

CERTIFICATION OF HIGH-QUALITY FOOD PRODUCTS IN THE PERCEPTION OF STUDENTS

Agata Balińska, DSc¹; Wioletta Olejniczak, MSc, doctoral candidate²

Institute of Economics and Finance, Warsaw University of Life Sciences – SGGW

ABSTRACT

This study aimed to investigate the perception of high-quality food products by young consumers, their recognition of logos assigned to registered products, and their experience in purchasing this type of product. The study involved desk research, computer-assisted web interviews (CAWI), and observation. The results of the survey conducted on a sample of 329 students of Warsaw University of Life Sciences (SGGW) showed that the respondents' recognition of high-quality food products was low. More than half of the respondents declared that they do not pay attention to labels when shopping for food, while those who buy certified food products indicated the following reasons: curiosity, promotion, or loyalty to a specific product. Almost one in four respondents declared that they do not buy imitations of original products covered by the registration.

Key words: food products, high quality, certification

JEL codes: E2, R22, Q18

INTRODUCTION

The intensification of agricultural production, the development of food processing, transport, and, on the other hand, the changing expectations and tastes of consumers make certification schemes guaranteeing a certain level of quality of food products more and more needed. Particularly valuable are quality schemes promoting regional, original and traditional production processes and ensuring the international recognition of the product. Support for traditional food production and processing is provided at the national level to promote and add prestige to quality foodstuffs as well as at the EU level (Gulbicka, 2014). The most important issue is the demand for high-quality food products and the level of consumer

knowledge about them. The research presented in this article is devoted to this issue.

The presented research aims to investigate the perception of high-quality food products by young consumers, their recognition of the logos assigned to these products, and their experience in purchasing this type of product. The choices of young consumers regarding high-quality food products are dictated by the still insufficiently recognised motives and behaviour patterns of this cohort. With this in mind, this paper seeks to address the following research questions:

1. What is the level of awareness of the logos assigned to Protected Designation of Origin (PDO), Protected Geographical Indication (PGI), or Traditional Specialty Guaranteed (TSG)?

¹ Corresponding author: Nowoursynowska 166, 02-787 Warsaw, Poland, agata_balinska@sggw.edu.pl

² Corresponding author: Nowoursynowska 166, 02-787 Warsaw, Poland, wioletta_olejniczak@sggw.edu.pl

2. To what extent are the respondents interested in purchasing products covered by registration?
3. What is the respondents' attitude to products imitating products covered by registration?

THEORETICAL BACKGROUND

High-quality food products are of interest to many authors, including Krasowska and Salejda (2011), Ozimek and Tomaszewska (2011), Gheorghe, Nistoreanu and Filip (2013), Bienia et al. (2016), Goryńska-Goldmann and Gazdecki (2017), Grębowiec (2017), Szlachciuk et al. (2017), Borowska (2018), Oleksiuk and Werenowska (2019), Hełdak et al. (2020).

The schemes ensuring the protection of the quality of agricultural products and foodstuffs introduced at the European Union level grant certificates confirming the original and traditional character of selected products. The initiators of such form of protection were the French, who already in the 1930s introduced the protection of wines obtained by traditional production methods. Such protection involves granting one of the three certificates: Protected Designation of Origin (PDO), Protected Geographical Indication (PGI), or Traditional Specialty Guaranteed (TSG). The most restrictive requirements must be met by the product applying for a PDO, as all production stages must take place in the region indicated in the specification. The least restrictive criteria must be met by products applying for a GTS, as here, the production can take place throughout the country, provided that its composition and method of production complies with the specification. Product protection also covers its name, which is beneficial for consumers. The register of regional and traditional products kept by the Ministry of Agriculture and Rural Development lists 44 products,

including 10 under the PDO category, 24 – PGI, and 10 – GTS¹. According to Council Regulation (EC) No 510/2006 of 20 March 2006 on the protection of geographical indications and designations of origin for agricultural products and foodstuffs (Article 13(1)), registered names shall be protected against:

- a) any direct or indirect commercial use of a registered name in respect of products not covered by the registration in so far as those products are comparable to the products registered under that name or in so far as using the name exploits the reputation of the protected name;
- b) any misuse, imitation, or evocation, even if the true origin of the product is indicated or if the protected name is translated or accompanied by an expression such as 'style', 'type', 'method', 'as produced in', 'imitation' or similar;
- c) any other false or misleading indication as to the provenance, origin, nature or essential qualities of the product, on the inner or outer packaging, advertising material or documents relating to the product concerned, and the packing of the product in a container liable to convey a false impression as to its origin;
- d) any other practice liable to mislead the consumer as to the true origin of the product.

These regulations are potentially beneficial for both the producers and consumers. Unfortunately, the observation of the market, including the online shopping sites, shows that the names assigned to products covered by EU certification are used by other manufacturers and traders to name products not covered by the registration. There are also situations where the name of the product does not infringe the law but contains a reference to a certified product. Examples are provided in Table 1.

¹ PDO: *bryndza podhalańska, oscypek, redykołka, wiśnia nadwiślańska, podkarpacki miód spadziowy, karp zatorskim, fasola Piękny Jaś z doliny Dunajca, fasola wrzawska, miód z Sejneńszczyzny/Łódzkiej szczyzny, miód spadziowy z Beskidu Wyspowego*; PGI: *miód wrzosowy z Borów Dolnośląskich, obwarzanek krakowski, rogal świętomarciński, śliwka szydłowska, wielkopolski ser smażony, jabłka łąckie, andruty kaliskie, chleb prądnicki, truskawka kaszubska, miód drahimski, fasola korcezyńska, kołacz/kołocz śląski, miód kurpiowski, jabłka grójeckie, susza sechłońska, ser koryciński swojski, kielbasa lisecka, jagnięcina podhalańska, krupnioki śląskie, cebularz lubelski, kielbasa biała parzona wielkopolska, kielbasa piaszczańska, czosnek galicyjski, podpiwek kujawski*; GTS: *półtorak staropolski tradycyjny, dwójniak staropolski tradycyjny, trójniak staropolski tradycyjny, czwórniak staropolski tradycyjny, olej rydzowy tradycyjny, pieriekaczewnik, kielbasa jałowcowa staropolska, kielbasa myśliwska staropolska, kabanosy staropolskie, kielbasa krakowska sucha staropolska* (Ministerstwo Rolnictwa i Rozwoju Wsi, 2020).

Table 1. Selected imitations of high-quality products covered by the registration

Protected Designation of Origin		Protected Geographical Indication	
Registered product name	Imitation	Registered product name	Imitation
<i>bryndza podhalańska</i> ^a	<i>bryndza owcza / / ser typu bryndza</i> ^a	<i>miód wrzosowy z Borów Dolnośląskich</i> ^b	<i>miód wrzosowy z wrzosów leśnych borów</i> ^b
<i>oscypek</i> ^a	<i>scypek / serek typu oscypek</i> ^a	<i>rogal świętomarciński</i> ^c	<i>rogal Świętego Marcina / / rogal marciński</i> ^c
<i>redykolka</i> ^a	<i>serek góralski typu redykolka</i> ^a	<i>wielkopolski ser smażony</i> ^a	<i>smażony ser typu wielkopolskiego / smażony ser a'la wielkopolski</i> ^a
<i>podkarpacki miód spadziowy</i> ^b	<i>miód ze spadzi iglastej z Podkarpacia</i> ^b	<i>andruty kaliskie</i> ^c	<i>wafle typu andruty kaliskie</i> ^c
Traditional Specialty Guaranteed		<i>obwarzanek krakowski</i> ^c	<i>precel z krakowska, bajgiel z Krakowa</i> ^c
Registered Product Name	Imitation	<i>ser koryciński swojski</i> ^a	<i>ser dojrzewający podpuszczkowy typu koryciński/ ser a'la koryciński</i> ^a
<i>trójniak staropolski tradycyjny</i> ^b	<i>miód benedyktyński trójniak korzenny</i> ^b	<i>kielbasa lisecka</i> ^c	<i>tradycyjna kielbasa typu lisecka</i> ^c
<i>olej rydzowy tradycyjny</i> ^d	<i>olej z lnianki</i> ^d	<i>kołacz / kołocz śląski</i> ^c	<i>ciasto drożdżowe typu kołacz</i> ^c
<i>kielbasa krakowska sucha staropolska</i> ^e	<i>kielbasa krakowska podsuszana swojska</i> ^e	–	–

A – kind of cheese; B – kind of honey; C – kind of baking; D – kind of oil; E – kind of sausage.

Source: own observations of the following online auction and shopping sites: allegro.pl, olx.pl, marketplace-facebook.com [accessed 08–12.04.2021].

Most often, the analysed online platforms showed offers for the sale of products referring to the name of *ser koryciński swojski* (cheese), *rogal świętomarciński* (crescent roll), and *wielkopolski ser smażony* (fried cheese).

RESEARCH METHODOLOGY

The study involved the analysis of source materials and the computer-assisted web interview (CAWI) method. The survey questionnaire was prepared on the Google platform. It contained closed, semi-open, and alternative questions. The supporting technique was the observation carried out on online auction and shopping sites to determine whether the registered products are being counterfeited.

The survey was made available to students of Warsaw University of Life Sciences (SGGW) on the Teams platform from 1 March to 20 March 2021. Three hundred and twenty nine students took part in the survey. All questionnaires were correctly completed.

RESEARCH RESULTS AND DISCUSSION

As regards the respondent's characteristics, women constituted 59.2% of the sample. As for the place of residence, 44.3% of the respondents declared that they lived in cities with a population of more than 200 000; 24.8% – in rural areas, 19.6% – in cities up to 50 000 inhabitants, and 11.3% – in cities with population from 50 000 to 200 000. Considering the research questions, it was relevant for this study to ask the respondents to estimate the cost of groceries per person per week. More than a half (57.5%) indicated that it was from 100 to 200 PLN, 30.8% – up to 100 PLN, and 11.7 over 200 PLN.

The term 'high-quality food products' was associated by the respondents primarily with those that are consistently checked by a reliable control institution and are organic (Table 2). These results are consistent with the results of the research presented by Bienia et al. which show that the main associations included healthy food (65%) and traditional production

methods (43.5%) (Bienia, Sawicka and Krochmal-Marczak, 2016).

The recognition of visual identifiers (logos were included in the questionnaire) assigned to the products granted PDO, PGI, or TSG certificates was also verified (Table 3). This data compilation also takes into account the leading differentiating variables, i.e.

age, place of residence, and the declared cost of groceries per person per week.

The differentiation in the recognition of individual logos at the level of the entire sample was insignificant. Some differentiation was noticed about gender, women less frequently than men declared the recognition of the PGI and the TSG logos. The

Table 2. Associations of the respondents with the term 'high-quality food products', $N = 329$ (%)

Specification	Value
Available from delicatessen rather than discounters	5.78
Only available at food fairs and fests	9.42
Available directly from a farmer	22.19
Registered with the Ministry responsible for agriculture	27.36
With a short shelf life	29.79
The product is made according to a traditional recipe	43.16
Organic product	61.70
Checked each time by a reliable control institution	67.17

Note: The respondents could indicate more than one answer.

Source: own empirical research.

Table 3. Recognition of logos of registered high-quality food products by selected variables (%)

Variable		Logo	Recognition		
			yes	no	not sure
Total, $N = 329$		PDO	41.6	43.8	14.6
		PGI	43.5	41.6	14.9
		TSG	40.7	39.8	19.5
Gender	women, $N = 193$	PDO	41.5	43.0	15.5
		PGI	41.5	43.5	15.0
		TSG	39.4	40.4	20.2
	men, $N = 136$	PDO	41.9	44.9	13.2
		PGI	46.3	39.0	14.7
		TSG	42.6	39.0	18.4
Place of residence	rural areas, $N = 81$	PDO	35.8	48.1	16.0
		PGI	39.5	44.4	16.0
		TSG	38.3	44.4	17.3
	cities under 200 000 inhabitants, $N = 101$	PDO	43.6	41.6	14.9
		PGI	44.6	42.6	12.9
		TSG	42.6	34.7	22.8
	cities over 200,000 inhabitants, $N = 147$	PDO	43.5	42.9	13.6
		PGI	44.9	39.5	15.6
		TSG	40.8	40.8	18.4
Cost of groceries per person per week	< 100 PLN, $N = 100$	PDO	35.0	48.0	17.0
		PGI	41.0	44.0	15.0
		TSG	29.0	47.0	24.0
	100–200 PLN, $N = 187$	PDO	40.6	46.0	13.4
		PGI	42.2	42.2	15.5
		TSG	43.9	38.0	18.2
	> 200 PLN, $N = 42$	PDO	61.9	23.8	14.3
		PGI	54.8	33.3	11.9
		TSG	54.8	31.0	14.3

Source: own empirical research.

share of people familiar with these logos was lower among rural residents than among urban residents. As for the declared cost of groceries, the logo recognition was the highest among respondents declaring expenses over 200 PLN per person per week. The respondents were also asked to list the products granted any of the analysed logos with which they were familiar. The most frequently mentioned included: *oscypek* (sheep milk cheese made in Tatra Mountains) (44 people), several people mentioned *jabłka grójeckie* (apples) (6), *rogal świętomarciński* (crescent roll) (5), *cebularz lubelski* (onion flatbread) (4), *truskawka kaszubska* (strawberry) (2), *ser koryciński* (cheese) (2). Seven of the respondents mentioned products that were not registered.

The study also aimed to determine how frequently the respondents purchased the certified products (Table 4).

Among the respondents declaring buying certified food products, a relatively large proportion declared purchase out of curiosity. This reason was also indicated by Gheorghe et al. (2013), Oleksiuk and Werenowska (2019), and Heldak et al. (2020). In turn, the research of Goryńska-Goldmann and Gazdecki

(2017) shows that the main reason was the belief in the pro-health value of this type of food.

More than half of the respondents indicated that they do not pay attention to the labels. This result is consistent with the study of Borowska (2008) who also emphasized little recognition of the logos in question. The share of consumers not reading labels was the highest in the case of rural residents and people declaring the lowest level of food expenditure. Also, the research of Szlachciuk et al. (2017) carried out among young people shows that almost every fifth respondent admitted that they did not look for information about regional and traditional food products, including products granted the EU certification in question.

Every fifth resident of a large city indicated that they buy this type of product from time to time and it was declared more often by men than women (Table 4). The respondents' attachment to the products was rather low. Only about 6% indicated that they have a few favourites that they sometimes buy and one favourite was selected by 0.6% of people. When asked to list their favourite certified food products, the respondents most often mentioned

Table 4. The frequency of purchase of registered high-quality food products by selected variables (%)

Specification		Frequency							
		A	B	C	D	E	F	G	H
Total, $N = 329$		54.4	15.9	9.5	8.6	6.1	2.1	1.8	0.6
Gender	women, $N = 193$	56.0	13.0	10.9	9.3	5.2	3.1	1.6	1.0
	men, $N = 136$	52.9	19.9	8.1	7.4	7.4	0.7	0.7	0.0
Place of residence	rural areas, $N = 81$	61.7	16.0	9.9	6.2	3.7	2.5	0.0	0.0
	city < 200 000, $N = 101$	50.5	15.8	8.9	11.9	7.9	1.0	2.0	2.0
	city > 200 000, $N = 147$	53.7	15.6	10.2	7.5	6.1	2.7	1.4	0.0
Cost of groceries per person per week	<100 PLN, $N = 100$	64.0	10.0	8.0	5.0	7.0	4.0	0.0	2.0
	100–200 PLN, $N = 187$	53.5	17.6	9.6	9.6	4.8	1.6	2.1	0.0
	> 200 PLN, $N = 42$	38.1	21.4	14.3	11.9	9.5	0.0	0.0	0.0

A – I don't pay attention to labels; B – From time to time, out of curiosity; C – I have never had a chance to find such a product; D – From time to time there is a promotion; E – I have a few favourites that I sometimes buy; F – Never because they are quite expensive; G – Often, I often look for such logos when I buy groceries; H – I have one favourite product that I sometimes buy.

Source: own empirical research.

oscypek (sheep milk cheese made in the Tatra Mountains) – 19 people. Individuals mentioned *jabłka grójeckie* (apples), *redykolka* (miniature sheep milk cheese made in Tatra Mountains) and *ser koryciński* (cheese).

In the authors' research, the majority of respondents do not pay attention to food products' labels. Meanwhile, the research by Ozimek and Tomaszewska (2011) shows that in the hierarchy of importance of information sources about food products, the packaging on which labels are placed was in the first position. This is also confirmed by the research of Krasowska and Salejda (2011). The low frequency of purchasing traditional products was also indicated by Grębowiec (2017).

As there are frequent situations where registered products' names are used by producers of food to name products not covered by the relevant registration, the respondents' attitude to this type of practice was verified (Table 5).

Every fourth respondent admitted that they buy such products despite having doubts as to whether it was a fair practice (Table 5). They were mostly women, inhabitants of rural areas, and people who spent no more than 100 PLN a week on groceries.

CONCLUSIONS

The study showed that the respondents' recognition of high-quality food products was low, which is consistent with the studies of other authors. In the open question, the respondents most often mentioned the most popular traditional food products, also available in supermarkets (*oscypek*, *jabłka grójeckie*, *rogal świętomarciński*), the recognition of the logos assigned to registered products was quite low, although slightly differentiated depending on gender and place of residence.

More than half of the respondents declared that they do not pay attention to labels when they purchase food products. Only a few respondents declared frequent purchases of products with the logos in question, and every third – sporadic purchase, dictated by curiosity, promotion, or having a favourite, occasionally purchased product. Almost every fourth respondent indicated that they do not buy products that are imitating certified products, and this was declared mainly by people with the highest weekly expenditure on groceries person.

The limitation of this study is the lack of representativeness of the research sample. However, the

Table 5. Respondents' attitude to imitations of registered high-quality food products by selected variables (%)

Specification		Attitude to imitations of certified products				
		A	B	C	D	E
Total		33.6	11.7	25.6	4.6	23.5
Gender	women	29.5	11.9	28.0	4.7	23.3
	men	38.2	11.0	21.3	4.4	22.8
Place of residence	rural areas	33.3	11.1	28.4	3.7	22.2
	city < 200 000	32.7	11.9	27.7	3.0	23.8
	city > 200 000	33.3	11.6	21.8	6.1	23.1
Cost of groceries per person per week	< 100	39.0	9.0	26.0	3.0	20.0
	100–200 PLN	31.0	13.9	25.7	4.3	23.0
	> 200 PLN	28.6	7.1	21.4	9.5	31.0

A – I have no opinion; B – I think it is a good idea (it allows me to imagine how this cheese can taste); C – I buy imitations, but I have doubts if it is a fair practice; D – I buy imitations, but I know it is against the law; E – I don't buy imitations because I know it's an example of unfair practice.

Source: own empirical research.

presented research results and the quoted literature might suggest that there is a need to strengthen the communication of this type of product to young consumers.

The research allowed for the formulation of the following theoretical and practical implications: (1) In research on the consumption of high-quality food products, both quantitative and qualitative methods should be taken into account at the same time; (2) The Government and industry institutions should be more involved in the promotion and protection of PDO, PGI or TSG certified products.

REFERENCES

1. Bienia, B., Sawicka, B., Krochmal-Marczak, B. (2016). Żywność regionalna i tradycyjna w opinii mieszkańców powiatu krośnieńskiego. In: K. Melski, D. Walkowiak-Tomczak (Eds) *Żywność dla świadomego konsumenta*. Wydział Nauk o Żywności i Żywieniu Uniwersytetu Przyrodniczego w Poznaniu, Poznań, pp. 94-103.
2. Borowska, A. (2008). Attitudes of European Consumers to Traditional and Regional Products. *Zeszyty Naukowe Szkoły Głównej Gospodarstwa Wiejskiego w Warszawie, Ekonomika i Organizacja Gospodarki Żywnościowej*, 72, pp. 145-159.
3. Borowska, A. (2018). Opportunities and barriers regarding the development of regional bean production with geographical certification in Poland. *Economic Sciences for Agribusiness and Rural Economy*, 1, pp. 133-139.
4. Council Regulation (EC) No 510/2006 of 20 March 2006 on the protection of geographical indications and designations of origin for agricultural products and foodstuffs. OJ L 93/12, 31.03.2006.
5. Gheorghe, G., Nistoreanu, B.G., Filip, A. (2013). Traditional products – vectors of sustainable development on the regional and national markets. *Business and Sustainable Development*, 15 (7), pp. 645-358.
6. Goryńska-Goldmann, E., Gazdecki, M. (2017). Buying factors as an innovation platform on regional and traditional products market. *Roczniki Naukowe Stowarzyszenia Ekonomistów Rolnictwa i Agrobiznesu*, 13 (6), pp. 35-41.
7. Grębowiec, M. (2017). Regional and Traditional Products as an Element of Building a Competitive Food Product Offer in Poland and Other European Countries. *Zeszyty Naukowe Szkoły Głównej Gospodarstwa Wiejskiego w Warszawie, Problemy Rolnictwa Światowego*, 17 (2), pp. 65-80.
8. Gulbicka, B. (2014). Żywność tradycyjna i regionalna w Polsce. Konkurencyjność polskiej gospodarki żywnościowej w warunkach globalizacji i integracji europejskiej. *Instytut Ekonomiki Rolnictwa i Gospodarki Żywnościowej – Państwowy Instytut Badawczy, Warszawa*.
9. Hełdak, M., Konako, S.S.K., Kurtyka-Marcak, I., Raszka, B., Kurdo, B.C. (2020). Visitors' Perceptions towards Traditional and Regional Products in Trabzon (Turkey) and Podhale (Poland). *Sustainability*, 12, 2362. <https://doi.org/10.3390/su12062362>
10. Krasnowska, G., Salejda, A.M. (2011). Ocena wiedzy konsumentów na temat znakowania żywności. *Żywność. Nauka. Technologia. Jakość*, 1 (74), pp. 173-189.
11. Ministerstwo Rolnictwa i Rozwoju Wsi (2020). Produkty zarejestrowane jako Chronione Nazwy Pochodzenia, Chronione Oznaczenia Geograficzne oraz Gwarantowane Tradycyjne Specjalności. Retrieved from: <https://www.gov.pl/web/rolnictwo/produkty-zarejestrowane-jako-chronione-nazwy-pochodzenia-chronione-oznaczenia-geograficzne-oraz-gwarantowane-tradycyjne-specjalnosci> [accessed 29.03.2021].
12. Oleksiuk, I., Werenowska, A. (2019). Promotion of regional and traditional products. *Środkowoeuropejskie Studia Polityczne*, 2, pp. 135-149.
13. Ozimek, I., Tomaszewska, M. (2011). Znaczenie wybranych źródeł informacji o produktach żywnościowych dla konsumentów. *Handel Wewnętrzny*, 2, pp. 48-56.
14. Szlachciuk, J., Bobola, A., Ozimek, I., Czyż, E. (2017). Znajomość polskich produktów regionalnych i tradycyjnych wśród młodych konsumentów. *Ekonomiczne Problemy Turystyki*, 3 (39), pp. 77-88.