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GLUTEN SENSITIVE OPINIONS ON THE PRICE OF GLUTEN-FREE PRODUCTS

Case
Study

Keywords

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Abstract

Whatever the type of food intolerance and allergy, with the correct adherence to a moderate diet, there are additional costs. It's no secret, because with daily shopping, anyone can find that the price of gluten-free products is higher than that of non-gluten-free foods. For a conscious shopper, this can be 20%, but for a family it can be as much as 30 or 50% if the whole family wants to eat gluten-free. However, it is also worth examining what is the reason for the larger-than-usual price difference, in which case people need to understand the production process and sourcing to get an answer. It is usually made from less commonly grown raw materials, which are more difficult to obtain and more expensive. These plants often require more manual labour, which can result in higher prices. Care must be taken to avoid cross-contamination at the processing plant as well as during transport - this can also lead to additional costs. Not to mention that it should also be prepared separately in restaurants to rule out the possibility of cross-contamination.

INTRODUCTION

Gluten free diet

Gluten sensitivity or autoimmune disease, also known as celiac disease, should be completely avoided, or a definite improvement can be observed in non-celiac gluten sensitivity if patients do not consume gluten. However, many people switch to a free diet for the purpose of losing weight or maintaining weight. This is often done incorrectly, as it can lead to the complete elimination of carbohydrates, which in fact can lead to weight loss in the short term, but can cause many problems in the long run, such as impaired concentration, indigestion and liver dysfunction (Mecsei, 2015).

Cereals containing gluten include Wheat, Barley, Dried Spelled, Rye, Spelled Wheat, Kamut, Triticale, Shape, Spelled Starch, and Oats (unless certified gluten-free). Foods that contain them are not gluten-free either, so flour, pasta, muesli, pastries, biscuits, chocolates and much more should not be consumed by those who are sensitive to this (Gluten-Free Blog, 2020).

WHY ARE GLUTEN-FREE PRODUCTS SO EXPENSIVE?

1. Gluten-free operation

Cross-contamination can be avoided by continuous cleaning - however, this is very expensive and time consuming and unfortunately by no means 100% safe. This can be a solution if you make alternately gluten-free and non-gluten-free products, but there are machines that cannot be cleaned at all. The hostel flour cannot be prevented by continuous cleaning. This can only be avoided by completely separating production lines using gluten-free and non-gluten-free raw materials, which can also double costs. If only gluten-free products are produced, no cross-contamination is guaranteed. There is also a separate mill at the Hajdú gabona Zrt. where only rice flour is ground (National Chamber of Agricultural Economy, 2017).

2. Smaller market

The number of diagnosed patients is growing every year, but even so, the admission market is small, with the majority being those who prefer to buy wheat flour.

3. Ingredients

In the case of wheat flour, no special raw materials are required, in contrast to a gluten-free flour mixture, as each such mixture can contain up to 10; or more than 10 ingredients. They are neither easy nor cheap to obtain, transport and process. The various packaging materials used during

transportation are also much more expensive (Prokisch and Prokisch, 2018).

4. Underlying work

Months of experimentation precede the manufacturing process, during which the proportions of the right ingredients are put together and the perfect taste and texture is created. By the time the particular flour mixture is ready, a product will be handed over to the customers that will give them a sure sense of success – mentioned Zoltán Lakatos.

5. Pricing

Of course, these products are nowhere much cheaper, but are particularly expensive in reform stores. This is possible because the reform shop also wants to sustain itself, so it puts its own benefits on it. Among other things, the store must be careful when placing the goods so that the goods are not cross-contaminated, they can only be reached somewhere with an extra shelf, which means an extra amount for the store. If you choose a small margin to easily sell your product, the store will not be profitable.

This can be traced back to the raw materials and the annual harvest. Because in case of poor harvest, the raw material is sold more expensive, so the forced to raise the manufacturer, the wholesaler and thus the retailer as well. Each solution imposes additional costs not only on the company but also on the customer. Let's talk about either isolation or purely gluten-free operation.

MATERIAL AND METHOD

The aim of the research is to assess the proportion and habits of gluten-sensitive people and to find out what they think about the pricing of free products. People can learn what unmet needs they have for the market, what they want more of, what they are missing, or what changes they want to achieve. The cornerstone of the primary research was an in-depth interview with Zoltán Lakatos, a member of the Board of Directors of Hajdú Gabona Zrt., in which people can gain an insight into the everyday life of such a large company. He introduced his opinion on gluten-sensitive products, free products, and came up with price-related problems and concerns. In addition, the primary quantitative online standard interview method was used, as it also facilitates outreach to stakeholders. Completing the questionnaires online is more appropriate due to the danger posed by the coronavirus. The survey of members of the groups on the community portal was more effective because it was important to include as many gluten-sensitive people who did not have food intolerance as possible during the sampling. This gives a more complete picture of how aware they

are of the disease. A questionnaire was used to collect the data. The data collection took place between February 8 and February 10, 2021, during this period the questionnaire was available to anyone, in three days the online questionnaire was filled in by five hundred people. Issues included demography, food intolerance, restaurant consumption and free and wholemeal foods. The respondents were 9.4% male and 90.6% female. The results obtained during the data collection are not considered representative. The questionnaires were compiled with the help of Google Form, and the obtained data were also recorded in Excel spreadsheet format.

The hypotheses of the primary research are the following:

H1: Consumers are mostly decided on the basis of external factors (such as packaging, brand name, price) when choosing products.

H2: Gluten-sensitive people surveyed in the questionnaire consider maintaining a gluten-free diet costly.

RESULTS

The first question in the questionnaire focused on how many of the respondents suffer from food intolerance. *Figure 1* shows that slightly more than half of the respondents - 50.8% - were gluten-sensitive, and 48% of those without intolerance filled in the questionnaire, i.e. 246 people, the former answers being based on self-declaration.

The next question was about the aspects play a role in making a decision when making a purchase. Nine categories were selected from the product features: price, packaging, taste, texture, brand name, advice from others, variety, storability, packaging, which were asked to score using a 5-point Likert scale. People who completed the questionnaire had the opportunity to answer from the non-important to the very important option.

When choosing foods, the responders decide based on their senses, so that external characteristics (packaging, brand name, price) influence them when buying products (Doyle, 2000). In this question, surprising results emerged in connection with the first hypothesis, which is also illustrated in *Figure 2*. Consumers are heavily influenced by the price of a product in the case of consumer goods, as this is usually seen first, so they decide whether to fit the cost. More than half of the 276 respondents consider the price to be a serious influencing factor. After that, the taste experience and texture received an outstanding number of votes in the "very important" category, the former being answered by 364 and the latter by 262. It is essential as someone who needs to live on such a diet can get a lot of relief. It can be seen from the diagram that the

storability also affects the customers. It does not matter whether the consumer can consume the given good for a month or only for a day. 258 people answered that the warranty period is very important to them. The variety of products is also significant, 191 people consider it very important to have a wide selection. The packaging of the products is considered by the majority of respondents to be "relatively important" from an economic point of view. The result can be related to the price, as it may be better to choose a larger package in general. Packaging was the next factor moderately considered important by fillers. In terms of shopping, the brand name and the advice of others are considered a moderately important factor. In this special market, the quality of the products is essential, and thus a positive experience, because if someone is disappointed, they will give a bad impression of the product, which will sooner or later reach the majority with negative information, which will adversely affect the distributor and manufacturer. Based on the above, it can be said that our first hypothesis can be refuted, as external factors such as packaging and brand name have a smaller impact on the purchase, so we reject it.

In the following, the financial implications of buying were examined, so the next question was about what they think about the price of free food compared to traditional food. Store prices had to be rated on a scale of 1 to 5, where a value of 1 meant that it was cheap, while a value of 5 meant that the products were considered expensive.

The majority of respondents, as *Figure 3* shows, unanimously believe that prices are too high, sometimes unaffordable. This answer was marked by 350 respondents. 127 people (25.4%) marked the value four. The average value was answered by 22, while one person chose option 2, but this can be said to be a negligible amount compared to the former. The graph shows excellently that consumers who find stores 'gluten-free products expensive are far more likely than those who find them cheap. "They are much more expensive (the costs of storage, separation, quality assurance, proper quality management, documentation), and because of this, the manufacturer has significant additional costs that can only be recovered by the consumer." - stated Zoltán Lakatos, a member of the Board of Directors of Hajdú Gabona Zrt. This suggests that it is not only gluten-sensitive products that consider gluten-free products to be more expensive than average. Professionals are also aware of the financial burden of maintaining a diet. The answers fully confirm our Hypothesis H2.

Research has also covered the study of prices (*Figure 4*), so the following question is important: How much more expensive are gluten-free products?

Surprisingly, mixed answers were received to the question, with 115 thinking that the products were 40% more expensive than an average food. 108 people said they were 30% more expensive and then 20.4% thought these specialty goods would cost 60% more. There were also 18.4% who thought it was 50% and 13% thought it was 20% cheaper than traditional products. The remaining 3.6% opted for the affordable category, meaning that goods were 10% higher.

For gluten-free products, the price can be much higher than several times the price of traditional products. This is when the question arises, why do people actually pay a “gold price”? The answer is shown in *Figure 5*. There is a difference in the ingredients and their production, which partly respond to the high prices. These products are usually made from quality raw materials and require a great deal of attention during their production and storage, and the cultivation of alternative crops is generally more expensive. In the case of such products, consumers are in a highly dependent position and are therefore willing to pay a higher price than justified in the long run, and are therefore less price-sensitive.

The manufacturer pays great attention to the elimination of gluten contamination of the ingredients. A plant producing gluten-free products must meet certain requirements. In order to prevent cross-contamination, the manufacturer must operate an appropriate food safety system to ensure that the raw materials are gluten-free. Gluten-free food production can only be carried out under regulated conditions under operating conditions, in accordance with GMP and HACCP regulations. While the HACCP (Hazard Analysis and Critical Control Point) system ensures the prevention of gluten contamination at various stages of production, GMP (Good Manufacturing Practice) defines the general requirements of food production or even an industry. The production of gluten-free products is usually carried out spatially, and the risk of gluten contamination can be eliminated by a cleaning protocol, the development and implementation of an appropriate sampling and testing plan, and the training of staff and the cleanliness of workwear (Holló-Szabó, 2006). In addition, the mode of transport is an important factor, as the packaging of the raw materials entering the plant must be clean, undamaged, completely free of indicated allergens and within the warranty period, for which the carrier provides a written guarantee based on the supplier's contract.

Discounts and subsidies available for diagnosed gluten-sensitive people

For celiac people, their treatment is a lifelong gluten-free diet, which can be financially stressful for many. Often, patients are not even aware of the options that would make their lives easier. They

can take advantage of many subsidies and discounts. However, in order to receive these benefits and subsidies provided by law, someone must have a diagnosis in accordance with the applicable guidelines. The disability is certified by a specialist. In the event of a final confirmation, the persons concerned are entitled to discounts valid each year on the basis of a certificate to that effect.

In the specialty stores, members of the National Association of Flour Sensitive Representatives can enjoy various discounts with a registered membership card.

According to a certificate issued by a specialist, after a child with celiac disease, the child and / or parents are entitled to the following benefits:

- public health care as a subject;
- increased family allowance / education allowance;
- travel discount;
- free textbook supply;
- a 50% discount on reimbursement in the case of child meals;
- childcare allowance for a child up to the age of 10;
- care fee, if the child is unable to take care of himself / herself, he / she needs constant care and supervision (Zelenák, 2020).

The state supports celiac adults with an income with a tax credit, thanks to which the tax payable can be reduced by HUF 8,450 this year (Glutenezekeny, 2021). However, does this amount cover the extra costs of a special diet?

CONCLUSIONS

The questionnaire surveyed the opinions of both gluten-sensitive and non-gluten-free people. The issue of price and problems of taste and choice came to the fore. Given the results, it is conceivable that in a family with a higher number of gluten-sensitive people, it is a financial burden in addition to the average earnings in Hungary, as dieters have no choice to follow this diet. Even if we want to buy cheaper gluten-free products, we still spend 40-60 percent more. And in some product categories, these products can be 70 to 80 percent more expensive. A more basic product like the price of a loaf of bread compared to the average price of white bread can mean eight to ten times or even more spending. Not to mention products that would be difficult to compare: without claiming to be exhaustive, thinking here of pricing gluten-free baked goods, muesli, sweets, meat products (Pénzcentrum, 2019). In general, it also seems that a free diet is much more expensive. In Western countries, free products are already available in a much wider selection and at more moderate prices than in Hungary. The answers received during the

in-depth interview revealed that the production and distribution of gluten-free products also entails high costs for manufacturers, as they have to meet conditions that are incompatible with traditional products. During the in-depth interview with Zoltán Lakatos, he drew attention to the fact that due to the smaller size of the recording market, it would be worth thinking at the international level, as the affected domestic consumers have little turnover and thus the payback period is very long. Perhaps the state could play a greater role in supporting both producers and those suffering from the disease. After all, this way of life involves many difficulties, and with even more financial outlay, as well as companies that sell specialty products, it is more challenging to produce the right products. Extending the scope of tender opportunities and financial support provided by the state, if not an immediate solution, would provide great relief for both parties.

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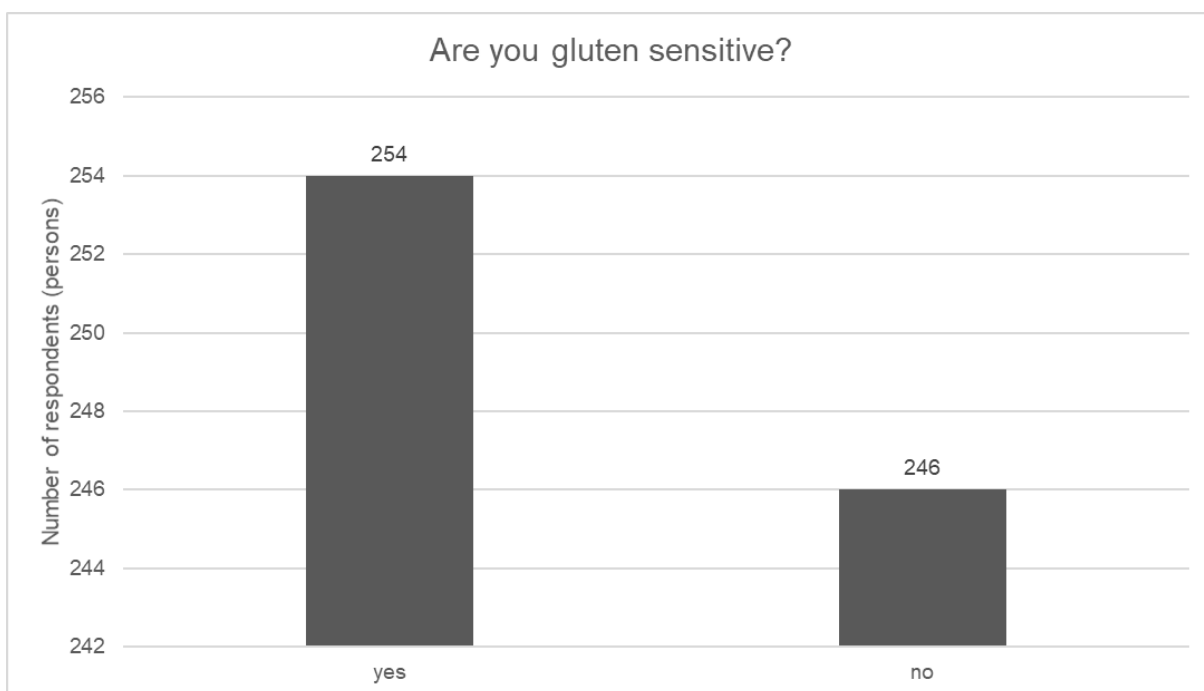


Figure 1
Proportion of gluten sensitive
Source: own editing based on the results of a questionnaire survey.

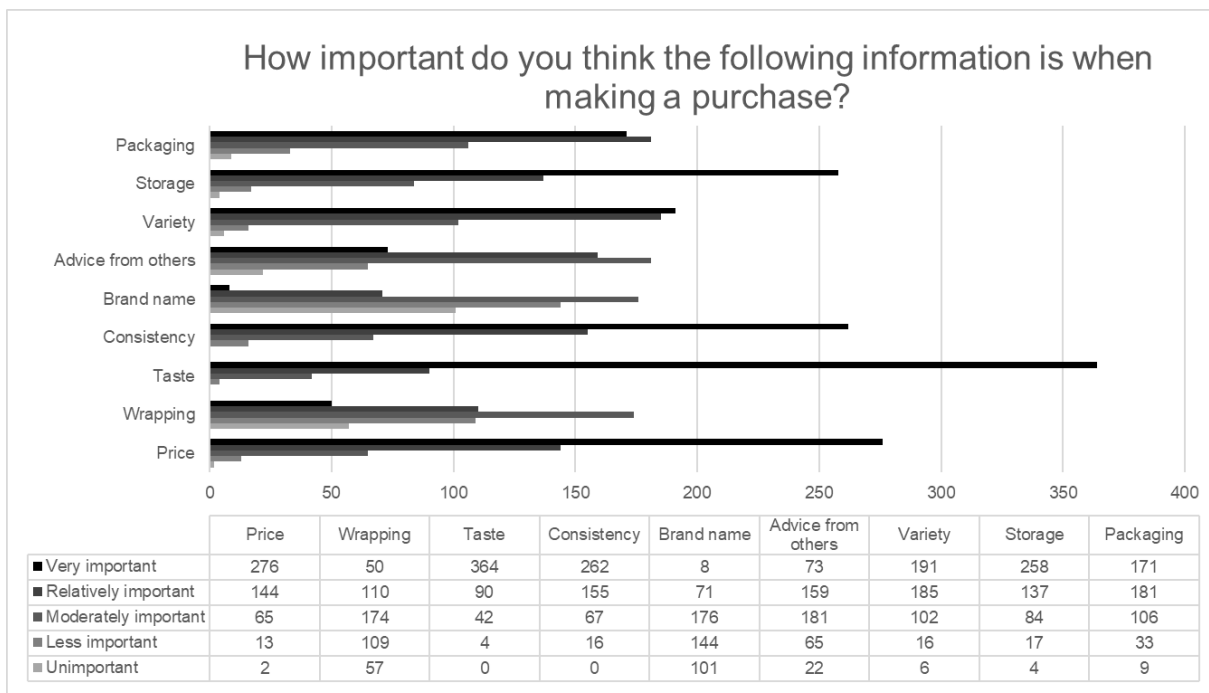


Figure 2
Purchasing priorities
Source: own editing based on the results of a questionnaire survey.

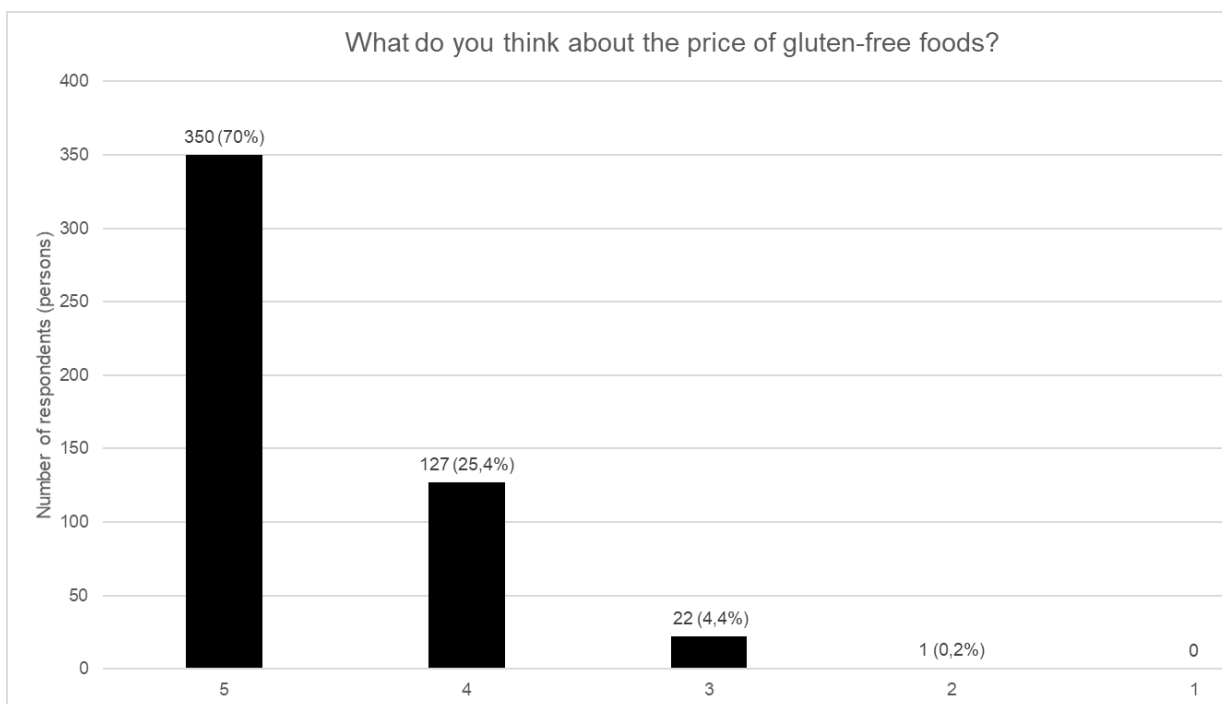


Figure 3
Opinions on product prices
Source: own editing based on the results of a questionnaire survey.

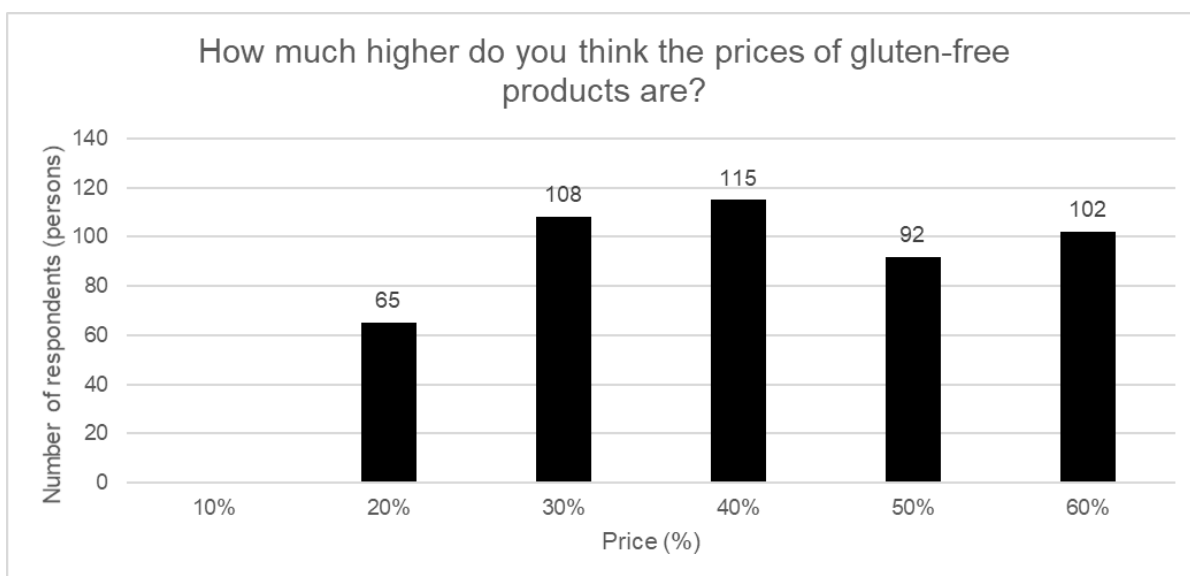


Figure 4
How much higher is the price of gluten-free products?
Source: own editing based on the results of a questionnaire survey.

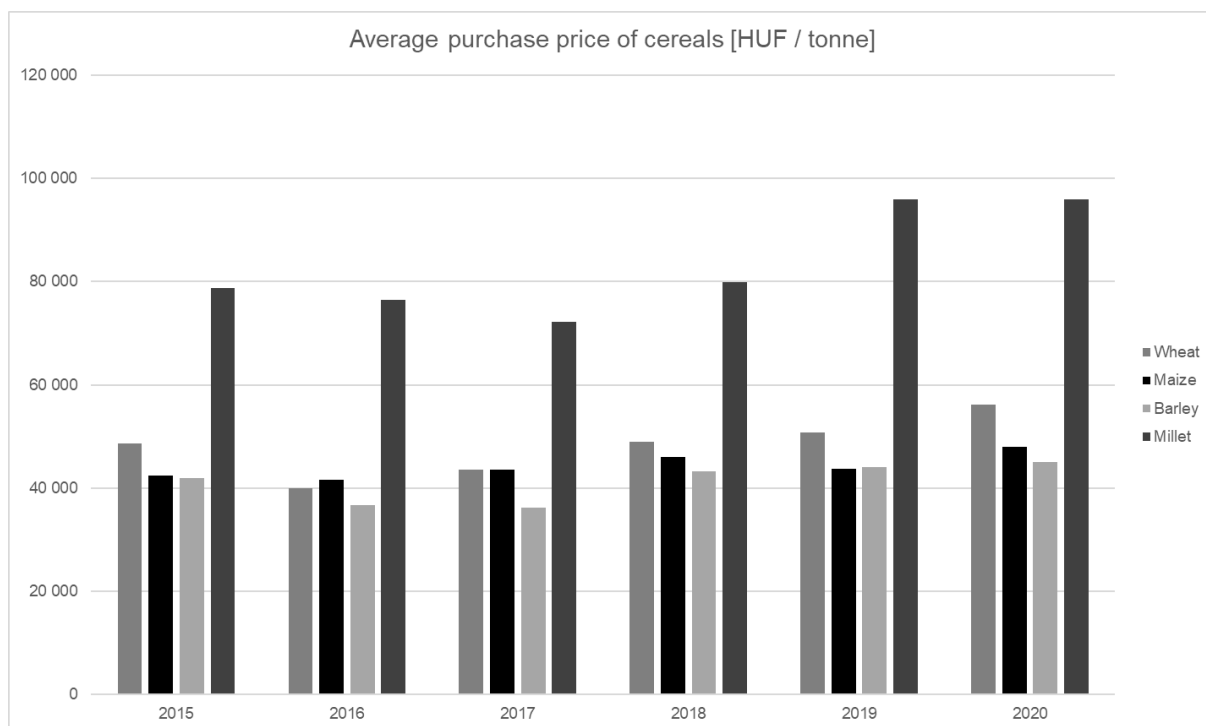


Figure 5
Cereal prices

Source: Own production based on KSH data.