

Attitudes towards private labels – example of a consumer sensory evaluation of food in Slovenia

Die Verbrauchereinstellung gegenüber Eigenmarken an Hand der sensorischen Evaluierung von Nahrungsmitteln in Slovenien

Aleš KUHAR and Tanja TIČ

Abstract

The study tries to deepen the understanding of consumers' perception of private labeled food products in Slovenia. Consumer sensory test of sour gherkins was conducted in two experimental conditions where the effect of brand information on hedonic judgment was examined. The difference between private label and producer label products was especially scrutinized. Results show that consumers in Slovenia perceive private labels as a lower price alternative of comparable quality to producer brands. Disposable income and family size proved to have significant effect on propensity to buy private label food. The Study confirms that the information about brand significantly affect consumer sensory judgment. The effect of assimilation has been confirmed also in the case of private label.

Keywords: Private labels; Food; Consumer sensory evaluation

Zusammenfassung

Die Studie versucht die Verbraucher Rezeption von Nahrungsmittel, die als Eigenmarken im slowenischen Handel vertrieben werden, zu beleuchten. Mittels sensorischer Tests von Essiggurken wurde der Effekt von Markeninformationen auf das geschmackliche Urteil ermittelt. Spezieller Untersuchungsgegenstand war die unterschiedliche Rezeption von Handels- und Eigenmarken. Die

Resultate zeigen, dass die Verbraucher in Slowenien Eigenmarken als preiswerte Alternativen zu vergleichbaren Handelsmarken sehen. Das verfügbare Nettoeinkommen und die Größe der zu versorgenden Familie haben dabei signifikanten Einfluss bei der Kaufentscheidung auf Eigenmarken zurückzugreifen. Die Studie bestätigt, dass die Markeninformation das sensorische Urteil des Verbrauchers signifikant beeinflusst. Der Effekt der Assimilation ist auch im Fall der Eigenmarke bestätigt worden.

Schlagerworte: Eigenmarken; Nahrungsmittel; sensorische Test

1. Introduction

A food product is defined as an aggregation of attributes at different levels. GRUNERT et al. (2000) divided them on search attributes (e.g. price, colour), experience attributes (e.g. taste and flavor) and credence attributes (e.g. health and safety). Notion of attributes itself, however, cannot explain all complexities of consumer choice since attributes are evaluative criteria. These are transposed to consumer perception through a process of interaction of product characteristics and personal socio-demographic, economic, psychographic, behavioral and cognitive determinants (MOWEN, 1993; ALVENSLEBEN, 1997). A food selection and consumption is therefore a complex phenomenon influenced by a multitude of factors.

Individual socio-demographic and economic characteristics are commonly included when consumers are making a purchasing decision and they have to form quality expectations based on quality cues (TUORILA et al., 1998). Sensory properties of food which have long been regarded as the main determinant of food selection have a rather limited influence in that stage of process. Consumers therefore form their quality expectation for most of the food categories on extrinsic cues such as price, brand name, brand familiarity, advertisements, etc. The effects of extrinsic cues on consumer behaviour have been widely studied (for a review see DELIZA and MACFIE, 1996 or SCHIFFERSTEIN, 2001) and confirming an important effect on consumer expectations and hedonics sensory ratings. Price is considered as a very important cue and received a great part of the research attention; however some scientist (JACOBY et al., 1971) established the theory that price is an objective cue, contrary to other factors being defined as subjective.

Regarding the frequency of usage brand is the most frequently read information about the foodstuff selected (CHERNATONY, 1991). KELLER (1998) identified the following key functions of the brand for consumers: identification of origin; definition of responsibility of producer; risk reduction; search cost reduction and a virtual contract with producer (promise, guarantee). However, DELIZA and MACFIE (1996) put the main focus of brand as an informational cue. Consumers combine actual information from shopping environment with past experiences and use them to make purchase decision, but they strive for a "cognitive efficiency" and try to use minimum of information. Therefore consumers use a brand as a simplifier of a decision making process and hence the foundation of brand power.

According to the ownership two types of brands can be distinguished. Manufacturer brand (also producer brand, national brand) which is owned and coordinated by a producer, whereas the private label (also retailer's brand, own label) is owned and coordinated by a retailer or a buying group and produced by a contracted manufacturer (BERTHON et al., 1999). The presence of private labels is increasing rapidly and is becoming one of the major factors in the developed food market place and a significant threat to producers' brands and manufacturers' profitability (BALTAS, 1997; GUERRERO et al., 2000).

There is clear evidence from research work that non-sensory attributes of food (extrinsic cues) affect the sensory acceptability of a food product (DI MONACO et al., 2003). However, external attributes mainly affect purchase decision, while sensory attributes confirm liking of a product and therefore determine repeat purchase and loyalty.

Rather large research attention has been devoted to the effect of brand on overall liking and sensory evaluation of food (CHENG et al., 1990; DELIZA and MACFIE, 1996; CARDELLO, 1994; SCHIFFERSTEIN, 2001).

FILSER (1994) pointed out that the effect of a brand in the food choice is also largely dependant on individual characteristics of consumers and it is possible to distinguish them regarding to their sensitivity to brand. The effect of brand on consumer is well represented in scientific literature, however there are much less studies regarding the private labels. DELVECCHIO (2001) prepared a research focusing on the role of product category characteristics on private label perception and acceptability. He found that the consumer perception and penetration success of private label is driven by the segment complexity, quality

variance, price and inter-purchase time. The other relevant study aimed at determining what makes consumers more responsive to private label products (BALTAS, 1997). The private label shopper has been identified as price sensitive but not promotion sensitive. High importance has been found regarding the familiarity with the product. GUERRERO et al. (2000) have studied consumer attitude towards private labels. They founded that the Spanish consumers perceive private labeled products as reliable, different from producer brands and are good value for money. CARDELLO (1997) reports about negative stereotypes that affect private label purchase, however this might be dependent on the country and related to the retailer.

The present paper tries to extend the research area focusing on the direct comparison of the two brand types; namely private label and producer label. The main objective is to examine to which extent an extrinsic factor (information on brand) affects hedonic sensory judgment and whether there is a difference in respect to the type of brand.

The research focuses on food consumers in Slovenia. Food retailers have successfully acquired the strategy of private label and the concept is present in Slovenia for a decade with a particularly rapid growth during the last five years (KUHAR, 2005). The leading retail chain started than intensively to introduce private label products primarily as a mechanism to increase profitability. As their market share on the Slovenian grocery market was increasing (mainly through mergers and acquisitions), has accordingly risen the national level of private label penetration. However, also other players at the retail market started to introduce private label products. Meanwhile Slovenian food retail sector has become one of the most concentrated in Europe since the largest three retailers holds about 80 % of the sector's turnover. Perhaps the most important factor for penetration growth of private label products in Slovenia is the level of retail sector concentration. Nevertheless also the promotion strategies have been effectively conducted. Majority of domestic food processors now produces private label products, but mainly without the adequate sustenance strategies. Vertical dominance of retailers has consequently increased and is now among the main factors for radical reduction of food industry business performance.

2. The survey methodology

The study was conducted in two consecutive stages. First three focus groups were performed (total 24 participants), discussing food purchasing behavior with special attention to private labeled products and sour gherkins. Focus groups were composed from participants (fourteen females and ten males) of various age groups. At the final stage of each focus group we performed a preliminary consumer sensory evaluation test. Preliminary testing was intended to precisely determine survey protocol for the consumer sensory evaluation. Pickled gherkins were selected to serve as a research object since there is a rather limited possibility for product differentiation. Furthermore, pickled gherkins are widely used in Slovenia and they were among the first sold under a private label.

Wording of consumers relating to the private labels was carefully studied from the focus groups discussions and applied when questionnaire was prepared as suggested by MALHOLTRA and BIRKS (1999). In addition, the sensory evaluation protocol was fine-tuned following the propositions from CARDELLO and SHUTZ (2006).

The second part of the research was a consumer study with attitude questionnaire and sensory evaluation test involving 155 participants. Sampling of the participants was stratified according to the Slovenian population structure regarding gender and age (SORS, 2006). Survey was conducted in three locations (two shopping malls and a public library) in equal proportions. The experiments were done in purposely prepared sites with minimally required conditions for consumer sensory evaluations. First the participants were given the questionnaire which had four parts: general food purchasing and eating behavior; brands; sour gherkins and socio-demography and were only let to fill-in the last part of it. Then, they were asked to express their opinion for five samples of pickled gherkins on a seven-point hedonic scale. For the purpose of this experiment it was sufficient to ask consumers for simple judgment on general acceptability (level of likeness) of the product without indicating specific sensory characteristics. It is believed that consumers make hedonic judgment considering the product as a whole and are generally not able to concentrate on singular sensory characteristics. Five brands of sour gherkins widely available on Slovenian market were included among which there were

two private label products. In the first session samples were served in neutral plastic containers labeled with a random three digit sample code - so called "blind tasting". In the second session participants were serving themselves from the original packaging of sour gherkins and hence they were informed about the brand ("informed tasting"). Between the two tasting sessions consumers completed the remaining three parts of the questionnaire. The break between the sensory evaluation sessions was done to prevent "quiz" effect.

Results from the consumer questionnaire were processed using general descriptive statistics methods. In order to evaluate the effect of the tasting conditions on the hedonic ratings of pickled gherkins the difference between informed and blind ratings was calculated (I-B). Paired *t*-test was used to evaluate the statistical significance of the rating difference.

3. Results and discussion

Results from the consumer questionnaire mainly confirmed the evident trend of increasing private label food market shares in Slovenia. As much as 45 % of the respondents classified into the "frequent buyer" of private label food (16,7 % very frequently and 29,5% rather frequently). Only about one fifth of consumers claims "no buy" or "very rare buy" of private labels and the remaining one third buy it occasionally.

Fig. 1 shows mean responses for private label product purchase frequency with the corresponding standard deviations (CI=95%). It is interesting for this research that processed vegetable comes as third following dairy products and salt, moreover the standard deviation of answers is the lowest. According to the results, for dairy products and salt around 20 % of respondents always select private labeled product, whereas for processed vegetable almost half of the respondents claim occasional purchase and 30% often purchase. It is therefore possible to conclude that processed vegetable is a product group with high potentials for private label penetration. This is particularly true for the Slovenian market where the leading retailer is efficiently conducting the strategy of "differentiation prevention". Most of the processed vegetable (sour gherkins, red beetroot and sauerkraut) under the private label for this retailer is produced by the market leader and there is actually no difference to the products sold under the producer

label. Beside limited quality difference, also other characteristics of the segment are stimulative: segment complexity is low and the inter-purchase time is short to medium. Beer has the lowest frequency with almost two thirds of the respondents claim no private label purchase, which has been expected.

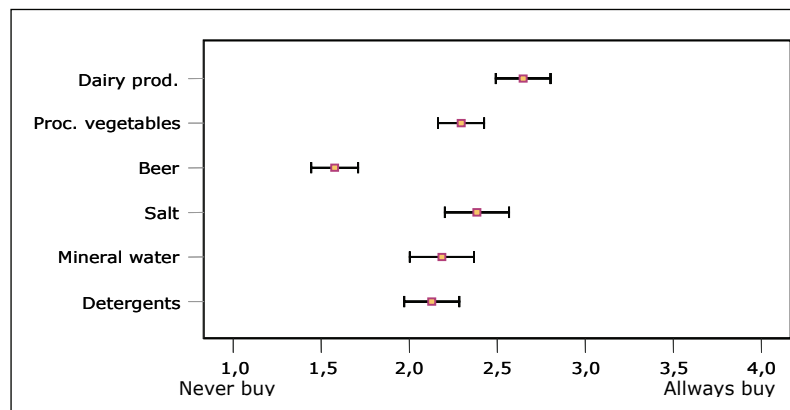


Fig. 1: Private label product purchase frequency by product group

The most obvious benefit to consumers afforded by private label is lower price. More than 90 % of the respondents believe that the private label products are cheaper (Fig. 2). When they were asked to compare overall product quality under producer label and equivalent private label the answer was not that uniform. As much as 49 % of respondents stated that the quality of products is the same, but 45 % believe the quality is lower. Therefore consumers strongly perceive private label products as a low-price alternative to producer label, however not all believe that they do not scarify on product quality. It seems that despite the lower perceived quality, Slovenian consumers accept the price-quality ratio of private label products.

Assortment of private label products is shown to be inferior in comparison to the producer label since 61% of respondents stated the selection is worse. This is particularly true for the Slovenian market since retailers mainly offer simple substitutes to national brands also referred as first generation private labels. There is almost no private label differentiation; however this passive strategy still seems to be

sufficient for exerting vertical chain domination and market power of Slovenian retailers. This is also to a great extent conditional with ineffective defensive strategies of Slovenian food processors.

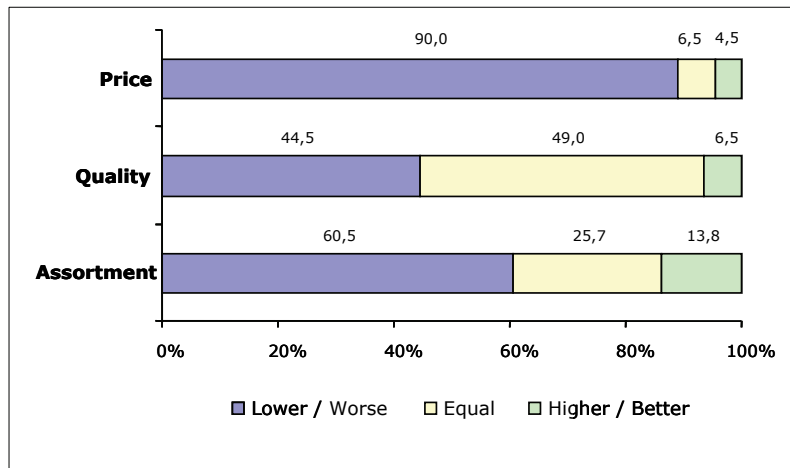


Fig. 2: Comparisons of private label product vs. producer labeled products

We have also attempted to discover whether the propensity to buy private labels is associated with demographic or socio-economic characteristics of consumers.

We found out that the gender, age and education are not significantly related to the reported frequency of private label purchase. This is in accordance with previous researches which also find rather weak association of propensity to buy private label and demographic characteristics of consumers (for review see: BALTAS 1997). Self-reported household disposable income has shown statistically significant effect on private label purchase frequency ($p=0,01$) with evident negative dependency (Gamma - 0,215). Respondents in lower income groups are more frequent buyers of private label food products. Also the size of a household is found to be significantly related to private label product purchase frequency ($p=0,04$), however the frequency density is U-shaped. The smallest and the largest households are very likely among the most frequent buyers of private label products. Also preferred retail chain has a significant relation to the frequency of private label purchase. The consumers which stated to

do most of their shopping in the largest retail chain show the largest propensity to buy private label. However, the chain has no above the average share of private label in their offer. High penetration of this chain private label is rather the result of efficient marketing strategies and selection of private label producers. Confirmative results regarding the private label perception of Slovenian consumers comes also from the aggregated descriptor named "Food attitude profile" where consumers were asked to choose the ultimate food purchasing determinant. The highest private label purchase frequency was found for the consumers that stated "Slovenian origin" as the most important factor when making food selection. More than half of them buy private label very frequently. This corresponds with the profile of leading retail chain which builds its position firmly on the ethnocentric strategies. The second most frequent buyers of private labels are, rather controversially, the respondents who stated that the producer is the most important determinant of product selection decision. This might be interpreted in two ways. Respondents either equalize private label with the producer (label), or another specificity of Slovenian market has effect here. Literally all products under the private label have full declaration of the producer, which might reduce risk related to private label selection. Negative relation is discovered for the consumer stating quality and health characteristics of food to be the main food selection determinants. They tend to buy private label "rarely" or "very rarely", whereas the distribution of respondents that prioritized price and taste in food selection is inconclusive-equally among categories of purchase frequency.

The results from the consumer evaluation are presented in the Fig. 3 which shows mean liking scores for five samples in two experimental conditions. The highest liking mean score in both experimental conditions has been given to the sample N2 which is the high quality product of the national market leader positioned in the gourmet segment. The liking score for this sample was significantly higher ($p=0,010$) when the respondents knew the brand of the sample (informed tasting). In this case we can confirm an assimilation effect due to a positive image of the brand.

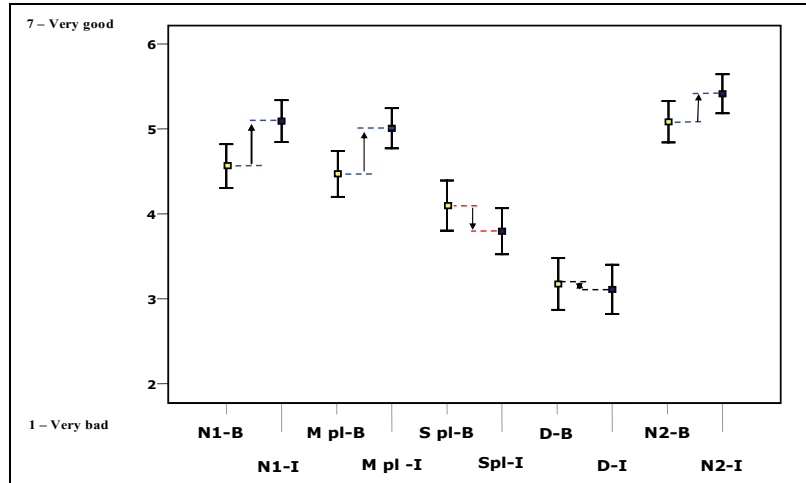


Fig. 3: Mean liking scores of hedonic sensory evaluation

The second ranked sample in blind testing was N1 and similarly the information about brand resulted in significantly higher mean ranking ($p=0,001$). Very close mean ranking has been revealed for the sample M-pl which is the private label "version" of the sample N1. There is virtually no other difference except the label design. This is also confirmed by almost negligible difference in mean scores under blind conditions. Respondents in the study therefore attested as rather reliable sensory evaluators. It is interesting, that also in the M-pl sample respondents show positive assimilation with statistically significant difference in mean liking ($p=0,000$). Actually, the informed-blind mean ranking difference was the largest for that sample. Obviously here consumers are aware of no difference between the producer brand and the private labeled product version. Another possible assimilation determinant might be the fact that the owner of the private label M-pl is the leading retail chain in Slovenia with aggressive private label marketing strategy and explicit ethnocentric positioning. It is rather different for the retail chain which is marketing the product under the sample code S-pl. Hedonic rating under informed conditions gave lower average liking score than blind tasting; however, the difference is not significant. The retailer chain is a subsidiary of a Global buying group and has only recently intensified the promotion strategy for private label segment. It has also rather

different strategy regarding private label category composition than the leading retailer in Slovenia. Prevailing part of the private label products is sourced from the common supply chains of the corporation and are therefore not of Slovenian origin. We might therefore speculate that the perception of private label products in this retailer chain is characterized with some uncertainty having in mind expressed high preference of Slovenian consumers to domestic origin of food. Information on the brand has no significant effect in the case of the D sample; however both average liking scores were lowest. The quality of this product obviously does not correspond to the expectations of Slovenian consumers. The brand has also lost image of reliable quality in the segment of processed vegetable.

4. Conclusions

Our study confirms that the information about brand can significantly affect consumers' hedonic sensory judgment of food. Consumer sensory judgment is therefore influenced by past experiences, familiarity, advertising etc. and preference is therefore influenced by more than the taste of food itself. When comparing the impact of experimental condition with respect to the type of brand, we observed the effect of assimilation also in the case of private label products which might be explained by responses from the attitudinal questions and actual market conditions in Slovenia. It has been noticed that consumers have a set of expectation related to a certain private label which is furthermore influenced by the perceived image of the retailer. In case where the retailer has a reputation on offering private labels produced by domestic leading manufacturers assimilation revealed has been positive. Opposite was discovered in the case of an international retailer where the assimilation has been negative, however not significant. It might be therefore inherited that consumers when making sensory evaluation are influenced similarly by the private label and producer label e.g. there is no difference regarding the type of label. These findings contribute to complex matter and have important implications for strategic brand management. Consumers do not perceive private labels as a "second class" label also in the case when the segment is non-diversified and only first generation private labels exist. Slovenian private label shoppers might be identified as a price-

cautious but quality-sensitive. This highlights the necessity of permanent low price strategy for private label food and preventing differentiation from the producer brands in respect of perceived quality. On the other hand the food enterprises should strengthen the extrinsic cues of their products. Potentials for competitive advantage for producer brands therefore relies on superior quality and highly differentiated images via advertising, effective and continuous product innovation and creative design.

References

- ALVENSLEBEN, R. (1997): Consumer behaviour. In D. I. Padberg, C. Ritson, L. M. Albisu, *Agro-food marketing*. Wallingford: CAB Publishing, P: 209– 224.
- BALTAS, G. (1997): Determinants of store brand choice: a behavioral analysis. *Journal of product and brand management*, 6, P: 315–324.
- BERTHON, P., HULBERT, J.M. and PITT, L.F. (1999): Brand management prognostications. *Sloan management review*, 40, 2, P: 53–65.
- CARDELLO A.V. (1994): Consumer expectations and their role in food acceptance. In MacFie H.J.H., Thomson D.M.H., eds. *Measurement of Food Preferences*. London: Blackie Academic and Professional, P: 253-297.
- CARDELLO, A.V. (1997): Food stereotypes: prejudice in the pantry. *Cereal foods World*, 42,4, P: 231-233.
- CARDELLO A.V. and SCHUTZ H.G. (2006): Sensory science: measuring consumer acceptance. In: *Handbook of food science, technology, and engineering*. Vol. 2. Hui Y.H. (ed.). Boca Raton, London, New York: Taylor & Francis, CRC Press: P: 56-1-56-21
- CHEMNATONY, L. (1991): Facilitating consumer choice decisions: the importance of branding cues. *British food journal*, 93,9, P. 5056.
- DELVECCHIO, D. (2001): Consumer perceptions of private label quality: the role of product category characteristics and consumer use of heuristics. *Journal of Retailing and Consumer Services*, 8, P: 239–249.
- DELIZA, R. and MACFIE, H. J. H. (1996): The generation of sensory expectation by external cues and its effect on sensory perception and hedonic ratings. A review. *Journal of Sensory Studies*. 11,P:103-128.
- DI MONACO, R., CAVELLA, S., IACCARINO, T., MINCIONE, A. and MASI, P. (2003): The role of the knowledge of color and brand name on the consumer's hedonic ratings of tomato purees. *Journal of sensory studies*, 18, P: 391–408.
- GRUNERT, K. G., BECH-LARSEN, T. and BREDAHL, L. (2000): Three issues in consumer quality perception and acceptance of dairy products. *International Dairy Journal*, 10, 575–584.
- JACOBY, J. , OLSON, J. C. and HADDOCK, R.A. (1971): Price, brand name, and product composition characteristics as determinants of perceived quality. *Journal of applied Psychology*, 55, 6, P. 570-579.

- KUHAR, A. (2005): Ekonomski trendi v slovenski živilski industriji. 3. konferenca DAES, P: 29-43.
- MALHOTRA, N.K. and BIRKS, D.F. (1999): Marketing research. Harlow, Prentice Hall: P: 736.
- MOWEN, J. C. (1993): Consumer behaviour. New York: Macmillan Publishing.
- STATISTICAL OFFICE OF REPUBLIC OF SLOVENIA (2006): Statistical yearbook 2005. Ljubljana, Statistical office of Republic of Slovenia. P:454.
- TUORILA, H.M., MEISELMAN, H.L., CARDELLO, A.V. and LESHER, L.L. (1998): Effect of expectations and the definition of products category on the acceptance of unfamiliar foods. Food Quality and Preference 9,6,421-430.

Affiliation

Aleš Kuhar
University of Ljubljana, Biotechnical Faculty
Chair for agricultural economics, policy and law
Groblje 3, SI-1230 Domžale, Slovenia
e-mail: ales.kuhar@bfro.uni-lj.si