

THE UTILIZATION OF POTATO IN PUBLIC CATERING - THE ROLE OF QUALITY ASPECTS

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ABSTRACT

Our study was carried out in the framework of the 'Development of potato growing technologies and trademarks' Hungarian national project. The aim of the project is to improve the national and international competitiveness of the Hungarian potato sector.

Nowadays, catering sector has growing share in food supply, and potato is a widely popular foodstuff in Hungary in everyday meal. Our aim is to examine, which factors (economic, attitude, knowledge etc.) help, or obstruct prevailing quality viewpoints in potato utilization in public catering sector.

A standardized questionnaire was used for the examination. The questionnaires were filled out on the 'Forum of public catering managers' in the autumn 2010. 118 questionnaires were collected; most of the catering kitchens in the sample were operated by local governments, catering more than 100 people.

The questionnaire includes the following topics: questions regarding the potato suppliers; questions regarding the potato utilization; the popularity of the potato and the trends in public catering; the willingness to use potato labelled with quality certification mark; questions regarding the workplace of the respondent; socio-demographic questions regarding the respondent.

Before our research, public procurement was obligatory in public catering, which has been cancelled. This new situation provides opportunity for public catering to choose new suppliers. At the present time the suppliers of public catering are mostly wholesale dealers and large scale growers. 46% of the respondents answered, that they would choose other supplier, for favourable price and quality, but only 56% of the catering managers can influence the decisions regarding the selection of the suppliers. According to the respondents there was no change in quantity and quality of the potato used in public catering, potato is as popular foodstuff nowadays, as before. From the point of our research it is favourable, that catering managers consider differentiating potato types (boiling type, baking type, salad potato) as an important matter, however, this is totally missing in the practice. The reasons of the wrong practice are: the lack of knowledge regarding the potato varieties; the lack of the suppliers' differentiated supplies; the limited resources for the purchase. Public catering sector is open for the utilization of a high quality Hungarian potato variety, but due to the obstructing factors, fast improvement cannot be foreseen in this matter.

1. INTRODUCTION

Potato is one of the most important foodstuff all over the world. It can be prepared variously, it is easily digestible, contains valuable proteins and fiber, and it has high nutrition value.

According to estimations, the number of potato varieties is around 3000 variety in the world. In Hungary the number of certified potato varieties is 44 at present time, and only 11 of them are Hungarian (Balatoni rózsa, Hópehely, Démon, Katica etc.) varieties, the rest are mostly Holland ones: Desirée, Kondor, Cleopátra. (Izsáki, 2004) The average yield of potato in Western-Europe is 40t/ha steadily, while this number in Hungary is only around 25t/ha. (Ábrahám, 2009) Potato consumption in the world is 218 million tons. In Hungary the potato consumption per capita has continuously decreased since 1934. A small increasing was seen in the '90s and nowadays it is stagnant on 60-65kg per capita per year. (Ábrahám, 2009) The reason of the decreasing potato consumption is the transformation of the income relations. As the consumers' disposable income is increased, the structure of the consumption is transformed: rather the quality, than the quantity of the foodstuffs comes into the foreground

and other kind of vegetables (ex. rice) appear increasingly in the meal. (Földi, 2007) The most important viewpoint in case of purchasing fruits and vegetables for the Hungarian consumers is the suitable price value-ratio. Potato consumption is 36% of the whole vegetable consumption, thus potato is the most frequent purchased vegetable in Hungary (Gfk, 2011). But unfortunately, there is a lot of imported potato in the Hungarian market, and there is a wrong practise, that Hungarian consumers dislike potato with yellow shell, and consumers don't know the differences between the potato types.

Our study was carried out in the framework of the 'Development of potato growing technologies and trademarks' Hungarian national project. The aim of the project is to improve the national and international competitiveness of the Hungarian potato sector. Two trademarks will be developed in the framework of the project: 'Keszthely seed-potato' and 'Delicious culinary potato'.

Three actors of food chain were examined: potato growers; the catering sector (public catering); and the consumers.

The present study examines the situation in the catering sector: which factors (economic, attitude, knowledge etc.) help, or obstruct prevailing quality viewpoints in potato utilization. Before our research, public procurement was obligatory in public catering, which has been cancelled. This new situation provides opportunity for public catering to choose new suppliers.

2. METHOD

A standardized questionnaire was used for the examination. The questionnaires were filled out on the 'Forum of public catering managers' in Budapest and in Szeged, in the autumn 2010 by catering managers. The questionnaire includes the following topics: questions regarding the potato suppliers; questions regarding the potato utilization; the popularity of the potato and the trends in public catering; the willingness to use potato labelled with quality certification mark; questions regarding the workplace of the respondent; socio-demographic questions regarding the respondent.

3. RESULTS AND DISCUSSION

3.1. Characterization of the sample

118 questionnaires were collected; most of the catering kitchens in the sample were operated by local governments and catering more than 100 people.

3.2. Questions regarding the practice of potato usage

On the 1st of August in 2011, a directive was designed for the public catering sector, about the proposed quantity of different foodstuffs and nutrition value. According to this guideline, in case of 10 catering days maximum 5 times (in case of one meal per day) it is proposed to use potato for dish.

According to the answers of catering managers, catering kitchens use potato a bit more frequently, than the proposal: In case of five catering days (N=91), 52 kitchens use potato 2-3 times, and 28 kitchens 3-4 times in a week for meal. In case of seven catering days (N=35) 25 kitchens cook potato 3-4 times in a week.

Table 1. Characterization of the sample

Institute of the public kitchen	Frequency	Operator	Frequency
Primary school	74 (62.7%)	Local government	82 (72.6%)
Nursery	70 (59.3%)	Large scale entrepreneur	12 (10.6%)
Workplace catering	63 (53.4%)	Small scale entrepreneur	11 (9.7%)
Old age home	49 (41.5%)	Network operator	6 (5.3%)
Secondary school	29 (24.6%)	Church	2 (1.8%)
Play-school	22 (18.6%)	Catering number	Frequency
Hospital	5 (4.2%)	50-100 capita	6 (5.1%)
Prison	2 (1.7%)	101-200 capita	20 (17.1%)
University, College	1 (0.8%)	201-500 capita	37 (31.6%)
Police	1 (0.8%)	501-1000 capita	31 (26.5%)
other	5 (4.2%)	>1000 capita	23 (19.7%)

3.3. Questions regarding the potato suppliers

Most of the catering kitchens (56%) have only one supplier and 21-23% use two, or more suppliers. At the present time the suppliers of public catering are mostly wholesale dealers (76,3%) and large scale growers (47,5%). 60% of the catering kitchens purchase potato weekly, and 17% purchase more than once in a week. The rest purchases potato monthly (20%) or rarely. This purchasing practise (smaller quantity more frequently) is favourable from the viewpoint of small scale growers. 46% of the respondents answered, that they would choose other supplier for favourable price and quality, but only 56% of the catering managers can influence the decisions regarding the selection of the suppliers. The most important criteria in case of choosing supplier are: the good quality, the flexibility, the price, the delivery timing and the reliability.

66% of the respondents mentioned, that they have had any problem with their potato supplier. The reason of the complaint were quality problems, mostly: health condition of the potato (35,6%) , problems with any quality attributes (29,7%) or mechanical injury (24,6%).

In 2009 39% of the catering kitchens purchased the potato at 60-80Ft/kg (0.2-0.27 Euro/kg) price level and 24.3% bought it more expensively, than 80Ft/kg (>0.27 Euro/kg). 28.7% of the kitchens purchased the potato at lower price level, than 60 Ft/kg (<0.2 Euro/kg). The more frequently the kitchen purchase potato, the higher price they pay for it, and those, who buy it at a lower price, more frequently give potato dish for the customers.

The next figure shows the catering managers' average satisfaction with the quality of the used potato in 2009.

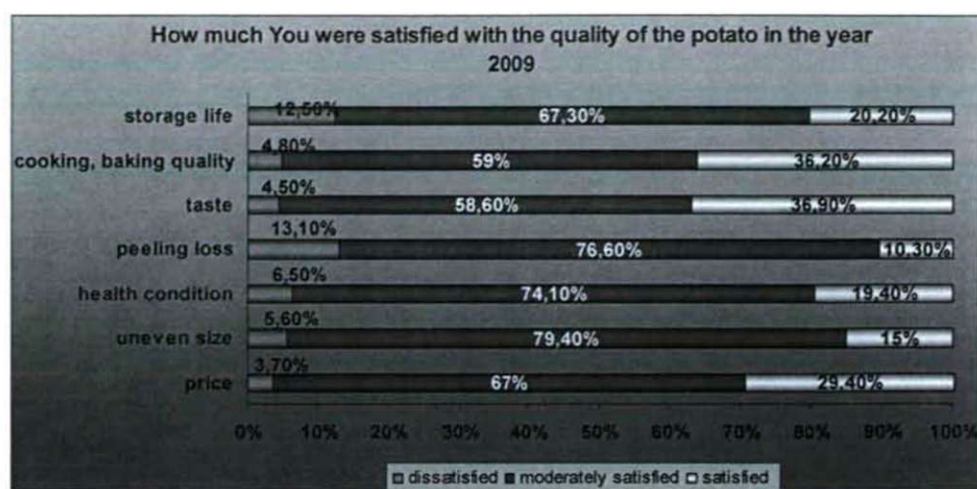


Figure 1. The average satisfaction with the used potato in the year 2009

As the figure shows, most of catering managers are moderately satisfied with the quality of the potato. But as the following results will show, due to the lack of adequate knowledge, presumably they did not have high expectations regarding the potato quality attributes. Apart from this, it seems favourable, that catering managers accept the price-quality ratio of the used potato.

3.4. Questions regarding the knowledge of potato varieties and types

According to the answers to the questions which tested the knowledge on the used potato types, catering managers do not have adequate knowledge.

Only 34.7% of the respondents answered 'yes' to the question 'Do you know the potato variety what you use in the catering kitchen?'. Most of them answered, that the used types of potato are 'Desiree', 'Kondor' and 'Rózsa', however there is no 'Rózsa' variety on the market. 46.6% of the respondents answered, that the used potato is a Hungarian variety, but Desiree is correctly a Dutch variety.

41.7% of the catering managers stated, that they used different types of potato in catering, but only 4 person answered, that she knew the so called 'potato ABC', what is the grouping of the potato varieties by the usage type: boiling, cooking and salad potato.

According to the respondents, the main barriers of the potato purchasing by usage types, are the lack of the suppliers' differentiated supplies (53%); the limited financial resources (28.8%); the lack of knowledge about the potato types (27.1%).

3.5. The innovation attitude of the catering managers

The innovation attitude of the catering managers was measured by questions regarding the demand of adequate information on the potato quality and the intention to change the present practice.

Catering managers consider the labelling of potato important, especially the origin of the products. The labelling of potato usage types and potato varieties are considered important, too. (Table. 2)

*Table 2. The importance of product labelling
(5 point Likert scale; 1= I don't agree at all; 5= I'm totally agree)*

Statement	Mean
The origin of the product should have to be labelled on the product.	4.71
The usage type of the potato should always be labelled on the product (cooking, boiling and salad).	4.50
The name of the potato variety should always be labelled on the product.	4.36

As the result shows, catering managers prefer Hungarian products and raw materials, and they consider necessary to use quality mark to differentiate Hungarian high quality potato. As the respondents answered (Table 3), they are opened to use quality mark labelled potato even if it is a bit more expensive, than the potato used before. But, we have to represent this statement carefully, because, as we mentioned before, one of the major barriers of the quality improvement in the public catering sector is the limited financial opportunities.

*Table 3. The willingness to use Hungarian quality mark labelled potato in the public catering sector
(5 point Likert scale; 1= I don't agree at all; 5= I'm totally agree)*

Statement	Mean
If the parameters (quality, price) are the same, I prefer Hungarian products.	4.91
As in case of the popularity of the 'Excellent Hungarian Quality Product' logo, it would be necessary to use quality mark in case of Hungarian potato. This would be an important step toward potato consumption culture improvement.	4.68
I would like to use quality mark labelled potato in the catering kitchen even if somewhat more expensive.	4.37

As Table 4 shows, catering managers are open to improve their knowledge on potato varieties and usage types and other areas of food and agriculture.

*Table 4. The willingness to improve knowledge
(5 point Likert scale; 1= I don't agree at all; 5= I'm totally agree)*

Statement	Mean
Usually I learn something new and try other practises with pleasure because we have to improve.	4.78
It would be a pleasure to take part in programs, aiming at supporting Hungarian agriculture.	4.7
It would be a pleasure to take part in a program, which shows the cooking and baking characteristics of potatoes with different usage types.	4.56
The differences between the potato usage varieties would have to be known by the workers in public catering.	4.03

4. SUMMARY

Catering managers – satisfying customers needs - offer potato dishes for their customers frequently, but their knowledge on the different potato types is not sufficient. However, respondents are open to improve their knowledge, and they would use suppliers, which can offer differentiated potato supply. The present purchasing practise (smaller quantities more frequently) is favourable from the viewpoint of small scale growers.

The most frequent barriers of purchasing potato by usage types are lack of the suppliers' differentiated supplies; the limited financial resources and the lack of knowledge about the potato varieties and types.

The attitude of the catering managers shows the opportunity for change: catering managers welcomed the mark labelled Hungarian potato varieties, and they would favourably improve their knowledge on potato varieties and usage types.

It would be necessary to train catering managers in order to improve their knowledge and form their views on the potato use.

Public catering sector is open for the utilization of a high quality Hungarian potato variety, but due to the obstructing factors, fast improvement cannot be foreseen in this matter.

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