

The role of healthy nutrition in young peoples' life

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Abstract. In Hungary, nutrition plays a determining role in the development of the most serious chronic illnesses. Illnesses related/linked to nutrition/nourishment and lifestyle mean a serious problem. In Hungary, half of the total number of mortalities derives from cardiovascular diseases, a quarter of which comes from malignant tumour illnesses.

Besides these, childhood obesity means an increasingly bigger problem since the major part of obese children remain overweight also as an adult. According to some researches, 17.5 million children under 5 years are overweight in the world. There are twice as much obese children in the USA than they were in 1980; the number of obese adolescents has tripled since then.

The primary part of my research consists of a representative survey launched in the Southern Transdanubian Region. Eight hundred primary and secondary school students were involved in the survey in the county seats (Pécs, Kaposvár, Szekszárd) of the region.

Summarizing the results, it can be said that the parents' consciousness affects their child's values positively.

The most common sources of information are the parents, and they also occupy an outstanding place in terms of authenticity. They figure on the second place after the doctors and district nurses.

1 Introduction

In Hungary, diet plays a key role in the development of the most serious diseases among the population. Diet- and lifestyle-related diseases cause an immense problem. In Hungary, coronary heart diseases account for half of all deaths and malignant tumour is responsible for 40% of deaths. As we know, all of these diseases causing death are related to nutrition. According to some researches, in the case of cardiovascular diseases, the effect of improper diet is over 30% while in the case of malignant tumours it is more than 35%. Besides these diseases, diet can also be brought into connection with obesity, diabetes, high blood pressure, osteoporosis, as well as, dental caries, food allergy, and intolerance [1]. As a result of this, every hour, 7 people die of obesity or of other obesity-related diseases in Hungary [2].

Childhood obesity is an extremely big problem since a significant number of children become obese when they grow up. According to the research of *Puska*, *Waxman* and *Porter* (2003) [3], 17.5 million children below 5 years of age are obese. In the United States, the number of obese children has doubled while among teenagers; this number has tripled since 1980 [4]. Childhood and teenage obesity has become a national economic problem of our days [5].

The main reason for obesity is the young peoples' improper health behaviour, a vital part of which is formed by nutrition habits. Children's nutrition habits start to develop at an early age, between 2 and 5 years of age; therefore, it is extremely important to take up proper eating habits since childhood nutrition habits can reduce the risk of adult age chronic diseases [6]. Teenage obesity has a 70% chance to result in adult age obesity. The chance increases to 80% if one or both of the parents are overweight or obese [7].

2 Materials and methods

During my secondary research, I studied mostly Hungarian and foreign specialized literature: special books, scientific journals, and I also analysed information available on the internet.

The primary part of my research consists of a representative survey launched in the Southern Transdanubian Region. Eight hundred primary and secondary school students were involved in the survey in the county seats (Pécs, Kaposvár, Szekszárd) of the region. The distribution of the questionnaires in the towns and within them, in the different school types (primary school, vocational school, technical school, secondary grammar school), according to

genders, was defined by the publication of the Central Statistical Office titled "The Main Data of Public Education in the Small Regions of Southern Transdanubia" [8]. The involved schools were selected arbitrarily, which was significantly influenced by the schools' willingness to take part in the survey. Within the schools, students from the 5th, 7th, 9th, and 11th grades were inquired. When choosing the age group, we followed the principles of the HBSC research to obtain comparable results. On the whole, we can say that the survey reflects the division rate of the school children attending different school types of the county seats of the Southern Transdanubian Region, and it is also representative concerning gender distribution.

The questionnaires were analysed with SPSS 13.0 programme. Significant corrections were counted (Pearson Chi^2 test) for the background variables (significance level: p < 0.05) using cross tables (Appendix 4), or in the case of the intervolume scales, variance analysis was applied using "ANOVA" tables.

3 Results and discussions

In the course of the representative survey, 800 primary and secondary school students were asked about their way of life and family patterns.

3.1 The importance of healthy nutrition

In the first group of questions, we asked the students to use school marks and judge how important healthy nutrition for them and for their father and mother is. The students who live in a one-parent family gave a zero mark in the case of the missing parent. We counted an average from the received results (Figure 1).

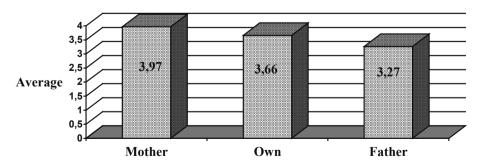


Figure 1: Importance of healthy nutrition

According to the results of the survey – within the family –, healthy eating is the most important for the mothers (3.97), they are followed by the children (3.66), and then the fathers (3.27).

3.2 Salubrity of nutrition and level of knowledge about healthy nutrition

In the next group of questions, the respondents had to estimate the whole-someness of their own and their parents' nutrition. Similarly to the previous question, it can be seen that – within the family – the mother's nutrition is regarded to be the healthiest (3.57), they are followed by the children (3.23) and the fathers (3.02).

The respondent young people consider their state of health good (3.99), and they are followed by the mothers (3.72) and the fathers (3.40).

The existence of a link between healthy eating and the state of health is also supported by the results of our survey. The healthier people eat, the better their state of health becomes. It is due to the beneficial influence of nutrition on health, and is also due to a lot of diseases resulting from improper eating habits.

According to the surveyed young people, within their family it is their mother who knows most about healthy eating (4.04), they are followed by the children (3.78), and then the fathers (3.56).

The more the parents know about healthy eating, the higher the children's knowledge is.

Table 1: The importance of healthy nutrition,	consciousness, knowl-
edge, and state of health	

Aspect	Own judgement (N=800)	Mother's judgement (N=793)	Father's judgement (N=771)
Importance of healthy eating	3.66	3.97	$\frac{3.27}{3.02}$
Healthiness of nutrition	3.23	3.57	
State of health Level of knowledge about healthy eating	3.99	3.72	3.40
	3.78	4.04	3.57

It can be stated that the surveyed people consider healthy eating important (3.66); however, it can also be seen well that, compared to this, the healthiness of their diet (3.23) lags behind its importance. But the reason for this is not the lack of knowledge since – according to their judgement – their level of knowledge is higher (3.78) than both previous factors. The highest value was reached by the state of health: 3.99 average. A very similar tendency can be observed in the cases of both the mothers and the fathers; the difference is that here the state of health comes behind the level of knowledge.

Studying the unity of the families, we can say that – from the point of view of the importance of healthy eating, the healthiness of families and the level of knowledge – the mothers got the highest value; they are followed by the children, and then the fathers. The only exception from this is the state of health because, in this case, the children came first, and they are followed by the mothers, and then by the fathers. The possible reason for the fathers' worse judgement is that – within the families – it is mainly the mothers who are responsible for providing food, so the children have less information about their fathers' way of thinking. In every case, the results reflect the children's subjective judgement. Later on – in the next step of the research – we are planning to have the children and their parents fill in parallel evaluations in order to see how realistic the children's judgements are.

3.3 Perceived health index

Using the value obtained in the first four questions, we worked out a new index and called it perceived health index (PHI). The index is built on the following factors: the importance of healthy eating, the healthiness of eating, the sate of health, and the level of knowledge regarding healthy eating. An average was made of the four factors and the obtained results were defined in the following way: if the average value is between 1 and 2.50, then PHI is critical; if it is between 2.51 and 3.50, then it is mediocre; if it is between 3.51 and 4.50, then PHI is good and if the obtained average value is more than 4.51, then PHI is excellent. The value of PHI calculated for the whole family is 3.87, which means that the family's state of health is good. Counting the PHI for each member of the family, we obtained the results seen in Table 2.

		PHI	
Family member	\mathbf{N}	Average	Standard
			Deviation
Child	800	3.80	0.78
Mother	793	4.06	0.77
Father	771	3.75	0.88

Table 2: Perceived health index (PHI) in the family

According to the applied index, the mother is the healthiest in the family. The PHI of the fathers and the children is almost the same; the difference between them is not significant. In our view, the mother's better result is due to that women are more interested in a healthy way of life, and in many cases, they do more to stay healthy.

3.4 The source of information related to healthy nutrition

We also wanted to find out information about young people's sources of information about healthy eating.

The three important sources of information are the parents (70.5%), the Internet (59.6%), and television (59.0%). It is a very good rate that seven out of ten young people turn to their parents for information about healthy eating. Doctors and nurses take the fourth place. Teachers occupy only the sixth place as only 39.7% of the children ask them for information about healthy eating.

When searching for detailed information on this issue, we were also looking for an answer to which of the listed sources of information is considered the most authentic by the surveyed children. They were allowed to choose only one of the already introduced answer categories. The obtained order can be seen in Table 3.

The order changed significantly. Doctors, nurses, parents, and the Internet proved to be the most authentic sources of information.

Source of	Head	%	Order	
information		-	Authenticity	Frequency
Doctor/Nurse	317	39.7	1.	4.
Parents	140	17.5	2.	1.
Internet	115	14.4	3.	2.
Books	52	6.4	4.	7.
NK/NA	50	6.3	5.	13.
Trainers	36	4.5	6.	9.
Television	31	3.9	7.	3.
Teachers	21	2.6	8.	6.
Newspapers	15	1.9	9.	5.
Friends	7	0.9	10.	8.
Radio	6	0.7	11.	10.
Brother or sister	6	0.7	11.	11.
Other	4	0.5	13.	12.

Table 3: Authenticity order of the sources of information (N=800)

4 Conclusions and recommendations

According to my results, it can be stated that the respondents consider healthy eating important and moderately important, but compared to this, the health-iness of their diet is behind its importance. The reason for this is not in the lack of their knowledge. According to the respondents, sometimes, the parents are also responsible for the children not being conscious enough (e.g. the children often get the sweets from their parents). The survey demonstrated that the importance of healthy diet is not significant enough in the families.

Although within the family, the mother has the greatest influence, we must not forget the fathers' role either since they also serve as a role model for their children. Their importance is supported by that 7 in 10 young people obtain information about healthy eating from their parents. The parents are given a serious task with this since they play an important part in providing their children with clear and relevant information.

According to the respondents, the most authentic sources of information are the doctors and nurses, but despite this, they only take the fourth place among the sources of information under consideration. Consequently, it becomes necessary to ensure the students the possibility to communicate with them more frequently.

Stressing the necessity of using the Internet is also a significant task since this is the second most frequently used source among the students, and it also takes a prominent place from the point of view of authenticity. However, it is important for the students to be able to select from the information available on the Internet since there are loads of articles and notes without any scientific basis.

Considering the obtained results, it would be important to forward the information not only to the children but it is also important to enhance the parents' consciousness, as well, since the results prove that the parents' consciousness has a great influence on their children's way of thinking – and the parents' consciousness highly depends on their education and knowledge.

In order to improve the parents' knowledge, brochures should be published, making use of the possibilities offered by collective marketing, or even lectures could be given at parents' meetings, or at other events where the emerging issues could be answered.

Children should be provided a lot more opportunities to communicate with doctors and nurses. They could also be supported by the schools so that the children are given the possibility to visit their doctors or nurses not only when they are ill but whenever they have any other problems too. Children would need more consulting hours with school doctors or nurses to be able to discuss healthy lifestyle, or if necessary, the different ways of body weight reduction or increase.

Since the Internet is the information source used by them most frequently, children could also be provided the chance to communicate with a school doctor or nurse in such a way. This way of communication could ensure anonymity for the children, which is very important for children of this age. Anonymity would make possible for them to get informed about topics that otherwise they would not dare bring forward, or would not want to ask, e.g. alcohol consumption, smoking, use of drugs, or sexuality.

References

- [1] I. Rodler, Élelmezés és Táplálkozás-egészségtan. (Food and nutritional hygiene) Medicina Kiadó, Budapest, 2005, 160–167.
- [2] L. Halmy (2010) Elhízás, avagy egy halálos népbetegség (Obesity, or a deathly endemic) http://www.lifenetwork.hu/lifenetwork/20100126elhizas-mint-nepbetegseg.html

- [3] P. Puska, A. Waxman, D. Porter, The global strategy on diet, physical activity and health. World Health Organization, Genova, 2003.
- [4] Z. Szakály, A táplálkozásmarketing új irányai. (New directions of nutrimarketing.) Élelmiszer, Táplálkozás és Marketing, 1 (2006) 3–12.
- [5] R. S. Szűcs, A fiatalkorúak által fogyasztott néhány élelmiszeripai termék marketing és fogyasztóvédelmi szempontú vizsgálata (Marketing and consumer protection analysis of some food products consumed by young people.), doktori értekezés, Debrecen, 2011–12–28.
- [6] V. Szűcs, D. Bánáti, E. Szabó, A gyermekek táplálkozásának megismerése élelmiszer-fogyasztás gyakorisági kérdőívvel. (The knowledge of the children's nourishment food consumption with a frequency questionnaire.) Magyar Táplálkozástudományi Társaság XXXIII. Vándorgyűlése, Pécs, 2008. október 2–4 poszter.
- [7] L-né Halmy, Az egészségpolitika új kihívása az elhízás epidémiája. (The new challenge of the health policy the epidemic of the obesity) *IME*, 2 (2006) 14–18.
- [8] KSH (2007), A közoktatás főbb adatai a Dél-Dunántúl kistérségeiben 2002-2006. (The more capital data of the public education in South-Transdanubia micro-regions 2002-2006) http://portal.ksh.hu/pls/ksh/docs/hun/xftp/idoszaki/regiok/pecskozokt06.pdf. Accessed: July 13 2009.