

THE INFORMATION ASYMMETRY AND THE SOCIAL RESPONSIBILITY ON THE FOOD MARKET

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The article presents the areas affected by the asymmetry of knowledge and information between producers and consumers in the food market. Subsequently, it indicates marketing communication through product packaging, the goal of which may be to reduce the level of asymmetry. It presents what actions are actually taken by food manufacturers and assesses the extent to which indeed they may contribute to the reduction of asymmetry, and to what extent they may deepen this asymmetry. If information asymmetry is reduced, it may be said that it is a socially responsible communication, otherwise - we cannot talk about CSR.

Keywords: Information asymmetry, CSR, Food market, Packaging.

Introduction

The asymmetry of information on the market of food products is widespread. Food manufacturers, compared to the consumers, have far more information about the products offered by them. They can reduce this asymmetry through the use of marketing communication tools. They also may, by using the same instruments of marketing communication, reduce asymmetry only superficially. The process of communication can take place in such a way that consumers interpret the information that comes to them not necessarily in line with reality, but according to the intentions of the sender. To some extent this is mitigated by legislation in force in the European Union, but it concerns mainly the content of the messages (e.g. mandatory information on the package), not how they are conveyed, although it is slowly changing.¹

The issue of messages which must be given, that is what the manufacturer must inform the consumer about, is regulated by law [Regulation EU 2011]. However, there is a whole range of aspects of the message and the method of its transmission, which the manufacturers, having not only a greater knowledge of the product, but also a greater understanding of the process of perception of information by the recipient of the message can used to their advantage. They may, for example, persuade the consumer to purchase a product which only apparently has some distinguishing features. Whether the manufacturers behave in such a way or not depends on their attitude, on whether they are socially responsible entrepreneurs or not.

Determination of whether the companies communicate in a socially responsible manner is extremely difficult because it is not enough to analyse marketing messages in terms of content and form, it is not enough to examine how consumers perceive them. It is important to determine the intent of the sender.

¹ An example would be the provisions in the Regulation of European Parliament and of the Council (EU) No 1169/2011 dated 25.10.2011 on the provision of information to consumers about food.

Unfortunately, none of the message sender who intends to mislead the customer or wants to cause disinformation will admit that they act with premeditation. Therefore, research on marketing communication with regard to the social responsibility of manufacturers apply more to consumer's action which has been taken under the influence of marketing communication or changes in consumer attitudes, rather than the intentions of the message sender. On the basis of how consumers understand the content and how they behave after encoding them, one can only assume what the intentions of the message sender were.

The purpose of this article is to present the various activities of food producers undertaken within the marketing communications which can reduce or deepen the asymmetry of information and knowledge asymmetry between the producer and the consumer.

In order to achieve this objective, in the course of discussion, we will focus attention on the following issues:

- What is the asymmetry of information on the food market about?
- How can food manufacturers reduce existing market information asymmetry by giving messages through the packaging?
- Could these actions actually reduce the asymmetry of information or may they even aggravate the imbalance in this regard?
- When can we say that communication through the packaging of a food product is socially responsible?

Due to the wide range of instruments of marketing communication, the discussion will focus on packaging². Detailed analysis has been performed on packaging of margarine spreads containing plant sterols and margarine spreads without sterols.

Literature Review

The asymmetry of information means that one party is in possession of more / more useful information. The asymmetry of information exists on the market when the range of information available to entities entering into transaction is varied [Polanski, Pietrzak, Wozniak, 2008]. A number of publications have been issued on the subject of information asymmetry, but these mainly concern the markets for financial services, insurance, used cars or the labour market [e.g. Akerlof 1970, Stiglitz and Weiss 1992, Spence 1973]. Market for food products is rarely the subject of discussion on this topic [Nestorowicz 2013a, 2013b]. And yet, food products, according to the classification by Nelson [1970] are goods whose characteristics can be identified either during consumption (experience-qualities) or in cases such as organic food or functional food, their properties cannot be fully assessed even during consumption. In their case, the consumer must entrust the manufacturer's statement. They are products referred to by Darby and Karni [1973] as credence-quality goods. The consumer must trust the information given by the manufacturer on the product ingredients or their effects on health. After tasting the product, the consumer can determine its taste and fragrance, but they are not able to conclude that, for example, the product actually improved their health³ (for example, after ingestion of margarine - cholesterol decreased). Even if it may be stated after some time that certain parameters such as blood pressure or aforementioned cholesterol improved, most often it can be evaluated after a longer period of consuming the product. In addition, health condition improvement most frequently occurs as a result of many different circumstances that took place during the period: the consumption of the product, medication, sports, less stress during the period. It may happen that the parameters do not improve, not because of the lack of

² More about reducing the information asymmetry by using the packaging in Nestorowicz 2014.

³ Expecting health improvement as a result of introducing food products to the diet refers to functional foods, or foods with proven beneficial effects on the body's vital functions. Functional food, in addition to providing the body with nutrients helps to improve the health and well-being and / or reduces the risk of lifestyle diseases [Gawęcki and Mossor-Pietraszewska (ed.) 2006].

positive impact of the food product, but due to some negligence of the consumer in relation to the regularity of consumption of the product, regarding the application of doctor's instructions, etc. Furthermore, the impact of the product can, in general, be difficult for the consumer to observe (in the case where the product is to reduce the risk of developing a certain disease).

In markets characterized by high information asymmetry, its reduction may occur as a result of actions undertaken both by the party that is relatively better informed (in the case escribed it is the manufacturer), as well as by the relatively less-informed party (the consumer). The consumer information activity consists mainly of receiving information coming to them and actively looking for information about a specific product or category of products [Nestorowicz 2013a]. In this article we will focus, however, on actions taken by the better-informed, or by manufacturers. They can take actions such as: the transmission of information (message) and / or signalling, that is conveying certain properties of the product, not by telling them directly to the consumer, but suggesting that the product has specific features. Signalling example can be:

- information about attestations, certificates e.g. organic food,
- provision of guarantees,
- information that the product is recommended by an institution which inspires confidence;
- the use of expensive packaging materials to make the impression of a luxury product.

As for the transmission of information (message), law in the European Union largely controls the acceptable and unacceptable operations. However, with signalling, it is not so easy, which is why in this area actions may take place which while complying with the law, are still ethically questionable. Examples of such activities are given in Table 1. The literature suggests that the signalling is effective only in situations where high capital is involved⁴ (e.g., a lot of effort, expenditure of time or money) [Forlicz 1996], so that it is not cost-effective for companies offering lower quality products. Such proposals have been put forward on the basis of analysis of the labour market, durable goods. Observing the food market, it may be assumed, however, that in the FMCG market, where many purchasing decisions are made on impulse, where we have to deal with decision-making heuristics, there are also less costly signalling tools, such as appropriate package design, suggesting some features of a product.

Corporate social responsibility is defined as the concept of conducting activities with respect to stakeholders (shareholders, employees, suppliers, customers, entities operating in the environment, local communities) and the environment. This concept is based on the conduct of economic activity that generates profit for the company, while proceeding in accordance not only with the law, but also ethical principles and behaving like a "good member of the community" [Stefańska 2014a]. According to the Carroll's pyramid model, one can speak of four kinds of responsibility: economic, legal, ethical and philanthropic [Carroll 1999, 1991, Stefańska 2014b]. From the point of view of marketing communication, the aim of which is to reduce the information asymmetry between the producer and the consumer, the most important are two types of corporate social responsibility: legal and ethical.

According to the definition of CSR adopted by the European Commission in 2011, the social responsibility of a company is voluntary actions that go beyond the requirements of the law. The activities of socially responsible companies should allow solving social, environmental, ethical problems, issues related to human rights, and consumer problems [Commission of the European Communities Papers 2011, p. 7]. For further considerations, the most important is this latter aspect, that is solving consumer problems. Food, especially bioactive food and healthy eating habits can become a factor contributing to limiting the development of civilization diseases [Nestorowicz, Nowak 2010].

The laws are designed to protect the consumer. Food which is safe and good for the health contributes significantly to the "health and well-being of citizens, and has a significant impact on their social and economic interests" [Regulation of the Parliament...2011]. According to EU regulations, the

⁴ These signals will include certificates for organic foods and health claims.

consumer has a right to information about food consumed. "The general principle of food law is to provide a basis for consumers to make informed choices about the food they consume and to prevent any practices that may mislead the consumer." Information provided to consumers cannot be ambiguous and cannot confuse the consumer. It should be clearly visible, legible, accurate and easy to understand. Manufacturers cannot for example indicate that the product has some special characteristics when all products in this category have such features.

Socially responsible enterprises, among others, honestly inform their customers about the qualities of their products. If manufacturers comply with the provisions of law, it cannot yet be said that they communicate in a socially responsible way. It is only when in their communication they better adapt to the needs and level of consumer communication than prescribed by applicable law, we can talk about social responsibility. This better adjustment means that the companies do not try to use their knowledge in such a way as to misinform the consumer. The intention of communicating with consumers in case of a socially responsible company is a clear transfer of information, not misleading, or even eliminating the existing asymmetry of information and knowledge asymmetry.

Research on the issue of social responsibility in marketing communication of the companies encounters a very significant difficulty associated with the fact that in order to determine whether the marketing communication of a company is socially responsible, one must examine intentions of the message sender. Studying only the reactions of message recipients, the content of messages is unfortunately not sufficient.

Asymmetry of Information on the Market of Food Products

Information asymmetry refers to many aspects. The literature most often refers to asymmetry related to characteristics of the product. It is certainly a core area where we can talk about the asymmetry of information between the manufacturer of foodstuffs and their buyer. Consumers do not always know what attributes the product should have, or what kind of ingredients it should contain, and how they impact their health. However, the asymmetry of knowledge between producer and consumer is much broader, covering such areas as:

- characteristics of the product, its features, functionality, ingredients, etc.
- nutrition and health claims
- certificates obtained by products and their manufacturers
- the process of perception of information
- consumer behaviour at the point of purchase
- decision-making process and the ability to influence each of its stages.

The presence of a significant knowledge asymmetry⁵ contributes to the asymmetry of information⁶ between the two parties⁷, and, consequently, raises the temptation for producers to use the advantage in this respect in their favour (Table 1). Such actions have nothing to do with the socially responsible operation. On the other hand, communication activities of the manufacturer aimed at reducing the asymmetry are socially responsible actions, because they show the manufacturer's care for the welfare of the consumer. Reducing the asymmetry of information between the consumer and the producer of food leads to making purchasing decisions which are more accurate from the point of view of consumers.

⁵ Knowledge - a collection of data and truths about the world surrounding the subject (Forlicz 1996)

⁶ Information - flow of data or truths formulated in the form of language strings from the sender to the recipient (Forlicz 1996)

More on the mechanisms in Nestorowicz 2013b.

Asymmetry in terms of knowledge about:	Manufacturer's information activity reducing the asymmetry	Unethical use of asymmetry of knowledge by manufacturers	
product and its characteristics	Message and Signalling - reliable information about the product and its properties	Suggesting that the product contains additional ingredients or does not contain certain ingredients if it is not true or all products in this category are characterized by such properties. Informing about the product in a manner difficult to understand by the average consumer. Introduction of difficult to understand names, abbreviations, signs. Transmission of information in an ambiguous way. When transmitting positive information, the use of simpler language, larger font, better contrast or graphics, which is intended to facilitate understanding of the information provided. When the information is not very favourable, it is conveyed, but in such a way as to limit its possible influence on the decisions of consumers. Not enough information or too much information, impeding focus on the most important information.	
Nutrition claims, Health claims	Message and Signalling - fair presentation of nutrition and health claims	Although the valid legal regulations are in force prohibiting suggestion by the manufacturer that the product has health benefits, if this has not been scientifically proven and approved by the EFSA, it is tempting to use some graphics to suggest that such a product can support the treatment.	
Certificates, for example, Organic food	Message and Signalling - fair presentation of the information regarding the certificates	Informing of certificates, which consumers do not know. The use of graphic or verbal elements associated with organic products and placing them on the packaging. Less aware consumers succumb to the impact of such treatments, because they do not know the proper designation of an ecological product. Informing of the product being recommended by the institutions, associations, whose names suggest that they are authorities in the field, although this is not true.	
The process of perception	Signalling - use of knowledge of the principles of perception to organize such a message so that the consumer easily perceives information important to them; information architecture helping to make a rational decision	Such an arrangement of information that the consumer sees the data, which the manufacturer cares about. Using eye-catching graphics to bring focus to the content relevant to persuasion, and not to the content important to the consumer. Omission or "hiding" information unfavourable to the manufacturer.	
Behaviour of the consumer in the store	Message and Signalling - using this knowledge to help make the optimal decision from the point of view of the consumer	Using the knowledge of decision-making heuristics (Wanat), information architecture (Thales and Sunstein) in such a way that the consumer does not realize that they make a	
Decision-making process	Signalling - the knowledge used to help make a quick decision based on reliable evidence.	decision under pressure, manipulating their attention.	

 Table 1. Actions of the manufacturer which could reduce or deepen the asymmetry.

Source: own study.

Producers who communicate in a socially responsible manner cannot succumb to the temptation of using the asymmetry of knowledge between them and the consumers.

Marketing Communication of Companies and Reducing Information Asymmetry in the Market of Food Products

The issue of research on marketing communication in relation to information asymmetry and corporate social responsibility, among others, may affect such elements of the communication process (Figure 1) as:

- The intentions of the sender
- Message
- Coding
- Communication noise
- Decoding
- Interpretation
- The effect of the communication process, i.e. the consumer response to the messages reaching them. The effect of the communication process can be feedback, e.g. a response to manufacturer's message, or simply purchase of a given product or change in its perception.



Figure 1. Model of marketing communication process. Source: own study based on Model Shannon and Weaver [Garcia de Torres 2001].

Analysing the social responsibility of entrepreneurs in the context of marketing communications, their intentions are of utmost importance. They are responsible for the form of message, and whether the company will try to eliminate the communication noise. A socially responsible company does not use the asymmetry of knowledge and information in such a way as to make it difficult to decode the message, but on the basis of their knowledge and skills of designers, tries to compose a message so that consumers correctly interpret the information that comes to them.

Preparing food information, it must be assumed that the recipient is the average consumer, who is reasonably well informed, observant and careful [Tańska 2010]. Even in such a case, one cannot be sure that the decoding will run as planned. Based on the semiotic model by U. Eco (Niebał 2001), in the process of decoding the message, different and sometimes conflicting interpretations of message content take place. Recipient of a message in addition to the general codes also apply various types of sub-codes, such as personal codes and introduce accidental connotations. Of course, the company cannot affect all the codes, but it should make an effort to compose a message so that the consumer needs to use sub-codes as little as possible.

In our case, we analyse the messages on the packaging of the product. As to the content of the information contained on the packaging, a manufacturer to a large extent has to obey the laws that

determine what information is mandatory for a particular food product. Until recently, the form of the communication was not standardized legally at all. Since December 2014, new rules come into force that will, for example, regulate minimum font size. It is a reaction to the results of many studies which indicate for example that:

- some information important for a customer is written in very small type, in an obscure and difficult to reach place, such as a weld, too little contrast is used between the font colour and background, and poor print quality is used [e.g. Tomaszewska-Pielacha and Ozimek 2011];
- the simple messages, often propped by graphics, to a larger extent influence the buying behavior of consumers than those comprehensive, but at the same time rather complicated and requiring more effort from consumers [*Rozumienie znakowania...* 2006];
- suitable information architecture helps consumers understand information and reduces mistakes when choosing a product [NPSA 2007].

It is not possible to introduce such restrictions which would eliminate all possibility of fraud.

Table 2 shows the messages on the front of packaging⁸ of functional margarines available on the Polish market which have scientifically proven health benefits. However, the analysis of ordinary packaging of margarine spreads shows that on some of them similar messages were used to evoke similar associations as in the case of functional margarines.

Purpose of the message	Content and form of the message
Information about health benefits - message	 nutrition claims such as "source of omega-3", "no added salt" health claims such as "effectively reduces cholesterol"
increasing the credibility of information on the health-promoting properties of the product - signalling	 photo of a man in a lab coat, glasses, arousing clear associations with the doctor, but on the lab coat pocket there is an abbreviation of the margarine manufacturer's name, but the inscription is very difficult to see slogan "clinically proven", "scientifically proven" slogan "quality assurance" in gold placed in a decorative black circle associated with the medal, award slogan: "guarantee of quality control," which the consumer is supposed to associate with a guarantee given to them, but the guarantee does not apply to quality as such, but only the fact that the quality is controlled; information about the recommendation by the Foundation for Cardiac Surgery Development in Zabrze, or favourable opinion of Child Health Centre
association with the product healthy for the heart - signalling	 drawing of a heart in various forms picture of people in motion on the beach - association with health arrows showing the decreasing cholesterol
association with plant product - signalling	 dominant green colour next to information about content of plant sterols - drawing of leaves background depicting plant motifs

Table 2. Message and signalling on the packaging of margarine.

Source: own study.

⁸ Only the information on the front of the packaging was analysed, because as Grunert's research shows, most buyers in the store look only at the front of the packaging, whereas only 12% look at other parts of the packaging [Grunert 2010].

While in the case of functional margarines the presented communication can be assessed positively, because the signals reinforce the message, but do not distort it, in relation to certain elements of conventional margarine packaging design there may be some reservations. Design of packaging, use of colours, materials, shapes or graphics on the packaging might suggest to some extent certain features which this product does not have. It depends on the decision of the producer which signals will be conveyed by the packaging. However, knowledge of the manufacturer on the automatism of making purchasing decisions, the behaviour of the customer in the store, information perception process, results in the manufacturer's ability to encode the message so that the consumer is automatically pointed to the information favourable to the manufacturer and makes a decision based on some impressions, and not necessarily facts.

Socially Responsible Marketing Communications of Companies in the Market of Food Products

Some manufacturers assume a certain convention in marketing communications, the assumption of limited trust between the parties: the manufacturer and the customer, due to the awareness of the possibility of divergence of interests [Forlicz 2008, p. 187]. However, due to the fact that not all customers approach the marketing messages with limited trust, there is a risk that the communications will be treated as reliable. And the company will use the gullibility of customers. If the company approaches marketing communications in this way, we cannot say that it is communicating in a socially responsible manner.

All regulations relating to marketing communications point to the following as the most important principle: do not mislead the customer. Unfortunately, in some cases, the communication activities are conducted on the borderline of ethics. In such cases, we cannot speak of CSR. A socially responsible company is committed to providing information to the customer in such a way as to enable understanding them so that they could make their own optimal purchasing decision. Socially responsible communication - the recipient of the message understands it in a "proper" way, i.e. learns more about the product, which enables them to make an informed decision most favourable to them. In the case of socially responsible communication, "proper" understanding of the message is tantamount to understanding the message intended by the sender, or reliable informing the consumer about the product and its characteristics. When the manufacturer communicates with consumers in such a way as to deepen the asymmetry of information, confuse the consumer or mislead them, we cannot talk about social responsibility.

Because effective communication occurs when the recipient of the message understands the message in accordance with the intent of the sender, which means that the communication objective assumed by the sender has been achieved, we can identify 4 communication situations highlighted due to the effectiveness of communication and reducing information asymmetry (Table 3).

	Purpose of communication	
Actual intentions of the sender	Achieved	Failed
Reduction of information asymmetry	Appropriate and effective communication Socially responsible communication	Communication correct, but ineffective Potentially socially responsible communication
Deepening of information asymmetry; consumer disinformation	Communication inappropriate, but effective Socially irresponsible communication	Communications inappropriate and ineffective Socially irresponsible communication

Table 3. The intentions of the sender and the effects of marketing communication.

Source: own study.

In conclusion, socially responsible marketing communication reduces information asymmetry in the market between the producer and the consumer. Some manufacturers, however, use their knowledge advantage and apply the messages which do not contribute to the reduction of information asymmetry; on the contrary, they contribute to it. In the food market, signalling is most often used for this purpose. This is an effective action because it is based on human knowledge of the communication perception process, on the knowledge of decision-making heuristics, some automatism used by consumers when shopping. Fortunately, such actions are taken less and less frequently. The reasons for the changes should be seen in increasingly better legal regulations in force in the European Union, as well as increasing consumer awareness. In the future, we should pay special attention to the education of consumers, which over time can contribute to reducing the asymmetry of knowledge between producers and consumers.

References

- 1. Akerlof G.A., 1970, The Market for "Lemons": Quality Uncertainty and the Market Mechanism, "The Quarterly Journal of Economics", No 3, p. 488-500, http://www.jstor.org/stable/1879431.
- 2. Carroll A., 1999, Corporate Social Responsibility, Evolution of a Definitional Construct, "Business and Society", Vol. 38, No. 3, p. 268-295.
- 3. Carroll A., 1991, The Piramid of Corporate Social Responsibility: Towards the Moral Management of Organisational Stakeholders, "Business Horizons", No. 34, p. 39-48.
- 4. Commission of the European Communities Papers, 2011, No. 681.
- 5. Darby R.R., Karni E., 1973, Free Competition and the Optimal Amount of Fraud, "Journal of Law and Economics", No.16, http://www.jstor.org/stable/724826.
- 6. Forlicz S., 1996, Mikroekonomiczne aspekty przepływu informacji między podmiotami rynkowymi, Wydawnictwo WSB, Poznań.
- 7. Forlicz S., 2008, Informacja w biznesie, Polskie Wydawnictwo Ekonomiczne, Warszawa.
- 8. Garcia de Torres E., 2001, *SzkołaPalo Alto*, In: *Nauka o komunikowaniu. Podstawowe orientacje teoretyczne*, Ed. Dobek_Ostrowska B., Wydawnictwo Uniwersytetu Wrocławskiego, Wrocław.
- 9. Gawęcki J., Mossor-Pietraszewska T., 2006, *Kompendium wiedzy o żywności, żywieniu i zdrowiu*, Wydawnictwo Naukowe PWN, Warszawa.
- 10. Grunert K.G., et al., 2010, Nutrition knowledge, and use and understanding of nutrition information on foodlabels among consumers in the UK, Appetite, doi:10.1016/j.appet.2010.05.045, http://www.eufic.org/upl/1/default/doc/GDApaperJPubHealth.pdf
- 11. Nelson P., 1970, Information and Consumer Behavior, "Journal of Political Economy", Vol. 78, No. 2, p. 311-329.
- 12. Nestorowicz R., 2013a, Consumers information activity on the polish food market vs. integration of Poland into the European Union, Visnik. Logistika, No. 762, Lvivskaja Politechnika. p. 133-138.
- 13. Nestorowicz R., 2013b, The asymmetry of information on food market and consumers' preferences some aspects, "Polityki Europejski, Finanse i Marketing, No 10 (59), Warszawa, p. 506-513.
- 14. Nestorowicz R., 2014, *Information on packages as a way of reducing asymmetry of information on the food products market*, Paris-Venice, ed. Jean-Claude Andreani, Paris-Venice: Marketing Trends Association [available at www.marketing-trends-congress.com/papers].
- 15. Nestorowicz R., Nowak L., 2010, Żywność bioaktywna a preferencje konsumentów, in: Zarządzanie produktem. Kreowanie marki, ed. J. Kall, B. Sojkin, Wydawnictwo UEP, Poznań.
- 16. Niebał I., 2001, Strukturalizm I semiologia a teoria krytyczna, In: Nauka o komunikowaniu. Podstawowe orientacje teoretyczne, Ed. Dobek_Ostrowska B., Wydawnictwo Uniwersytetu Wrocławskiego, Wrocław.

- 17. NPSA, 2007, A guide to the graphic design of medication packaging, National Patient Safety Agency, London, www.npsa.nhs.uk/health/currentprojects/designforpatientsafety.
- 18. Polański B., Pietrzak Z., Woźniak B., 2008, *System finansowy w Polsce*, Wydawnictwo Naukowe PWN, Warszawa.
- 19. Regulation (Eu) No 1169/2011 of the European Parliament and of the Council of 25 October 2011; http://eurlex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2011:304:0018:0063:EN:PDF
- 20. *Rozumienie znakowania żywności przez konsumentów europejskich*, 2006 http://www.federacja-konsumentow.org.pl/story.php?story=440;
- 21. Spence M., 1973, Job Market Signaling, Quartely Journal of Economics, No. 87, p. 355-374, http://www.jstor.org/stable/1882010;
- 22. Stefańska M., 2014a, Rola społecznej odpowiedzialności w tworzeniu przewagi konkurencyjnej przedsiębiorstw handlu detalicznego, Wydawnictwo UEP, Poznań.
- 23. Stefańska M., 2014b, Raportowanie o społecznej odpowiedzialności biznesu jako narzędzie komunikowania się przedsiębiorstwa z interesariuszami, In: Marketing w 25-leciu gospodarki rynkowej w Polsce, Czubała A., Hadrian P., Wiktor J. W. (Ed.), Polskie Wydawnictwo Ekonomiczne, Warszawa.
- 24. Stiglitz J.E., Weiss A., 1992, Asymmetric Information in Credit Markets and Its Implications for Macro-Economics, Oxford Economic Papers, No 44, p. 694-724, http://www.jstor.org/stable/2663385;
- 25. Tańska I., 2010, Jakie informacje muszą znaleźć się na opakowaniach żywności?, IGIFOOD Consulitng, Warszawa, http://www.igifc.pl/
- Tomaszewska-Pielacha M., Ozimek I., 2011, Czytelność, zrozumiałość i kompletność informacji zamieszczanych na opakowaniach żywności w opinii konsumentów, "Problemy Higieniczno-Epidemiologicze", No. 4.