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LINK OF BRAND AND QUALITY OF PRODUCTS IN CONSUMERS' EVALUATION

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ABSTRACT. The paper presents two quality tests carried out during the International Food Fair POLAGRA-FOOD 2002. The main aim of the research was evaluation of the customer's sensorial perception of milk product quality. Eight products were tested. The results cover, among other things, the impact of different features on total quality evaluation and differentiation of quality evaluation depending on Polish customer's brand knowledge.

Key words: dairy products, brand, quality

Introduction

The market of dairy products is characterized by growing competition. Yearly 7-10 new types of products are introduced into the market (**Krajeński** and **Górska--Warsewicz** 1998). At the same time more and more brands appear giving either new products or products so far anonymous.

It results from rich consumer research, that the customer choosing products from the market offer takes into consideration their quality before everything. But in market reality consumer evaluating the quality of the dairy product don't take under remark only its sensory features. On image of product a lot of other important product's attributes influent also, for instance: the brand, the package, advertising activities or the range of public relations (**Sznajder** 1999).

Reliable evaluation of the quality of products by consumers under consideration of their sensory features is possible exclusive in the case of using the blind test, in which respondents evaluating the product don't know its brand.

The objective, range and methods

Research was conducted during the Polagra Food Fair, which took place from 10 to 13 September 2002 in Poznań.

The main objective of this research was evaluation of quality of dairy products perceived by consumers.

Eight categories of products were evaluated: natural kefir, strawberry taste yoghurt, cottage cheese, vanilla taste dessert, butter, mix of butter and plant oils, hard cheese and semi-fat quark cheese.

35 products were included into these eight categories of products. The tested products were supplied by 13 domestic producers and one importer (one product).

The method of the comparative blind test was used for the evaluation of the quality of products. The blind test consists in evaluating by a consumer an unknown brand of product. In this way the object of research is becoming anonymous for evaluating consumer. The evaluation of the value of product is possible because of the elimination of influence of the brand.

A few products are tested at the same time in the comparative test what makes that estimation of preference take the specific measurement (**Mazurek-Łopacińska** 2002).

Four sensory features consisted to the estimation of quality of products, namely the taste, the smell, the colour and consistency. Each of the features was estimated in four degree scale: 1 – bad (total lack of approval of the given product feature), 2 – sufficient, 3 – good and 4 – very good (full realization of expectation as regards the given feature for the given product).

Respondents were asked for the estimation of importance of these features in order to determine the impact of each discriminants on the quality on the general estimation of the quality of product.

There was applied rank constant sum scale of evaluations. The total evaluation of the quality of products was established by calculating the arithmetic mean from four fragmentary estimations with the consideration of importance fixed by respondents.

The division into four groups of products was applied to the analysis of results in dependence on the level of knowledge of their brand by Polish consumers[1].

The first group (I) included products about recognized brand, i.e. for which the number of indications of spontaneous brand knowledge among consumers were over 30%. To the other group (II) were qualified brands of products about the number of indications from 21 to 30%, to the third group (III) brands with the number of indications from 10 to 20%, in turn to the fourth group (IV) products about the least known brand, for which the number of indications wasn't exceed 10%.

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[1]This Division was made on the base on results of research conducted by Hanna Górska-Warsewicz in the range of own research: "Brand in development strategies of food industry companies", which was realized in Department of Organization and Economics of Consumption of Warsaw Agricultural University.

Characteristic of respondents

Respondents who evaluating quality of products were visitors of Polagra Food 2002 Fair. Every of products were evaluated by 70 to 100 consumers. Totally, during four days lasting of The Fair, place which the estimation of products was doing, visited 646 persons.

Social and economic profile of fair visitors a little diversified from profile of Polish consumer of dairy products. The biggest representativeness was obtained in the case of respondents' gender. Almost the equal number of women and men was found in the sample.

In relation to age structure, among evaluating consumers was missing older persons, above 65 of years. Among visiting the fair the majority were people in the age up to 25 years (pupils and students) and people in the productive age, from 26 to 50 years (representatives of exhibitors and interested in the offer of fair directly).

In the case of respondents' education majority of them had the secondary or tertiary education. Among visitors was missing persons about primary and basic vocational education.

The place of respondents' residence is before everything big towns. It was relatively little among visitors representatives of the villages and small towns (Table 1).

Table 1

Characteristics of respondents
Charakterystyka respondentów

1	2
Sex – Płeć	
Males – Kobiety	53.17%
Females – Mężczyźni	46.83%
Education – Wykształcenie	
Primary – Podstawowe	2.87%
Basic vocational – Zawodowe	3.99%
Secondary – Średnie	40.83%
Tertiary – Wyższe	52.31%
Monthly net income per one person in household (PLN) Miesięczny dochód netto na osobę w gospodarstwie domowym (PLN)	
≤ 500	12.70%
501-1000	33.71%
1001-2000	35.02%
> 2000	18.57%

Table 1 – cont.

1	2
Age (years) – Wiek (lata)	
≤ 25	37.62%
26-35	20.95%
36-50	25.56%
50-65	13.97%
> 65	1.90%
Place of residence – Miejsce zamieszkania	
Village – Wieś	13.63%
City less than 10 thous. of inhabitants Miasto poniżej 10 tys. mieszkańców	9.83%
City from 10 to 50 thous. of inhabitants Miasto od 10 do 50 tys. mieszkańców	31.54%
City above 50 thous. of inhabitants Miasto powyżej 50 tys. mieszkańców	45.01%

Importance of features in quality evaluation

From among four sensory features, which respondents were supposed to evaluate the quality of products, determination according to the taste turned out to be the most important feature. This feature was influencing the total evaluation of the quality in case of all products in around 50% (Table 2). In case of other features, namely the colour, the smell and consistency, reliable diversity of importance was noted in dependence on the category of the product.

In case of butter and mixes of butter with oils, the second as regards of importance feature was their consistency (over 20%), which are connected directly with possibility of easy spreading of this products.

Respondents pointed quite big importance of this feature (consistency) in case of yoghurt, vanilla desserts, and cottage cheeses. However, the smell had the biggest importance in the case of kefirs (20%), and in the next order in the case of butter and all tested cheeses (after around 18% of impact of the quality on the general evaluation).

The least significant feature in the evaluation of the sensory quality of tested dairy products appeared their colour.

**Average evaluation of importance of features for definition of dairy products quality
(percentage is related to importance of particular feature) (%)
Średnia ocena ważności cech przy określaniu jakości produktów mleczarskich (procent
odzwierciedla, jak ważna jest dana cecha) (%)**

Category of products Kategoria produktów	Colour Barwa	Consistency Konsystencja	Smell Zapach	Taste Smak
Kefir Kefir	10.98	17.11	20.25	51.67
Yoghurt Jogurt	11.82	19.25	16.47	52.45
Butter Masło	15.76	20.83	18.56	44.85
Butter mix Miks maślany	15.41	22.16	15.87	46.56
Hard cheese Ser twardy	15.18	16.77	17.63	50.42
Quark cheese Ser twarogowy	16.99	15.60	18.61	48.81
Cottage cheese Ser typu cottage	15.04	18.82	18.53	47.61
Vanilla dessert Serek waniliowy	13.49	18.87	18.22	49.42

Quality of dairy products in consumers' evaluation and recognition of brand

The biggest diversity of evaluations of the quality noted in case of strawberry yoghurts. There were six products evaluated in this category.

The difference between the best and the most badly evaluated products by consumers was 1.82 point. The best evaluation (3.5 at maximum 4 points) obtained yoghurt from the first group (I) so product about the brand recognized by consumers.

Relatively high evaluations (3 points) obtained also two other products, belonging to the second group (II), so also about the relatively well-known brand. Quality of other products was evaluated more badly definitely (Fig. 1).

Two products obtained the estimation somewhat above sufficient (products from the II and the III group), but quality of last product (belonging to the IV group – of products about the noncognizable brand) was evaluated as bad (1.68 points).

Differently the estimation of quality were in case of the second category of products, which were natural kefirs. In this case differences in evaluation were smaller definitely (0.27 points), and all products obtained the almost good or good estimation.
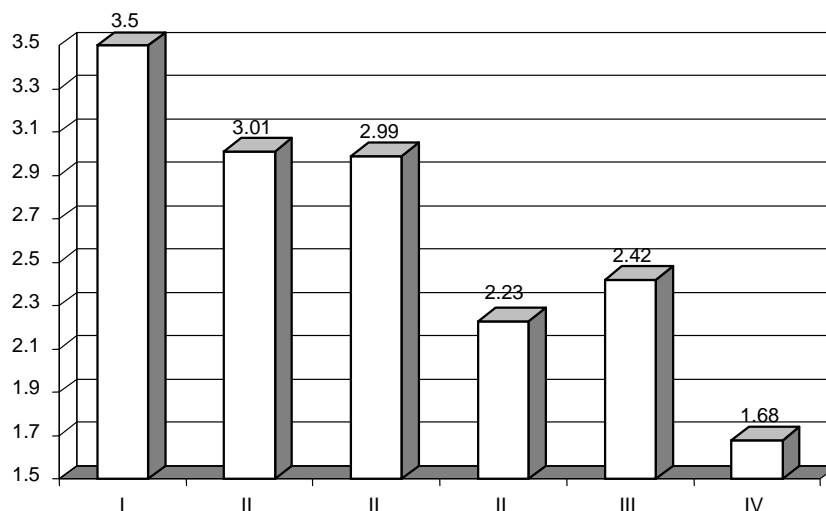
Fig. 1. Evaluation of quality (four degree scale) of strawberry yoghurts in different
groups in dependence on degree of brand knowledge
Ryc. 1. Ocena jakości (skala 4-stopniowa) jogurtów truskawkowych w różnych gru-
pach w zależności od stopnia znajomości marki

The product from the III group was evaluated best, so product about the relatively
little-known brand. Product from the I group was evaluated badly, but also the estima-
tion was relatively high (2.86 points).

Interesting results obtained in the category of vanilla desserts. The quality of three
among six evaluated products obtained consumers' good or higher evaluation (from
3.17 for 3.37 points). Each of this three products belonged to the other group of brands,
but the highest evaluation was product from the I group (Fig. 2).

Next quality of other three products wasn't accepted by evaluating consumers (esti-
mations from 2.46 for 2.69 points). There were found products from two groups here –
II and III.

Next evaluated category of products was semi fat quark cheeses. Diversity of esti-
mation was relatively small in the case of this category, but quality of products they
were recognized as good. Highest, the same estimation (3.2 points) obtained two prod-
ucts (II and III group). The product from the group about the unknown brand was evalu-
ated well relatively In this category among evaluated products none belonged to the I
group (Fig. 3).

In the category of cottage cheese only two products were submitted to the estima-
tion: one from the II group and one from the III group.

Both products received a good mark but the product from the II group was evaluated
clearly better (estimation 3.39 points).

The next kind of evaluated cheese was full fat hard cheeses. The brand belonging to
the II group obtained the highest estimation in this category. The quality of the product
from the IV group was also evaluated well. Lower, but also the good estimation, obtained
imported cheese. Consumers evaluated the quality of the product which belonged to the
I group most badly. However, it is necessary to add that so high knowledge of this brand
is resulting from the strong market position of the other product sold under this brand.
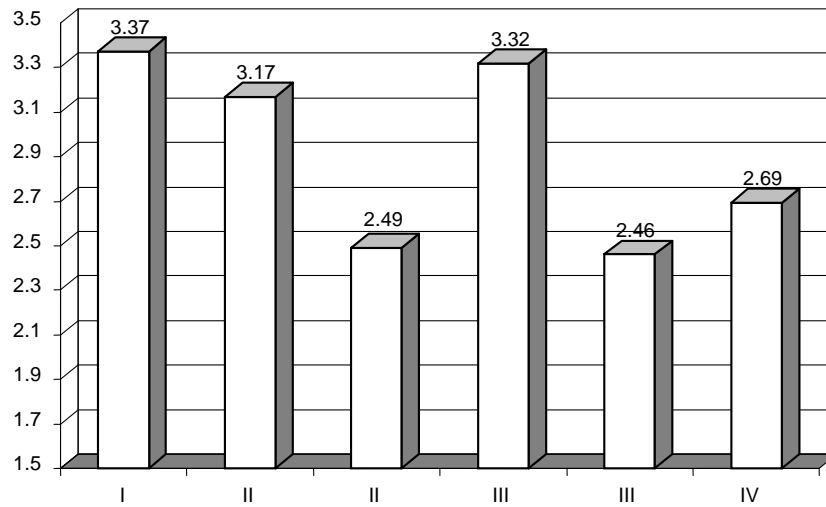
Fig. 2. Evaluation of quality (four degree scale) of vanilla desserts in different groups in dependence on degree of brand knowledge
Ryc. 2. Ocena jakości (skala 4-stopniowa) serków homogenizowanych waniliowych w różnych grupach w zależności od stopnia znajomości marki
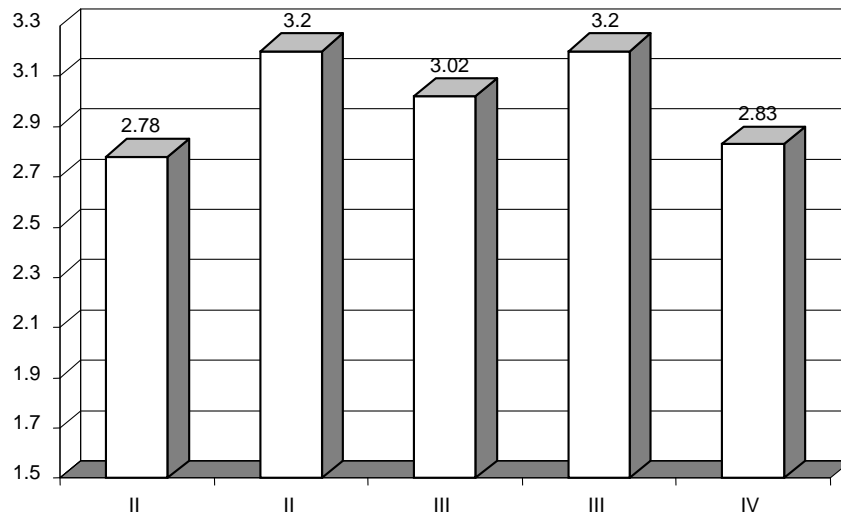

Fig. 3. Evaluation of quality (four degree scale) of semi-fat quark cheeses in different groups in dependence on degree of brand knowledge
Ryc. 3. Ocena jakości (skala 4-stopniowa) serów twarogowych półtłustych w różnych grupach w zależności od stopnia znajomości marki

The test of butter had producers' big interest. Five brands were submitted to the estimation and all of them were evaluated well (evaluation 2.93 for 3.19 points). Taking into consideration relatively small differences in estimations and the fact that only prod-

ucts from the II and the III groups were evaluated, it is difficult to find some links between the reputation of the brand and the quality of the product.

Last evaluated category of products were mixes of butter with vegetable oils. Although only two products were tested in this category it is necessary to regard interesting results of this test. Although both products were relatively high recognition of brand (the II group) it were evaluated very variously. One of them received a good mark (3.4 points) but other relatively low (2.7 points).

Conclusions

1. In consumers' evaluation of dairy products' quality firstly decide taste, next consistency or smell and in the least stage – products' colour.

2. Among dairy products there are as well products with great differentiation of quality as products with similar quality of brands in consumers' evaluation.

3. The greatest differentiation of products' quality in particular brands is in the case of yoghurts and vanilla desserts.

4. The most level quality of products is in the case of butter and natural kefirs.

5. In the case of most evaluated products higher marks received products with recognized brand, but sometimes products with undistinguishable brand received high evaluation or products with recognized brand received low evaluation.

Literature

Krajeński K., Górska-Warsewicz H. (1998): Rynki mleczarskie nowej generacji a strategie marketingowe. In: Dynamiczne rynki produktów mleczarskich. Ed. M. Sznajder. Typescript. Horyzont, Mikołajki.

Mazurek-Łopacińska K. (2002): Badania marketingowe. Podstawowe metody i obszary zastosowań. Wyd. AE, Wrocławiu.

Sznajder M. (1999): Ekonomika mleczarstwa. Wyd. AR, Poznań.

POWIĄZANIE MARKI I JAKOŚCI PRODUKTÓW W OCENIE KONSUMENTÓW

S t r e s z c z e n i e

W artykule przedstawiono wyniki testów jakości produktów mleczarskich przeprowadzonych podczas Targów Polagra Food 2002. Celem badań była ocena sensorycznej jakości produktów mleczarskich postrzeganej przez konsumentów. Ocenie poddano osiem kategorii produktów. Przedstawiono m.in. wpływ poszczególnych wyróżników jakości na ogólną ocenę jakości produktu oraz zróżnicowanie ocen produktów w zależności od stopnia znajomości ich marki przez polskich konsumentów.