

CONSUMERS' PREFERENCES FOR PLACES TO PURCHASE LOCAL DAIRY PRODUCTS

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Abstract

Production and distribution of local food contributes to responds to the needs of consumers in terms of desire to support the local economies and responsibility for the environment. In local food resources, food production and processing, trading this food and its consumption occur in a relatively small geographical area. Benefits resulting from the functioning of local food systems are not only related to satisfying food demand, but also bringing specific social benefits. They allow to maintain the vitality of rural areas, especially in peripheral locations. In addition, locally produced food is not anonymous, it is also characterised by higher quality than mass-produced food. The purpose of the work is to identify the determinants and preferences of consumers regarding the places of purchase of local dairy products. The study was carried-out in 2019 using an interview questionnaire on a randomly selected group of respondents. The survey involved 308 respondents from the Podkarpackie Voivodeship, of which 298 consumed dairy products, and 255 respondents bought local dairy products (85.6% of respondents consuming dairy products). It was discovered the interest in buying local dairy products is quite high - 85.6% of respondents consuming dairy products bought them. A significant percentage of respondents (91.4%) indicated the availability of local dairy products in retail trade. Whereby, in the case of units located near the place of residence, 7.5% of respondents faced significant restrictions on access to these products, while 33.7% pointed to frequent shortages in the product range. This indicates the need to improve the flow of these products in distribution channels.

Key words: local food, short supply chains, dairy products, consumers' preferences.

INTRODUCTION

The food consumption sphere often becomes an opportunity to demonstrate specific views, the value system or opposition to the mass consumption model. Consumers make more and more conscious choices based on responsibility and benefits for the local community. For this reason, interest in local products and short food distribution chain is growing. Food from local production allows to implement the concept of sustainable rural development and sustainable consumption, contributes to reducing the negative effects associated with distribution and supports the development of local communities (Kusz, 2014). The development of local food distribution may become an important element of promoting the region, contribute to job creation and thus realistically support the development of the local economy (Cărătuș,

2018; Gómez et al., 2019; Gradziuk, 2015; Kacz, 2019; Kacz et al., 2018; Mikelionytė et al., 2019; Żakowska-Biemans et al., 2017).

In the source literature, the most commonly used criteria to qualify food in this category are the geographical place of manufacture and the perception of items by consumers as locally produced. "Local food systems" means that food production and processing, trade and consumption of food occur in a relatively small geographical area. Consumers most often interpret "local food" in reference to the distance that the food travels on the way from the producer to the consumer or the administrative boundaries within which it is produced (e.g. county, voivodeship, province). It should also be emphasized that "local food" is associated among consumers with certain attributes, as a product with unique features such as: freshness, high quality, animal welfare, environmental value, health values,

compliance with sustainable production conditions, relationship with the local socio-cultural environment, which is the beneficiary of the development of such a concept of production and distribution (Kawecka and Gebarowski, 2015; Matysik-Pejas et al., 2017; Żakowska-Biemans et al., 2017)

Distribution channels are crucial in the development of the local food market. The institutional and functional structures of distribution channels may take various forms depending on the type of market. The choice of distribution channel is largely dependent on the type of product (and the degree of their processing) and the preferences of buyers (Nestorowicz et al., 2012). There may be various food distribution channels on the market of local food products, both traditional and modern (e.g. using the Internet, purchasing groups of consumers). Whereby, the availability of food products on the market largely depends on well-functioning distribution channels. In the process of distribution of local products, an important element is to determine consumer preferences regarding the choice of places to buy local food.

MATERIALS AND METHODS

The purpose of the work is to identify the determinants and preferences of consumers regarding the places of purchase of local dairy products.

The study was carried-out in 2019 using an interview questionnaire on a randomly selected group of respondents.

The survey involved 308 respondents from the Podkarpackie Voivodeship, of which 298 consumed dairy products, and 255 respondents bought local dairy products (85.6% of respondents consuming dairy products).

Detailed analysis were presented for respondents that declared to buy local dairy products. Articles produced in the Podkarpackie Province (the province located in the south-eastern region of Poland) were assumed as local dairy products.

The respondents were divided according to gender, age, education and place of residence.

The structure of respondents is presented in Table 1.

Table 1. Characteristics of the respondents (%)

Characteristics	% of respond.	Characteristics	% of respond.
Gender	100.0	Education	100.0
-women	53.3	-primary	3.1
-men	46.7	-vocational	10.2
Age	100.0	-secondary	29.4
-up to 35 years	29.8	-higher	57.3
-36-45 years	23.5	Place of residence	100.0
-46-55 years	26.7	-city	28.2
-56 and more	20.0	-country	71.8

Source: own research

RESULTS AND DISCUSSIONS

Access to local food products on the market depends on well-functioning distribution channels.

Distribution is one of the most important elements of a company's marketing strategy. It is a set of activities that aim at moving products from the place of manufacture to the final consumer.

The main goal of distribution is to maximize the buyer's benefits, consisting in delivering the expected range of goods to the right place at the right time, with acceptable price and quality (Nestorowicz et al., 2012).

The availability of red goods sought by customers is both one of the basic dimensions of marketing effectiveness of enterprises, and also the most important element determining the purchase of food products.

Own research shows that only 8.6% of respondents had problems with buying local products in retail stores (Figure 1). Men, city dwellers, people aged 36-45 and respondents with primary education more often pointed out problems with purchasing local dairy products. Further analysis pointed out the availability of local dairy products in retail units located close to the respondents' place of residence (Figure 2). A small percentage of respondents (7.5%) indicated that there was a lack of these products in retail stores in the place of their residence. The highest number of such respondents was among men, in the age group over 56 and among persons with vocational education.

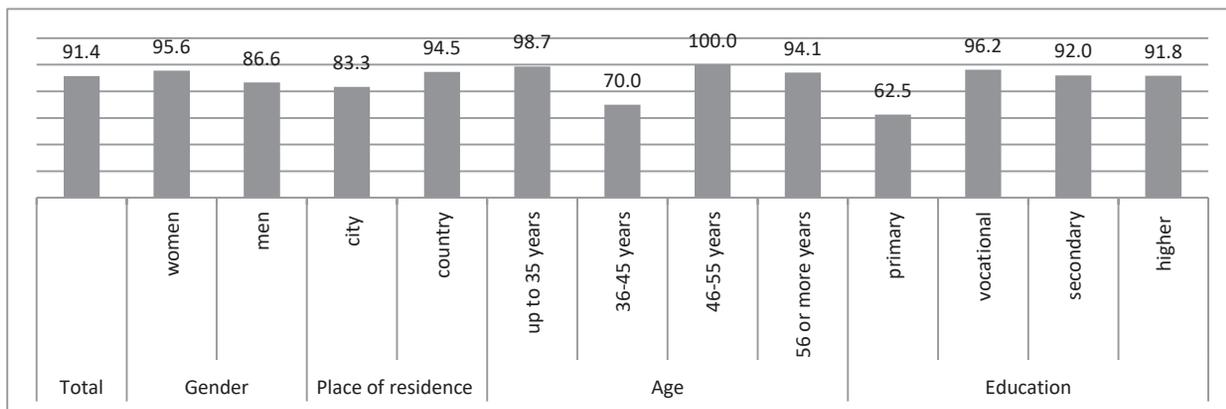


Figure 1. Percentage of respondents indicating availability of local dairy products in retail chains (%)
Source: own research

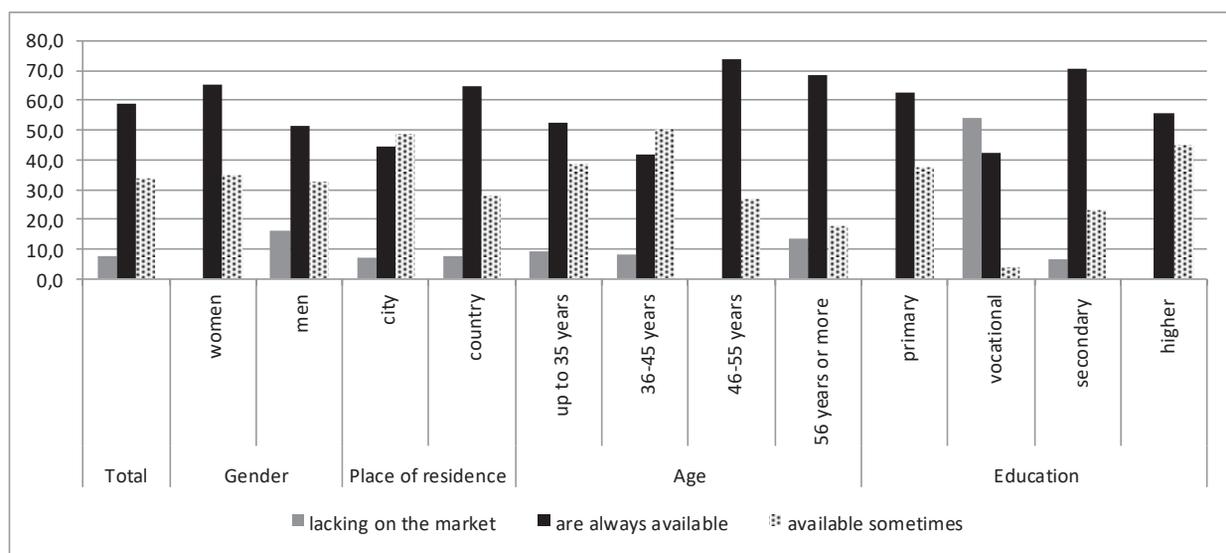


Figure 2. Degree of availability of local dairy products in the retail chains located in the place of residence (%)
Source: own research

Table 2. Place of purchase of local dairy products according to respondents* depending on gender and place of residence

Specification	In total Frequency %	Gender			Place of residence		
		Women	Men	Chi-square test p-value	City	Country	Chi-square test p-value
		Frequency %			Frequency %		
Small and medium shops	58.4	64.7	51.3	0.0297	52.8	60.6	0.2506
Super/hypermarkets, discount stores	16.5	17.6	15.1	0.5882	16.7	16.4	0.9578
Directly on a farm	14.1	-	30.3	0.0000	6.9	16.9	0.0391
Bazaars and marketplaces	15.7	17.6	13.4	0.3574	31.9	9.3	0.0000

*respondents could indicate more than one answer
Source: own research

Decisions regarding the places of purchase of food products taken by consumers are the result of many factors, i.e. the level of financial income, place of residence, age, education, their mobility, number of people in the household, distance from the sales point, convenience of shopping, availability of sought

goods, attractive prices, convenient opening hours (Białobrzycka, 2012; Cyrek, 2012; Kusz et al., 2017; Łapińska, 2012). Analysing the preferences of places to buy local dairy products, respondents indicated that they most often purchase them in small and medium-sized grocery stores (Table 2).

Table 3. Place of purchase of local dairy products according to respondents* depending on age

Specification	Age				Chi-square test p-value
	Up to 35 years	36-45 years	46-55 years	56 years and more	
	Frequency %				
Small and medium shops	44.7	31.7	89.7	68.6	0.0000
Super/hypermarkets, discount stores	23.7	40.0	-	-	0.0000
Directly on a farm	31.6	8.3	-	13.7	0.0000
Bazaars and marketplaces	7.9	20.0	10.3	29.4	0.0044

*respondents could indicate more than one answer

Source: own research

Table 4. Place of purchase of local dairy products according to respondents* depending on education

Specification	Education				Chi- square test p-value
	primary	vocational	secondary	higher	
	Frequency %				
Small and medium shops	62.5	42.3	78.7	50.7	0.0003
Super / hypermarkets, discount stores	-	-	-	28.8	0.0000
Directly on a farm	-	53.8	21.3	4.1	0.0000
Bazaars and marketplaces	37.5	26.9	-	20.5	0.0001

*respondents could indicate more than one answer

Source: own research

In all distinguished groups of respondents, small and medium-sized stores were indicated as the most common place to buy local dairy products. The exception is the group of respondents aged 36-45, where shopping locations were more often indicated on super- and hypermarkets (Table 3). Analysing the impact of variables differentiating the respondents on decisions regarding the place of buying local food, it was found out that the gender of the respondents had a statistically significant influence of the choice of small and medium-sized stores, while it did not have a statistically significant impact on the choice of super and hypermarkets as the place to buy these products (Table 2). When analysing the impact of the place of residence on the selection of super- and hypermarkets as well as small and medium-sized stores, no statistically significant relationships were found (Table 2). In the case of age (Table 3) and education (Table 4), these relationships were statistically significant. In the aspect of local food products, an important issue is the possibility of offering them in short distribution chains. The role of transparency in the structure of such a food distribution channel is emphasized, which facilitates the identification of all participants in this chain, especially producers. The regional reach of short supply chains, promoting tourist

attractions of the region, as well as the possibility of providing information about the nature and origin of products is also significant. The basic and easiest type of local food distribution channel is direct selling. It involves direct contact between the final consumer and the food producer, which can take place on the farm or marketplace, on the local food fairs organized cyclically or occasionally, as well as on exchanges or open-air market (Kawecka and Gębarowski, 2015). Alternative local food distribution channels, such as e-commerce, can also be mentioned.

When analysing the research results, it can be seen that the popularity of direct sales on a farm and purchases at bazaars and marketplaces was not high (Table 2). Most often men (Table 2), people up to 35 years of age (Table 3) and people with vocational education (Table 4) used direct sales on a farm. Statistical analysis confirmed the crucial statistical impact of gender, place of residence, age and education on the preferences for buying local products directly on farms. On the other hand, purchases of local dairy products at bazaars and marketplaces were popular among respondents living in the city (Table 2), aged 56 years and over (Table 3), and among people with primary and vocational education (Table 4).

Table 5. Local dairy products most often purchased in the opinion of respondents* differentiated in terms of gender and place of residence

Specification	In total	Gender			Place of residence		
		Women	Men	Chi-square test p-value	City	Country	Chi-square test p-value
		Frequency %			Frequency %		
milk	85.9	82.3	89.9	0.0836	83.3	86.9	0.4634
kefir	47.1	70.6	20.2	0.0000	61.1	41.5	0.0048
buttermilk	27.5	36.0	17.7	0.0010	18.1	31.1	0.0350
processed cheese	40.4	43.4	37.0	0.2982	34.7	42.6	0.2471
sour milk	22.3	32.4	10.9	0.0000	26.4	20.8	0.3319
butter	88.6	95.6	80.7	0.0002	83.3	90.7	0.0949
white cheeses	81.6	87.5	74.8	0.0090	84.7	80.3	0.4153
blue cheeses	21.6	26.5	16.0	0.0419	18.1	22.9	0.3923
yogurt	72.9	70.6	75.6	0.3659	76.4	71.6	0.4370
sour cream	69.4	78.7	58.8	0.0006	59.7	73.2	0.0352
yellow cheeses	67.1	69.1	64.7	0.4546	33.3	80.3	0.0000
Herbal cheeses	20.0	27.9	10.9	0.0070	27.8	16.9	0.0515

*respondents could indicate more than one answer

Source: own research

Table 6. Local dairy products most often purchased in the opinion of respondents* differentiated in terms of age

Specification	Age				Chi-square test p-value
	Up to 35 years	36-45 years	46-55 years	56 or more years	
	Frequency %				
milk	92.1	70.0	91.2	88.2	0.0008
kefir	28.9	30.0	75.0	56.9	0.0000
buttermilk	1.3	10.0	54.4	51.0	0.0000
processed cheese	40.8	21.7	36.8	66.7	0.0000
sour milk	7.9	20.0	47.1	13.7	0.0000
butter	92.1	80.0	92.6	88.2	0.0920
white cheeses	77.6	70.0	92.6	86.3	0.0061
blue cheeses	15.8	10.0	36.8	23.5	0.0013
yogurt	63.2	90.0	82.4	54.9	0.0000
sour cream	69.7	40.0	0.0	62.7	0.0000
yellow cheeses	55.3	60.0	89.7	62.7	0.0001
herbal cheeses	0.0	0.0	48.5	35.3	0.0000

*respondents could indicate more than one answer

Source: own research

Table 7. Local dairy products most often purchased in the opinion of respondents* differentiated diversified in terms of education

Specification	Education				Chi-square test p-value
	primary	vocational	secondary	higher	
	Frequency %				
milk	100.0	100.0	92.0	79.5	0.0049
kefir	62.5	0.0	46.7	54.8	0.0000
buttermilk	100.0	46.1	33.3	17.1	0.0000
processed cheese	37.5	57.7	38.7	38.4	0.3075
sour milk	0.0	26.9	33.3	17.1	0.0175
butter	100.0	80.8	100.0	83.6	0.0012
white cheeses	100.0	53.8	92.0	80.1	0.0001
blue cheeses	0.0	0.0	24.0	25.3	0.0126
yogurt	37.5	100.0	77.3	67.8	0.0006
sour cream	100.0	50.0	86.7	62.3	0.0001
yellow cheeses	100.0	50.0	76.0	63.7	0.0128
herbal cheeses	0.0	0.0	25.3	21.9	0.0172

*respondents could indicate more than one answer

Source: own research

A statistically significant impact of variables differentiating the respondents on purchasing decisions of local dairy products was found in bazaars and marketplaces, except for gender (Table 1).

Further analysis pointed out the local dairy products most frequently purchased by respondents (Tables 5-7). The highest percentage of respondents chose the following local dairy products: milk, butter, white cheese, yogurt, cream and yellow cheese (Table 5). The

noticeable differences can be seen in consumer preferences regarding the choice of dairy products. Women much more often purchased local kefir, buttermilk, curd, butter, white cheese, blue cheese, cream, cheese with herbs than men, and these differences were statistically significant (Table 5). Also, the place of residence diversifies the choices of consumers. City dwellers were definitely more likely to buy local kefirs than country residents, while country dwellers were far more likely than city dwellers to reach for local products such as buttermilk, cream and cheese (Table 5). For other products, no statistically significant differences were noted. Analysing the responses that considered the age of respondents, it can be seen that in all age groups milk and butter purchased in local dairies were the most popular (Table 6). People aged 46 and older were more likely to buy kefir, buttermilk, blue cheese and herbal cheeses than younger people. A statistically significant impact of age on the selection of local dairy products was noted for all products except butter (Table 6). In the case of respondents diversified in terms of education, buttermilk was more likely bought by people with primary and vocational education, while this group of respondents did not buy cheeses with herbs (Table 7). In the case of other products, the attention should be drawn to the fact that people with vocational education did declare to purchase neither kefir nor blue cheese. The education of the respondents had a statistically significant impact on the selection of all analysed local dairy products except processed cheese (Table 7).

CONCLUSIONS

In the light of the above research, it should be stated that the interest in buying local dairy products is quite high - 85.6% of respondents consuming dairy products bought them. A significant percentage of respondents (91.4%) indicated the availability of local dairy products in retail trade. Whereby, in the case of units located near the place of residence, 7.5% of respondents faced significant restrictions on access to these products, while 33.7% pointed to frequent shortages in the product range. This indicates the need to improve the flow of these

products in distribution channels. Most often, respondents pointed out small and medium grocery shops as a place where they buy local dairy products. Short distribution channels were not popular among the respondents. Rarely, the respondents used direct sales on a farm and purchases at bazaars and marketplaces. This may result from a small knowledge of these forms of sales and consumer concerns about the health safety of such food products. This requires educating consumers and informing about the benefits of shortening the food distribution chain.

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