

THE ROLE OF HEALTH-CONSCIOUS DECISIONS IN FOOD CONSUMPTION

AZ EGÉSZSÉGTUDATOS DÖNTÉSEK SZEREPE AZ ÉLELMISZERFOGYASZTÁSBAN

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Key words: food balance, food products, consumption, health consciousness, corporate culture

Abstract

The Ministry of Rural Development in Hungary has set the goal of restoring the competitiveness of the domestic food industry among many others. They would like to contribute to the stable financing by facilitating borrowing loans as well as export financing the enterprises in the food industry. For the period between 2014 and 2020, 500 billion HUF subsidies have been allocated for the technical and technological modernization of businesses, for the increase of input efficiency as well as for research and development and trainings and consultancy. In order to do so it is essential to encourage the demand for Hungarian food products besides insuring workforce with up-to-date expertise and the supportive economic environment.

The research mentions consumption figures based on food balances where the balances calculated for various food groups include food products and beverages converted into ingredients. The development of food consumption is negatively affected by the economic recession, the weather influencing cultivation significantly as well as the fall in consumption from private farming. Enterprises put great emphasis on prevention and on the good physical and mental condition of their colleagues with such organization of work that focuses on health since work can be more efficient by this means. The quality of the work environment influences the health condition both directly and indirectly. In case of micro- and small enterprises cafeteria plans as well as the visible elements of corporate culture are much more revealed thus contributing to more health-conscious food consumption in Zala County. In addition to the agricultural support of the sale of domestic food products, the government could stimulate the manufacturing of healthy products of local small-scale producers indirectly by reducing VAT for instance.

Kulcsszavak: élelmiszermérleg, élelmiszer alapanyagok, fogyasztás, egészségtudatosság, vállalati kultúra

Kivonat

Magyarországon a Vidékfejlesztési Minisztérium többek között a hazai élelmiszeripar versenyképességének helyreállítását tűzte ki célul. A stabil finanszírozáshoz a hitelfelvétel könnyítésével, valamint élelmiszeripari vállalkozások exportfinanszírozásával szeretnének hozzájárulni 2014-2020 között a fenti időszakra 500 milliárd Ft-os támogatást különítettek el a vállalkozások műszaki, technológiai korszerűsítésre, inputhatékonyság növelésre, kutatás-fejlesztésre valamint képzésre és szaktanácsadásra. Ehhez azonban nélkülözhetetlen a korszerű szaktudással rendelkező munkaerő biztosítása mellett, a magyar élelmiszer keresettségének az elősegítése, és a támogató gazdasági környezet. Jelen vizsgálat többek között az élelmiszermérlegek alapján számított fogyasztási adatokra tér ki, ahol ezen csoportokra kalkulált mérlegek az élelmiszer-készítményeket alapanyagokra átszámítva tartalmazzák. A fogyasztás alakulását negatívan befolyásolja a gazdasági recesszió, a növénytermesztést jelentősen befolyásoló időjárás, valamint a saját termelésből való fogyasztás visszaesése is. Egészségközpontú munkaszervezéssel nagy hangsúlyt fektetnek ma már a vállalatok is a megelőzésre, a munkatársak jó fizikai és mentális egészségi állapotának megőrzésére, mivel ezáltal hatékonyabbá válhat a munkavégzés. A mikro - illetve kisvállalkozások esetén az étkezési hozzájárulások valamint a vállalati kultúra látható elemei is jobban megmutatkoznak elősegítve ezzel az egészségtudatosabb élelmiszerfogyasztást Zala megyében. A kormány a hazai élelmiszer értékesítés agrártámogatásai mellett például ÁFA csökkentéssel közvetetten a helyi kistermelők egészséges termék előállítását tudná ösztönözni.

INTRODUCTION

Hungary has excellent conditions (ecological, genetic, human etc.) for cultivation and food production. In spite of this, the situation of the food industry has deteriorated especially after 2004: domestic sales have dropped by nearly 30 % in the past 10 years; the balance sheet earnings of the sector have been typically negative in the last few years. The Hungarian government wishes to promote the rehabilitation of the food industry and to improve its competitiveness.

On the consumer side of the food market there have been significant changes: it has become more and more obvious from the end of the 1980s that consumption has a status-reinforcing and demonstrative characteristic; it “constructs identity” (*Hetesi, 2004*). As a result of this process, the analysis of the role of values and scales of values that form purchasing has come to the foreground of researches that study food consumption behaviour. For the contemporary consumer food is not only a means to satisfy physiological needs but it also serves as a source of experiencing and a means to achieve values deemed important. The lifestyle and scale of values of an individual is reflected in his eating habits; therefore, food consumption behaviour can be interpreted as the external projection of one’s value system since it is determined by value trends in the long run. Time wins greater recognition, the importance of health increases and hedonistic aspects gain more ground – all these factors can be observed in various fields of our dietary culture (*Fodor, 2009*).

In the past few decades several researches have cast light upon the fact that consumers take advantage of eating out and home delivery more and more frequently. Besides the increasing workload, spending quality leisure time has become more and more important and in order to do so, consumers focus on more convenient and more enjoyable forms of shopping.

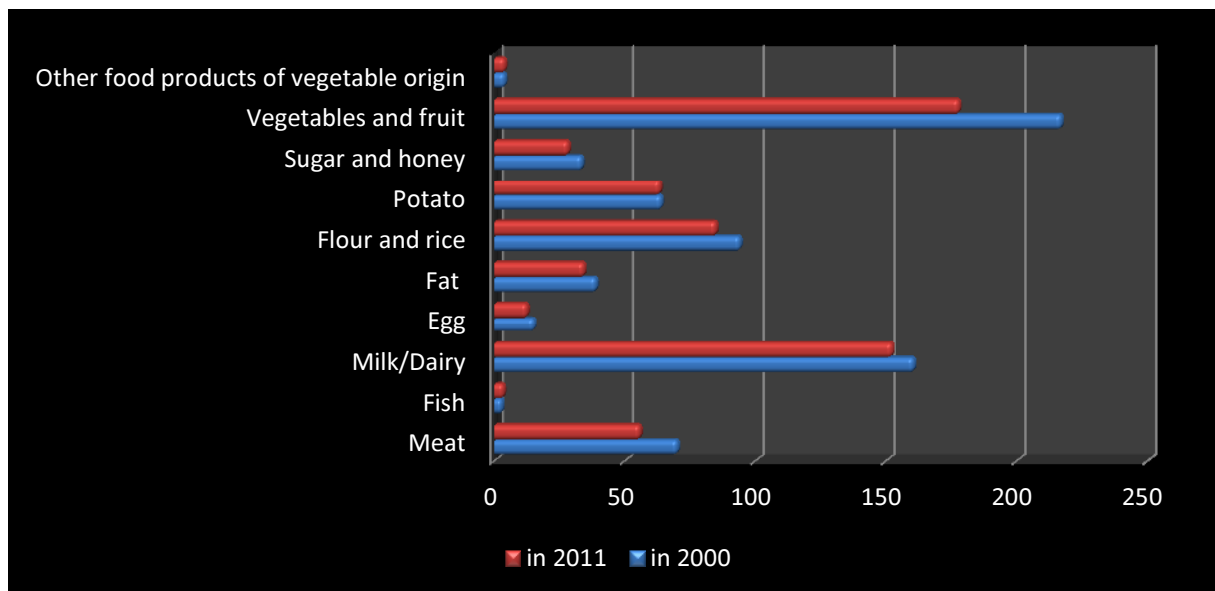
The desire to spend more quality leisure time allows less time to prepare meals and to cook, therefore, the demand for easy-to-prepare, but still healthy and practicable meals. The change in lifestyle results in developing new eating habits (*Szabó 1998; Gaál 1998; Orbánné 2006; Fodor, 2009*).

The total food consumption per capita in Hungary calculated from food balances was 618 kg in 2011, which means approximately 2 kg food on average very day if we take the whole population into account. Food products of animal origin (meat, fish, milk, egg) still take up about 40% of total food consumption. Meat consumption per capita fell by 14.4 kg

between 2000 and 2011 among the Hungarian population (see Fig. 1). In case of fish consumption there is no remarkable change; it dropped from 3.6 kg to 3.00 kg. Among the fishes consumed, 1.5 kg was carp, which is the most popular fresh-water fish in the country mainly due to the fish-soup made out of it that is considered hungarikum. The most significant feature of domestic fish consumption is that Hungarians consider fish a festive meal; therefore, 40 % of sales occur at Christmas.

The research carried out by the University of Debrecen (*Szűcs-Tikász*) in 2008 proves the commonly known fact that a part of Hungarians hate fish-bone (32%), while the other part (32%) regard fish as having an unpleasant smell, which is rather a cultural concern. The success of the North-African catfish, which is free from fish-bones though its quality is insignificant from gastronomical point of view, proves the sensitivity of domestic consumers to fish-bones. The silver carp is significantly underrated in most cases considering its potentials. Elderly people eat fish rather for its taste, driven by traditions and customs; whereas the younger generation chooses it since they strive for a healthy lifestyle. The more developed a region is (the higher the tax paid by the inhabitants is, therefore, the higher their salary is), the less likelihood there is for death caused by tumorous, cardiovascular and digestive illnesses (Molnár – Molnárné Barna, 2012), which can be connected to healthy nourishment.

Figure 1 The tendency of food consumption per capita in Hungary (kg)



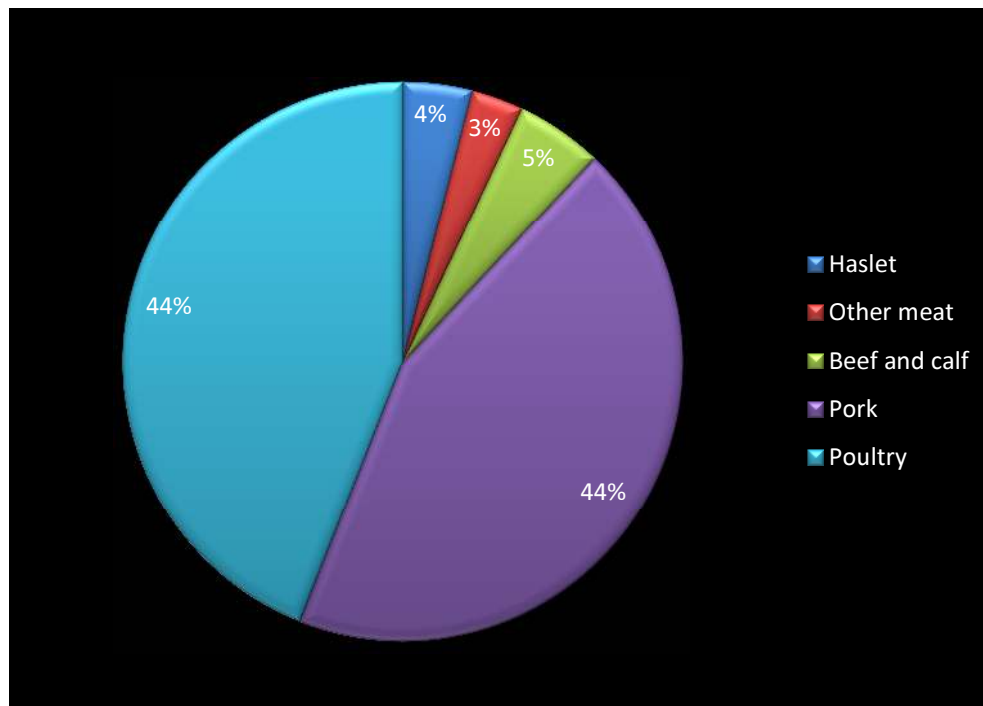
Source: Own diagram based on HCSO figures (*Statistical mirror*, 2013)

From the aspect of nutrition and health, the food consumption of 2011 was rather diverse compared to the figures from a decade before since the decline of sugar (by 5.2 kg)

continued; on the other hand, the consumption of alcoholic drinks rose while that of milk and dair products dropped (by 8.3 kg) and in total less was consumed of vegetables and fruit (by 39.2 kg). The fall in egg consumption that had been going on for 6 consecutive years did not stop in the given year, either; consumption per person was 12.6 kg (about 217 pcs). In spite of the fall, our egg consumption is still slightly higher than the EU average (12 kg/person). Vegetable – and fruit consumption per person came to 178 kg in 2011, which makes up 30 % of food consumption. In the past few years consumption had been fluctuating as a function of cultivation and - as a result of unfavourable weather conditions – this tendency continued in 2011.

The amount of pork consumed per capita was 25 kg in 2011, which is 0.5 kg less than it was in 2010. Poultry consumption (24 kg) remained virtually unchanged compared to 2010 (Fig. 2).

Figure 2 Distribution of meat consumption in Hungary in 2011



Source: Own diagram based on HCSO figures (*Statistical mirror, 2013*)

The consumption of pork dropped by 2 kg compared to the middle of the millennium while that of poultry fell by 5 kg. The VAT of living and side of pork fell from 27% to 5% from 1 January 2014. The government expects the measures to whiten the sector, to protect workplaces and to improve competitiveness. By reason of the pork strategy, the goal is to set up and rear a pig population of 6 million until 2020 – in conformity with the principles

laid down in the National Rural strategy and with the National Growth Plan. The strategy helps to establish 20,000 new workplaces, to look for export markets and to produce healthy, domestic food besides doubling the pork population. Despite the fall in consumption in Hungary in the last few years the consumption of pork and poultry is considered ordinary in the European Union. Consumption of poultry per capita in Luxemburg is 10 kg less than in our country, whereas it is more with the same amount in Portugal. In Denmark pork consumption is twice as much as in Hungary; on the other hand, in Greece only one third of the Hungarian quantity is consumed.

Due to the accession to the EU, the goal can only be to sell top quality beef-cattle that meet the requirements of healthy nutrition completely. We do not stand a chance with producing cheap meat in large quantities against the world's great cattle regions (Argentina, Brazil, Canada, the USA). We can only be competitive in the market with top quality, prime products to be able to make a profit for the actors in the sector. Despite the fact that Hungary has age-old traditions in beef production by virtue of its ecological conditions, beef consumption has never been significant. Traditional Hungarian cuisine prefers pork and poultry. This specific structure has social roots to some extent since the consumption for their own use of smallholders running a farm depended on mainly consuming poultry kept around the house and on the annual pig slaughtering. Our beef consumption at present is 2.8 kg/person/year, which is deemed rather low both on European and on world scale. The average consumption of the EU 25 is 18-20 kg/person/year. Another sad fact is that our country is the last one among those states that accessed the EU in 2004. (*Blaskó et al., 2011*).

The Hungarian Chamber of Agriculture and FruitVeB – the Vegetable and Fruit Product Board support the reduction of the VAT of essential food products to 5 %. In addition to the meat sector, it is the vegetable-fruit sector where the proportion of black economy is the highest, 40 % on average. In the vegetable-fruit sector it means about 55-60 billion HUF VAT deficit in the budget according to the most moderate estimates. On the whole, it is more than the VAT deficit of the meat - , poultry - and the dairy sectors altogether. The plans of the vegetable-fruit sector to develop and to extend employment can hardly be realised beside the current 27 % VAT. Therefore, in addition to the planned VAT reduction of meat products, the VAT reduction of vegetable and fruit produces to 5 % has high priority. That would mean applying the same VAT level in Hungary as our competitors. Since in competitor countries the VAT of vegetables and fruit produces is among 3-7 %, which means such a significant difference that is explains the difference in price in itself.

Furthermore, several professional and business policy factors could be mentioned as the Hungarian consumer has no possession of such information. Last year following the Escherichia coli-scandal great supply was brought about in the European market; nobody was able to trade for reasonable price and the countries of solid capital held down their prices to an absolute minimum as part of their marketing strategy. Since the goods have a free flow in the European single market, vegetables and fruit arrive in our country on a depressed price and the domestic farmers cannot compete with that. The applied technology and the yield also have a significant influence on the price. Dutch and Spanish farmers can produce their goods with a much higher level technology. In this respect Hungary is positioned in the middle regarding both vegetable and fruit growing. Yield implicitly influences prices. Surveys prove that Hungarian consumer has preferred domestic vegetables and fruit for a while now. However, unfortunately not the local farmers are those who can benefit from this favourable tendency, but the commercial chains which enforce a very high margin. Quite often they offer their products 2-3 times higher than the producers' price. There is a remarkable gap between producers' and consumers' prices, which is dependant on the trading business policy and it obviously cannot be influenced.

The essential aim is to allow the Hungarian farmers to cultivate with more up-to-date technology, to be able to reach higher yield; whereas considering the commercial side the biggest emphasis should be on agricultural organizations to offer their goods in greater volume to retail traders and to be able to place them in a better position than collective bargaining. However, agricultural organizations need to go a long way to have their successful business activities realised (*Mártonffy, 2013*).

METHODOLOGY

Our goal was to cast light on health consciousness and consumer culture in Zala County through an analysis of the supply and demand side. The reference population of the quantitative survey of the demand side was based on the population data published by Zala County on 1st January, 2012. Out of this, the sample population was 500 people: 47% men and 53% women. Based on gender and age, the survey was representative. To select the sample population, we have used the method of random sampling (*Babbie, 2001*).

The analysis of the supply side involved 198 institutions, and through the analysis of corporate culture it sheds light on the fact that health is just as important as the economic goals of the company, which can greatly contribute to the health improvement of the

employees. Payments related to salary offered by the employers can clearly contribute to the more health-conscious food consumption.

59% of the companies included in the survey are micro-companies (1-9 employees). 23% of them are small companies, employing 10-49 people, and 11 % of them are medium-sized companies. The big companies – employing more than 250 people – represented themselves with 7% in our survey. For our empirical research the reference population was based on data provided by the Central Statistical Office. The location of sample was Zala County. For our survey we have chosen the systematic sampling method. The reference population was representative based on size categories, and by their classification: state or private sector. The survey was conducted in spring, 2013. To check correlations we have used the SPSS 16.0 programme package to calculate the correlations. The research that founded the publication of Erzsébet Péter PhD was conducted in the framework of TÁMOP-4.2.4.A/ 2-11/1-2012-0001 ‘National Excellence Program’– Development and Operation of the Convergence Program of Inland student and Researcher Support. The project was supported by the European Union, co-financed by the European Social Fund.

RESULTS

The evaluation of empirical study in Zala County

Most of the experts agree that there are two basic types of preventive health measures: individual and communal. The individual measures aim at the direct improvement of the individual's state of health, and to achieve this goal the individual has to change his behaviour, his lifestyle, and the elements of his environment that have an effect on his health. (*Glatz, 2002*).

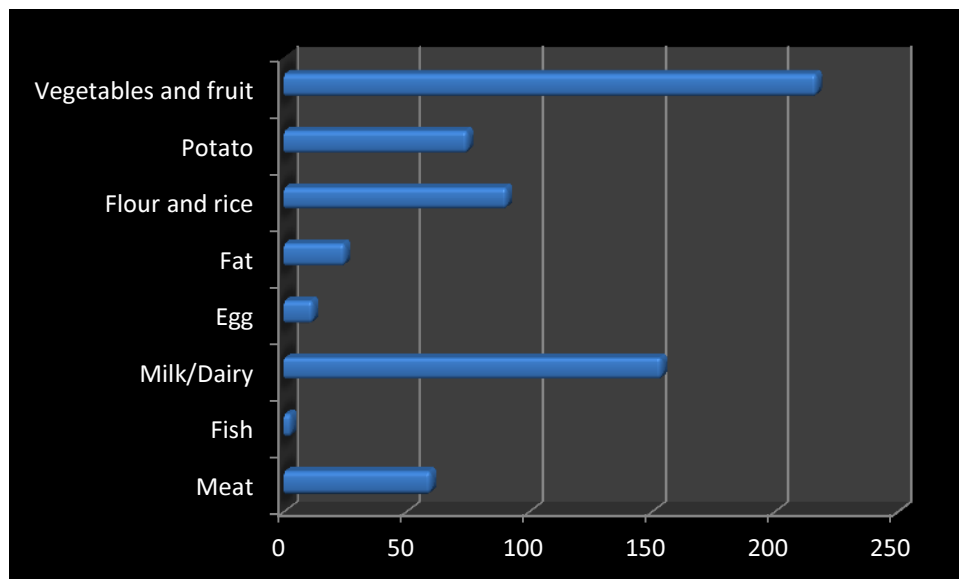
Health relates to the concept of prevention. It includes the concept of primary, secondary and tertiary prevention. The primary prevention measures are intended to avoid harm to health, before it even begins. We can do a lot to support this idea, for example by helping to keep the incomes in our area by buying more fresh produce from local growers. The consumption of organic food and other, functional food categories and brands, is not part of the general lifestyle yet – it only characterizes a narrow layer of the population, approximately ten percent of the surveyed total population. (*Péter et al., 2013*). The consumption of organic products is fashionable but on no accounts widespread. The

openness towards this product category predominantly can be seen among women with high level of education and social status.

At the same time it can be considered progressive that despite the basically low level health-consciousness of the adult Hungarian population, there are certain groups which in the long run and with appropriate education can become real health-conscious consumers (Aszmann, 2010).

As for nutritional health the food consumption in kilograms in Zala County in 2013 was similar to the national average (Fig. 3.). Meat consumption per capita is on average 10 kg less than the national average and similarly, the local citizens mostly purchase poultry products.

Figure 3 Food consumption per capita among respondents in Zala County (kg)



Source: Own diagram

Fish consumption is similar to the national figures. Fish caught in Hungarian fishponds – especially in Lake Balaton – is the most popular. The peak period is still at Christmas. The per capita consumption of milk and dairy products is 6 kg less, of eggs is 1.7 kg less in Zala county. Compared to the national average fat consumption is 14 kg less and flour consumption is 3 kg less. However, potato is very popular in the kitchens of Zala – locals consume almost 11 kg more of it than people living in other areas. This can be attributed to the gastronomy of Zala County, among other things. The vegetable and fruit consumption is significant in the county and this could be further enhanced by the successful and popular “schoolfruit”-programme, which was restarted in the 2012/2013 school year. The

goal – as in the previous years – is to provide fresh fruits and 100% fruit juices to the students in the first four grades of elementary schools. The Hungarian Vegetable-Fruit Growers' Sales Organization was established in order to bring together and represent the vegetable and fruit growing Hungarian farmers, family farmers and entrepreneurs. The organization has members in several counties so they can transport fresh vegetables and fruits to the whole country quickly, accurately and in excellent quality.

We have also examined the eating habits of the citizens of Zala County according to their health effects and asked about the most preferred food types. By their own admissions 25.5% of them consume light meals most of the time, but a significant percentage (20.9) like the spicy, Hungarian cuisine also. Food with high carbohydrates content (18.1%) and fatty food (11.4%) is quite popular among consumers. As employers, the enterprises and institutions can indirectly also contribute to the health-conscious food consumption of the population at the first level – the level of visible elements - of the company culture. We have examined this through the 198 institutes involved in the research, out of which 8% operate in the field of agriculture as we provide details about it next.

The significance of cafeteria plans at enterprises in Zala County

Cafeteria plan means optional fringe benefits from which the employee can choose at his own discretion, according to his individual needs. The advantage of the cafeteria system from the company side – besides the opportunity for motivation – is that it can increase employee benefits with more favourable conditions and tax burdens than salaries and in certain cases the system can even be used instead of a pay raise. (*Péter et al., 2013*).

97% of the employers consider the health preservation of employees very important, and for them it is more or less part of the organizational values and ideologies of the company culture. A commonly valued cultural element is the health promotion of employees. When applying the appropriate company policy it is important to examine if health promotion is included in the management system, if they have recognised its important role.

Half of the surveyed enterprises (98 institutes) could not provide such additional benefits last year due to lack of resources. Those, who were able to provide, preferred the Erzsébet-voucher that the employee can use for meals. The empirical study conducted in the spring of 2013 asked about the benefits of 2012. Examining the visible level of company culture we are embedding the certain cafeteria elements into the economic environment of the organization.

From 2013 the Erzsébet-voucher can be used for new purposes. The food-voucher and child-protection-voucher stay in use, and in addition, three new forms will appear: the gift-voucher can be redeemed for a wide selection of products, the school voucher can be used for textbooks, school supplies, and clothes, and the recreational-voucher can be redeemed for entry tickets to sport or cultural events, passes and library registration. At the places accepting these vouchers warm food can still be purchased with the Erzsébet-voucher till the preferential tax burden 35.7%, with a maximum amount of 8.000 Ft which can make this fringe benefit attractive both for the employer and employee. The SZÉP card (35) and the voluntary health-insurance contribution (supplementary or for life style improvement, 28) were mentioned most frequently. According to related rules in case of the above mentioned benefit the rate of contribution increased from 10% to 14% in 2013.

Out of the surveyed companies, 53 mentioned that they try to contribute to the food-consumption inside the institute as a fringe benefit.

According to our hypothesis in case of micro- and small enterprises the food allowances and the visible elements of corporate culture can be better seen, promoting more health-conscious food consumption in Zala County.

Our assumption is supported by the fact that the micro- and small enterprises are the most involved in this case. We have compared the variables according to size categories (micro, small, medium-sized, big companies) with other variables and checked the closeness of relationships between them and the co-movement of them with correlation calculation with the help of SPSS 16.0 programme package. In case of the variables, we have allowed a 5% significance margin of error. In case of size categories and fringe benefits we have found a moderate but opposite relationship (significance: 0,00, Pearson: - 0,317). According to the result, the smaller the company is, the more homely the atmosphere is and the more the employer knows the needs and problems of the employees, so the employer considers it important to provide appropriate fringe benefits, suitable catering, vaccinations, on top of the cafeteria plan. At a small company paying attention to each other has a bigger importance than at a big multinational company where it can be mostly attributed to compliance to regulations.

CONCLUSION, PROPOSALS

The soft loan scheme for working capital in the food industry was launched on 1 January 2014 in Hungary (maturity 6 years with maximum 3-year grace period and with 50% but

maximum 4 percentage point/year interest subsidy), which can facilitate the production of healthy food, what's more, it can stimulate its consumption. Furthermore, EXIM Bank provided a chance to export finance enterprises in the food industry. The sound workforce with up-to-date expertise gains specific emphasis. There is great need to change managerial approach on all levels: through modern marketing and management knowledge, innovative thinking and co-operation techniques (with the help of higher education and other trainings). It is also essential to provide positions equal in rank in the food chain. In addition to working out adequate food supply chain strategies, among many others it refers to the development of horizontal and vertical co-operation: ensuring healthy ingredient supply, homogeneous supply of goods and better bargaining position.

Based on the findings of the research we can conclude that the majority of the Hungarian population only realises the value of health when they sense danger. The consumption of organic food products and other, functional food categories has not become a part of the lifestyle; it is only characteristic of a restricted layer. Due to its ecological conditions and long traditions, the consumption of beef has never been significant in Hungary. The traditional Hungarian cuisine prefers pork and poultry, which can be explained with the good value for money offer and with the historical past (Turkish oppression).

Economic recession, high, 6.6% increase in food prices and the extraordinarily slender fruit harvest still influence food consumption. In addition to the agricultural support of the sale of domestic food products, the government could stimulate the manufacturing of healthy products of local small-scale producers indirectly by reducing VAT for instance. Trade organizations (e.g.: National Chamber of Agriculture, National Food Chain Safety Office etc.) and educational and research institutions (by introducing agricultural produces locally) should not only take part but also fulfil a leading role in these activities. In addition, consumer habits are considerably affected by trends related to nutrition, by marketing and by the extent of VAT on food products.

The prolonged lack of health may cause a loss to the company as absenteeism. Employers, therefore, find corporate health improvement important through providing fringe benefits that encourage prevention.

Ahead of multinational companies and state-owned organizations struggling with lack of funds, micro- and small-size enterprises provide exemplary benefits in the studied region with respect to cafeteria plans and fringe benefits (food allowances, luncheon vouchers). By these means, this form of appreciation is integrated into corporate culture; thus, creating a healthier and consequently more productive workplace in the long run.

According to the results, the smaller an enterprise is, the more the employer is aware of the employees' needs and problems; therefore, providing the adequate fringe benefits is deemed essential. The presence of this at larger multinational companies can generally be attributed to compliance with regulations.

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