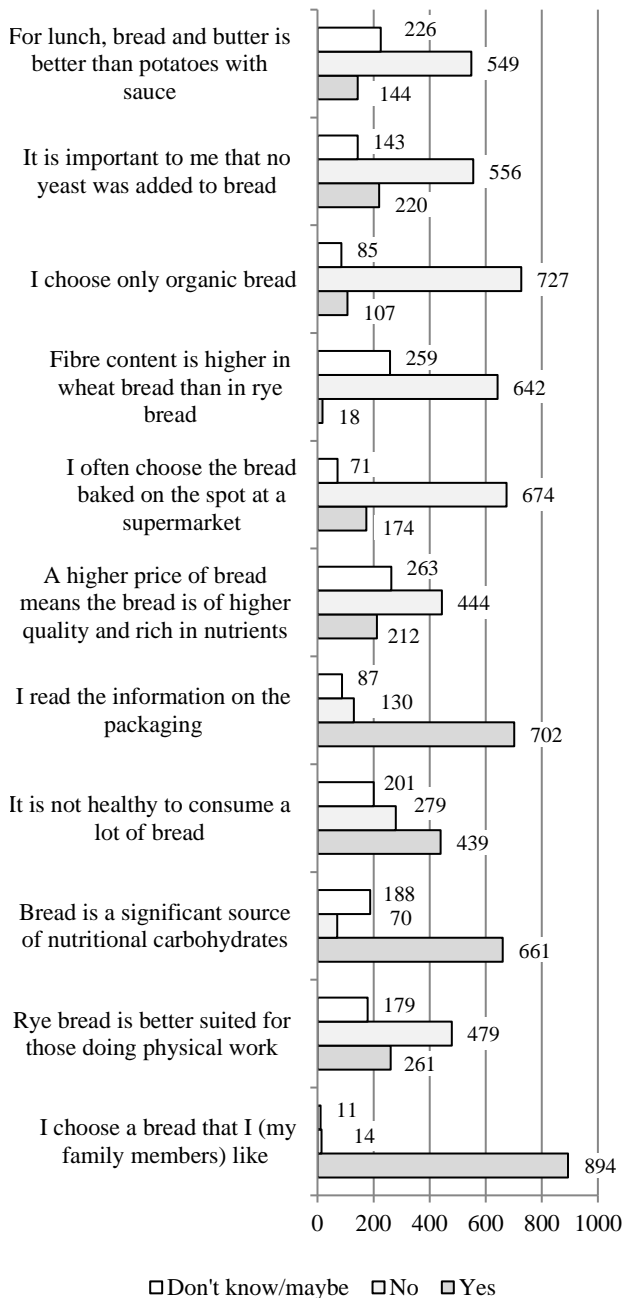


Figure 3. Distribution of replies to the question: „Do you agree with the assertion that: ...?”

Almost half of the respondents (48%) were convinced that it was not healthy to consume a lot of bread. However, compared with a 2009 study, an opinion that rye bread is better suited for that doing physical work has changed, as most of the respondents (52%) believed that rye bread had no association with physical activities. The residents' knowledge about bread improved and two thirds knew bread components (Eglite, Kantike, 2012). One more positive trend was observed with regard to this fact. Compared with earlier surveys at 2009 (Eglite, 2012), 76% of the respondents were interested in information available on the packaging of bread, only 14% were not interested in it, while the others were indifferent to it. It was important to almost a fourth (24%) that no yeast was added to their bread. Of the respondents, 23% thought that a higher bread price meant the bread was of higher quality and richer in nutrients.

A question was asked regarding any change in the quality of bread in comparison with the previous year. Most of the respondents believed that there was no change. Most complaints about a decrease in the quality of wheat bread by the respondents related to wheat bread, while the quality of rye bread, and mainly whole grain bread, increased, according to them. It is worth mentioning that the same results were acquired by another survey conducted two years ago (Eglite, Kunkulberga, 2015). One can note that the consumption of rye and wheat breads still declines, while that of whole grain and sweet-and-sour breads is not captured by statistics.

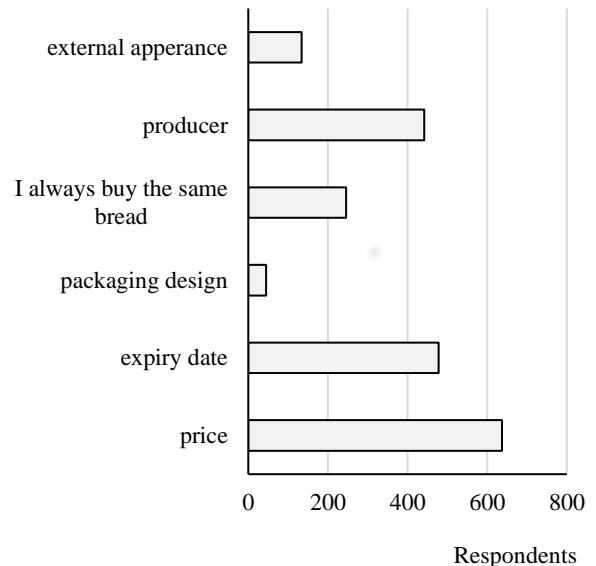


Figure 4. Factors for the choice of wheat bread

The respondents were asked to rate three most important factors, based on which they chose every kind of bread. In choosing wheat bread, price was the most important factor, followed by the bread expiry date and the producer brand. Packaging design and external appearance were the least important factors (Figure 4). In Latvia, wheat bread is bread supplied in the broadest assortment and has relatively similar taste

characteristics. In choosing rye bread, the producer was the most important factor for the consumers (Figure 5). For 46% of the respondents, the producer of rye bread was the most important factor, followed by price and the expiry date. About a fifth of the consumers bought the same kind of bread. Only 7% of them paid attention to the external appearance of bread.

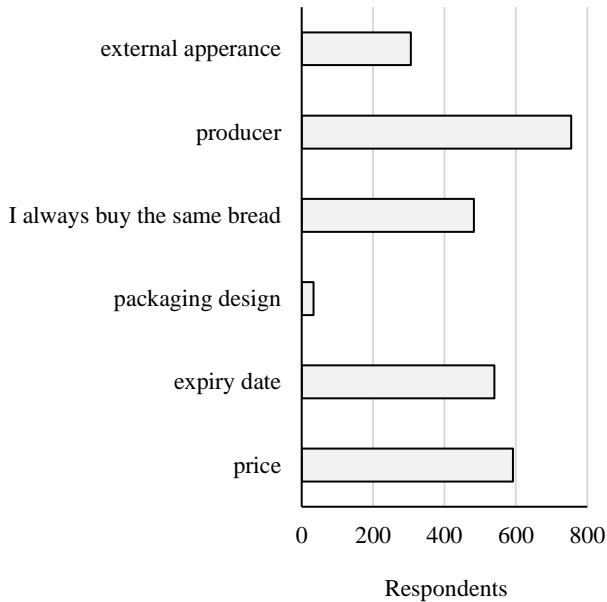


Figure 5. Factors for the choice of rye bread

The respondents were requested to choose the prerequisites under which they would consume more bread. The assertions were like follows: “The price of bread is lower”, “The bread is tastier”, “I am informed that this bread is healthy” and similar.

With regard to the kinds of bread, the respondents expressed explicit opinions on whole grain bread and rye bread, while their opinions on sweet-and-sour bread and wheat bread were uncertain and implicit.

The most important prerequisite for consuming more bread for all the kinds of bread (rye, whole grain and sweet-and-sour), except wheat bread, was a tastier bread. They would consume more wheat bread if being informed it is healthy.

Information about whether wheat bread is healthy and a bread packet of an adequate size would be important prerequisites for increasing the consumption of the wheat bread. Sweet-and-sour bread would be consumed more if consumers were informed about its healthiness, its price was lower and bread packets of an adequate size were available. To increase the consumption of whole grain bread, the following prerequisites were important: information about its healthiness, a lower price, a broader assortment and longer expiry dates. For rye bread, its taste was the most important factor, and a packet of an adequate size was ranked second, which were followed by a lower price, information about the bread’s healthiness and the consumer’s physical activity.

Overall, one can conclude that the most important factors for increasing the consumption of bread were the taste of bread, followed by personal factors difficult to explain, while the least important factors were the external appearance of the bread and its expiry dates. There is a paradox – consumers wish longer expiry dates, but when choosing particular criteria, this factor is ranked in last but one position.

Studies on the market of bakery products in Europe (Innovation and Market..., 2009) explicitly show that in view of an increase in the number of older individuals (aged over 65) in Europe, such services as delivery, custom-made orders and consumer personalisation along with the choice of bakery products would be crucial for this consumer group; besides, not only the quality of the product but also its association with the particular site, bakery and local brand would be important.

Since the population’s health problems get worse and there is an increased need for dietary bakery products made of rough flour, a broad market niche is available in the market. We concluded that the purchasing power of consumers rises after an economic crisis, and bread is going to be one of the products the consumers are ready to pay more, especially if the bread is made according to an original or ancient recipe or technology.

New niches for bread and bakery products are sought for and found in Europe to meet the wishes of consumers. One can clearly notice a “boom” in sales of frozen bakery products, which has undergone consumer testing. The following trends have emerged in bread production: more pleasure from eating bread as well as healthy, fresh and ready to eat bread. Market researchers predict a lot of changes for bread and confectionery products in the third millennium (Huber, 2000). European consumers increasingly wish to enjoy traditional bakery products of various countries. “Exotic” kinds of bread from foreign countries are more and more often seen on consumer tables along with regional kinds of bread. It is seen not only at international exhibitions and conferences but also in all European cities that an “ethnic food wave” spreads across the entire Europe.

Conclusions

In recent years, bread consumption in Latvia has stabilized and has not been reduced.

Study showed that in choosing wheat bread, the determinant factor was price, while the choice of rye bread was determined by previous experience, i.e. the producer of the bread consumed.

Consumers believed that an increase in bread consumption could be achieved by producing tastier breads.

It was concluded that bread producers, faced by the decreasing market demand for bread, will have to work on maintaining and enhancing the quality of the bread as well as developing diverse alternative products, thereby increasing competition.

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