

Consumer perception of product recall in the food sector

Keywords: product recall, risk analysis, consumer survey, food industry

1. Summary

The task of risk analysis is to estimate the risks associated with the hazards present in the food chain and to prevent or reduce potential harm with risk management and risk communication. Measures related to the restriction of the marketing of certain products are connected to the latter. In our article, related concepts are reviewed and the most important results of the representative consumer survey of the National Food Chain Safety Office (henceforward: NFCSO) on product recall are presented.

2. Introduction

2.1. Legal background

In the European Union, concepts and obligations related to product recall are defined and regulated by Regulation (EC) No 178/2002 of the European Parliament and of the Council laying down the general principles and requirements of food law, establishing the European Food Safety Authority and laying down procedures in matters of food safety. In Hungarian food law, this topic is covered by Law XLVI of 2008 on the food chain and its authority supervision. There are no contradictions between the two laws, and so they are treated in this article uniformly.

2.2. Basic concepts

Even though so far we have been talking about product recall, in fact, this concept involves a number of measures that differ in content.

If a food entrepreneur thinks or has a reason to believe that a food that is produced, processed, manufactured, imported or marketed by the business does not meet food safety requirements and the food in question is no longer under the direct control of the enterprise, *withdrawal of the food from the market* has to be initiated immediately and the competent authority has to be informed. If the product may have reached customers, then consumers have to be informed by the enterprise about the cause of the recall and, if necessary - other measures are not sufficient enough to ensure a high level of health protection -, the product, which is already at

the customers *has to be recalled*. This means that the *withdrawal of the product from the market* and *product recall* are two separate concepts.

The concept of *withdrawal from the market* is not defined by either Regulation 178/2002 or the Éltv., but the general understanding is that it is a process during which the product being removed from the food chain, except for products already in the possession of customers. In this respect, the definition of Directive 2001/95/EC on general product safety serves as a useful guideline, stating that “withdrawal shall mean any measure aimed at preventing the distribution, display and offer of a product dangerous to the consumer”. We can talk about *recall*, if the dangerous product is already at the customer. While in the case of *withdrawal*, stakeholders of the food chain can inform each other relatively quickly, in the case of a *recall*, it could be difficult to reach or notify customers. At this time, there is no detailed regulation for enterprises is available regarding this topic. At the same time, it is a requirement for enterprises to inform relevant customers using the most effective tools and as accurately as possible. In this respect, the above-mentioned obligation to provide information could be helpful, according to which food enterprises are obliged to report these product recalls to the authority. European food law defines it as a task for national authorities to perform risk communication services, i.e., the multilateral passing on of risk-related information. In this regard, the Hungarian central authority, NFCSO has made great strides over the past 10 years, setting an example on the European level according to the survey of the European Food Safety Authority, covering 25 EU member states [1],

¹ National Food Chain Safety Office, Directorate for Food Safety Risk Assessment

² Ministry of Agriculture, State Secretariat for Food Chain Supervision

ensuring that data on risky products reach a wide range of people within a few hours.

It should be noted that, in accordance with the precautionary principle, the enterprise may not postpone the notification until the fact that batch in question is genuinely a risk is proven beyond all doubt. Action must be taken even in the case of a suspicion, in order to ensure the protection of human health at the highest possible level.

However, withdrawal and recall of products can not only be carried out on the basis of voluntary measures by the enterprises. The Law XLVI of 2008 states that if the measures taken by the enterprise are considered insufficient by the authority, then the food chain supervision body, in proportion with the infringement found and taking into consideration the degree and nature of the risk inherent in the infringement, may impose conditions for the production, storage, transportation, use, marketing, import, export or shipping of the product through its territory, it can restrict, suspend or ban the above activities, or can order the placing under seal, seizing, withdrawal, destruction or disposal of the product.

3. Dilemmas about product recall

While the withdrawal of products from the market is a “silent” process, i.e., customers are not necessarily informed of the measure in each case, the purpose of a recall is specifically to provide information related to the risk to consumers. For this reason, even in the case of responsible enterprises, it is a critical point in decision-making to launch the product recall process, if there is only a suspicion of a risk. This is so, because business executives feel that product recalls may result in a decline in reputation and brand value, in other words, unwanted “negative marketing”. In view of the fact that in the case of a product recall the latitude of businesses from a communication point of view is very limited, keeping the interest of the public in mind, in the case of such an event that food chain supervision authority should act in such a way that ensures effective informing of the public, but does not cause unnecessary damage to the relevant economic organizations. This issue was at the center of the 2nd Round table event of NFCSO on June 12, 2018, where not only representatives of businesses and authority employees, but also consumer protection social organizations were present. The results of the discussion are in line with the results of the consumer survey described in the next chapter.

4. Research objective

Business and authority measures related to product recall influence the risk perception of consumers, which is one of the decisive elements of consumer decisions [2]. This, of course, is also recognized by businesses, but it is important to get to know the background of customer reactions in more detail

in order for risk-related information to be able to reach all stakeholders within a short period of time and, at the same time, to avoid the development of unfounded panic situations [3], [4], [5], [6], [7]. From a European food chain safety point of view, currently the role of the conscious customer can be considered the most critical [8], [9], [10], [11], [12]. In our survey, we aimed to find out what consumer attitudes and behavior patterns can be observed in the Hungarian society regarding product recall. Results may contribute to the development of the crisis communication of enterprises and the definition of the directions of authority risk communication.

5. Research methodology

The data was collected by a quantitative consumer survey [13]. Between April 10 and 27, 2018, personal interviews were conducted with a total of 1,002 people. The questionnaire included both open- and closed-ended questions, and a 5-point Likert scale was used for attitudinal questions. In terms of gender, age and place of residence of the respondents (NUTS 2 planning and statistical regions), the sample can be considered representative of the total adult population of Hungary, based on the 2016 microcensus data of the Hungarian Central Statistical Office [14]. Statistical analysis of the data was carried out by the IBM SPSS Statistics 22.0 software package.

6. Results

The vast majority of respondents, 96.1% have already heard about food product recall. In response to the open-ended question related to this, most of them (138 people) mentioned baby foods, there were 52 mentions regarding paprika, and 35 people cited the recall of some kind of meat product. Mineral waters, eggs, chocolate and caraway seeds were relatively often mentioned.

According to 5.8% of the respondents, product recall is the sole responsibility of the enterprise, while 14.0% thinks that it is the sole responsibility of the authority. However, according to the opinion of the majority (80.2%), these two stakeholders have to cooperate in such cases.

In our next question, attitudes regarding product recall were investigated. In order to do so, a situation was outlined for the respondent, and they had to express their opinion, based on agreement or disagreement, regarding the given answer related to the situation (*Figure 1*). The question was this: „Suppose that one of the batches of a food is reported to be contaminated with mycotoxin. The batch has been recalled, and the other items on the shelves are fine. What do you think about it this?”.

With the next question, we intended to assess the first reactions of customers in the same situation

(Figure 2). In this question, once again the degree of agreement with the answers given was recorded.

The survey also probed what kind of information is required by customers regarding the recalled item. For 85.6% of the respondents, the cause of the recall is important, 66.2% would like to know the name of the manufacturer of the item, 62.0% consider it important to receive a photo of the product, 61.3% would like to know the name of the brand. 61.0% would like to know what harms may be caused by the consumption and 55.3% would require the publication of a list of the stores where the product in question is marketed. People were much less interested in information that would enable them to directly identify the given batch: 31.7% would like to know the expiration date, 20.9% the product ID and 8.0% the bar code.

7. Conclusions and recommendations

The phenomenon of product recall is not unknown to consumers in the context of the food sector. It can be viewed as a positive result that a straightforward and correct attitude is appreciated by most of the respondents, and even perceives the problem to be bigger if the information comes not from the enterprise but from elsewhere (for example, the authority).

Most of them would throw out a risky product already purchased, and would also draw the attention of their acquaintances to do so. However, it is important to point out that enterprises involved in product recall are not “punished” by the vast majority of the Hungarian population in the long run, after a while, customers return to their favourite brands, which is consistent with other international experiences [15].

To establish good recall practices, three players are needed:

1. A fair, prudent enterprise keeping in mind the protection of the health of consumers.
2. A credible authority that takes part in solving the problem and can provide an objective picture about the given event through the media to society. It is the task of the authority to work actively in order to ensure timely information of all stakeholders about the risk and, at the same time, to act against unnecessary panic-mongering [16], [17].
3. A conscious buyer who accepts that mistakes can occur in all areas of life and who does not ignore the risks that emerge, but does not draw long-time, final conclusions from a single event.

Based on the findings, it seems timely to prepare and promote a guideline on product recall for companies. In this guideline, the concepts contained in this article would be defined and interpreted, action plans for

different situations would be presented, and advice would be provided for proper risk communication. From the side of the authority, the need to create a public database regarding product recalls has arisen, which would provide better information for consumers and media, and in the long run would contribute to strengthening confidence in food enterprises.

An important task of NFCSO that, in the area of raising customer awareness, even in relation to future events, discuss the nature of product recalls, and to make it clear to all stakeholders that it is a measure that serves the interests of the Hungarian population, because the real danger lies in concealing the marketing of products that endanger consumers' health or are largely inadequate in their composition.

8. References:

- [1] Etienne, J., Chirico, S., McEntaggart, K., Papoutsis, S., Millstone, E. (2018): EU Insights – Consumer perceptions of emerging risks in the food chain. EFSA supporting publication
- [2] Grunert, K. G. (2005): Food quality and safety: consumer perception and demand. *European review of agricultural economics*, 32(3), 369-391.
- [3] Lakner, Z., Szabó, E., & Hajdu, I. (2005): The 2004 paprika scandal: anatomy of a food safety problem. *Studies in Agricultural Economics (Budapest)*, 102, p.67-82.
- [4] Peake, W., Detre, J., Carlson, C. (2014): One bad apple spoils the bunch? An exploration of broad consumption changes in response to food recalls. *Food Policy* 49, p. 13–22.
- [5] Li, T., Bernard, J. C., Johnston, Z. A., Messer, K. D., Kaiser, H. M. (2017): Consumer preferences before and after a food safety scare: An experimental analysis of the 2010 egg recall. *Food Policy*, Volume 66, January 2017, p. 25-34.
- [6] Pozo, V.F., Schroeder, T.C., (2016): Evaluating the costs of meat and poultry recalls to food firms using stock returns. *Food Policy* 59, p. 66–77.
- [7] FSA/FSS (2017): Efficacy of Recalls, Final Report. Elérhető: <https://acss.food.gov.uk/sites/default/files/recalls-efficacy-report.pdf> (Hozzáférés/Aquired: 30.07.2018.)
- [8] Patil, S. R., Cates, S., Morales, R. (2005): Consumer Food Safety Knowledge, Practices, and Demographic Differences: Findings from a Meta-Analysis. *Journal of Food Protection*: September 2005, Vol. 68, No. 9, pp. 1884-1894.
- [9] Barnett, J., McConnon, A., Kennedy, J., Raats, M., Shepherd, R., Verbeke, W., et al. (2011): Development of strategies for effective communication of food risks and benefits

across Europe: design and conceptual framework of the FoodRisC project. *BMC Public Health*, 11, 308.

- [10] EFSA (2012): When food is cooking up a storm: Proven recipes for risk communications. Parma: EFSA (European Food Safety Authority). <http://www.efsa.europa.eu/en/corporate/pub/riskcommguidelines.htm> (Hozzáférés/Aquired 24.07.12.)
- [11] Kasza, Gy., Józsviak, Á., Bódi, B., Zsoldos L., Lakner, Z. (2013): Élelmiszerlánc-biztonsági stratégia: kihívások és elvárások. *Magyar állatorvosok lapja*, 135 (8), p. 481-493.
- [12] Rutsaert, P., Regan, Á., Pieniak, Z., McConnon, Á., Wall, P., Verbeke, W. (2013): The use of social media in food risk and benefit communication. *Trends in Food Science & Technology* 30 (1), p. 84-91.
- [13] Lakner, Z., Hajdu, I., Bánáti, D., Szabó, E., & Kasza, Gy. (2006): The application of multivariate statistical methods for understanding food consumer behaviour. *Studies in Agricultural Economics* 105, 59-70.
- [14] KSH (2016): Mikrocenzus 2016 – 3. Demográfiai adatok. Elérhető: https://www.ksh.hu/mikrocenzus2016/kotet_3_demografiai_adatok (Hozzáférés/Aquired: 30.07.2018.)

[15] Bakhtavoryan, R., Capps, O., Salin, V. (2012): Impact of food contamination on brands: a demand systems estimation of peanut butter. *Agricultural and Resource Economics Review*. 41 (3), p. 327–339.

[16] Laestadius, L.I., Lagasse, L.P., Smith, C.S., Neff, R.A. (2012): Print news coverage of the 2010 Iowa egg recall: addressing bad eggs and poor oversight. *Food Policy* 37, p. 751–759.

[17] Shan, L., Regan, Á., De Brún, A., Barnett, J., van der Sanden, M. C. A., Wall, P., & McConnon, Á. (2013): Food crisis coverage by social and traditional media: A case study of the 2008 Irish dioxin crisis. *Public Understanding of Science*, 23(8), p. 911-928.

Referenced laws:

- Regulation (EC) No. 178/2002 of the European Parliament and of the Council laying down the general principles and requirements of food law, establishing the European Food Safety Authority and laying down procedures in matters of food safety
- Directive 2001/95/EC of the European Parliament and of the Council of 3 December 2001 on general product safety
- Act No. XLVI of 2008 on food chain and its control

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