

## **Health and youth**

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*Abstract: Health and health education are an important part of youth education. The target of education is the develop the youth and give them everey important tools to become healthy men and women. Health is wide territory and consists of different aspects of life and life territories. However, how do young people think about health, how it important is for them? The article examines the place and role of health in society, education and the food industry, focusing on the consumer's opinion. Following the evaluation of the questionnaire, we can see that the level of health awareness is not too high among young people, which is reinforced by the fact that there is no health education in schools either. This will have more serious consequences for the longer term, whose economic impact is expected in the future.*

*Keywords: healt, diseases, healt expenditure, consumption, healthy food, education*

## **1 Material and methodology**

Hungarian and international literature are used and read to the writing. However a survey was made to measure the approach of the students in recent years. The center of this research stands the following questions: overweight, physical activity, mental conditions and food consumption of youth and children.

## 2 Introduction

Health has been a central issue for humanity for thousands of years. Illnesses, accidents and health problems are part of the history of humanity. Even the old scriptures mention it, think here of the stories of the Old Testament or the New Testament. Who would not know the story of a blind man from birth, or the cases of infertile women. Initially, the people of the ancient times lived in a closer look to the nature in terms of the terms, so they kept their laws automatically, and as a result they were healthier than today. Later, he poured the nature out of the wilderness of a person who was extinct, could have locked him in, and even could break his laws. Examples include construction sites, village communities, natural disasters, the use of means of transport or the use of domestic animals. At the same time, it is also conceivable that even in recent centuries it can be proved that the average age of people was lower. With the development of public health and medicine, people's life expectancy increased and healthier people lived. At the same time, one of the results of these changes is the underprivileged religious life and the foreground of the materialistic human image which has affected both education and remedy. As a result of this material human image, man is a naked ape, blood, bone, and flesh, whose knowledge so far extends. The manuscript of the old religions was different, which today's science regards as a belief, a religious approach. It is true that statistics show improvements in terms of better nutrition and public health, but at the same time, the twilight of the twentieth century, the emergence of psychology, which aims at the healing of different deviances, shows that, in vain, physical health is not balanced by the soul, something is missing the soul. These changes also had an impact on education, and they also shaped the health outlook in schools.

If we look at the health expenditures from 2003, we can see that they have increased constantly from that time. Healing and rehabilitation in-patient and one-day care and medicine are the leaders with 25-33% of total expenditure. The ratio of outpatient care is 20-24% of the total. As these data are similar in different years, we can say that there is no increase and no decrease, and as the number of cases sent by local doctors has not changed in last years, the main reason of the total data increase is the inflation. As the number of inhabitants decreases in Hungary, we can say that the reason of the increase is more expensive expenditures.

Table 1. General practitioner's case

Time	General practitioner's case
2010	54 593 413
2011	54 998 151
2012	55 257 892
2013	55 262 455
2014	54 875 481
2015	55 458 938
2016	55 348 090

Source: KSH, 2018.

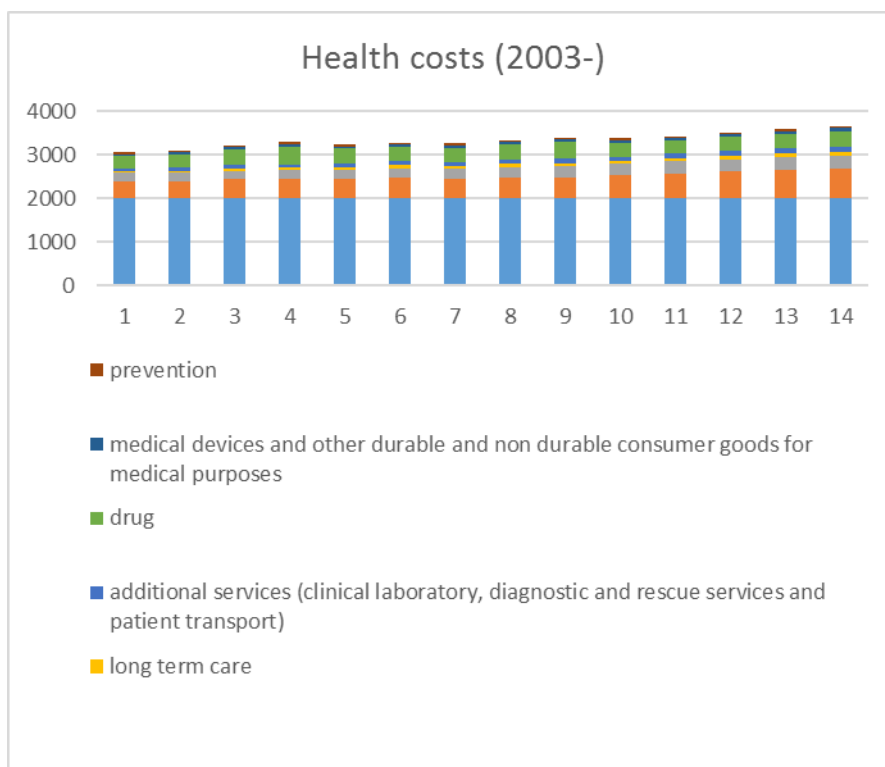


Figure 1. Health costs in billion HUF in Hungary Source: KSH, 2018

The most important is prevention cost. But in the expenditure structure its ratio is very low. It means in the health system prefer aftercare to prevention and not supporting the healthy life style and helaty food and so on. But we need a change

in our mind in this field because decreasing volume in health expenditure means worse possibilities in health care, which cause that we need to listen to prevention. It consists of sport, health education, health food, healthy environment and spiritual and psychical healthy family.

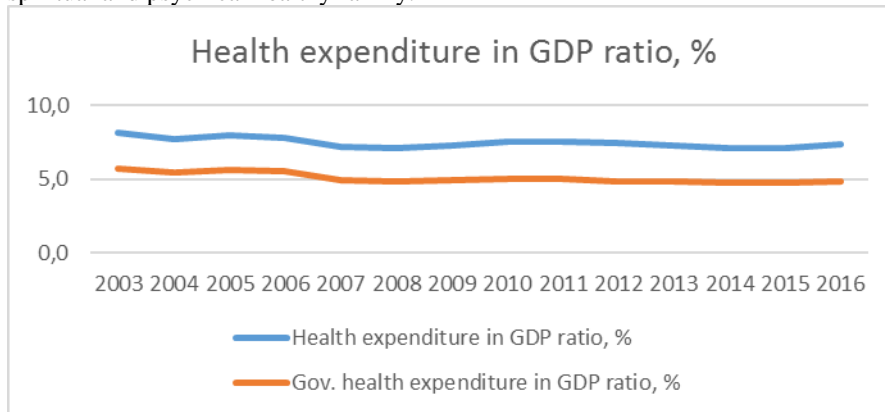


Figure 2. Health expenditure in GDP ratio, % Source: KSH, 2018

We can see that the health expenditures in GDP ratio decreased year by year. The main reason of it is to fluctuate the value of GDP year by year while health expenditure cannot increase with the same volume, so relative value of health cost decreased in Hungary for ages. Both health expenditure and cost have increased year by year. While of which the governmental expenditure has decreased. The government in Hungary leaves this sector and its play decreased.

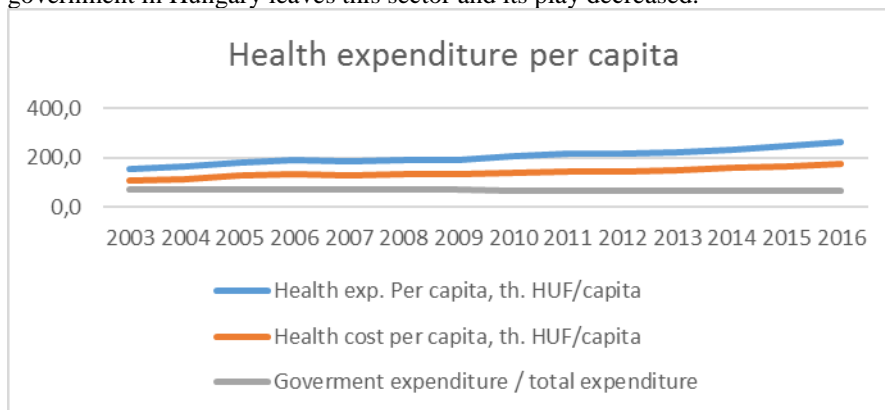


Figure 3. Health expenditure per capita Source: KSH, 2018

On average, 4.1 percent of health expenditure will increase by 2017 and 2021 worldwide. Higher spending, however, does not necessarily mean better health outcomes, healthcare providers are likely to continue to have declining profits and

increasing costs. Instead of treatment, prevention comes to the fore, resulting in the emergence of "well-informed" health consumers instead of simple "patients" [2].



Figure 4. Key issues in global health care Source: Deloitte, 2018

Decreasing profits in the precarious and changing healthcare sector: Healthcare providers are likely to continue to have declining profits and increasing costs. By 2020, the aggregate health spending of the world's largest regions is expected to reach \$ 8.7 trillion compared to \$ 7 trillion in 2015. To compensate for declining profits, many health care organizations introduce new cost-cutting measures and look after new revenue sources.

Strategic shift from quantity to quality: Health continues to shift from the fee paid for the service (FFS) to earnings and value-based payment models. In advanced healthcare systems, sector actors emphasize prevention rather than treatment, which results in "well-informed" healthcare consumers instead of simply "patients".

In order for a transition to value-based care to be successful, it is also necessary for actors, including consumers, to look at health rather than health care, instead of

treatment instead of prevention and well-being, and health instead of the individual.

**Reaction to Health Policy and Complex Control:** The cyber attacks of recent times have placed greater emphasis on data protection and security. Digital healthcare is a challenge for governments, healthcare providers and insurers since they need to gather, analyze and store more and more data while also ensuring compliance with legislation, ethics, and risks.

**Discovering Exponential Technologies to Reduce Costs, Increase Access, and Improve Supply:** Exponential technologies make supplies less costly, more efficient and more accessible on a global scale. Demographic and economic trends combined with advanced technology are already predicting how future hospitals will work in terms of workforce, size, and design. That is why actors need to plan their strategic investments in human resources, processes, and infrastructure in consideration of digital technologies.

**Focus on Clients and Improving Patient Experience:** Personal Services have become a top priority for consumers, and technology also enables them to become more active in decision-making. Service providers and payers should take advantage of digital trends to provide more personal care, improve communication, and improve patient experience and involve technology in research, diagnosis, treatment, and aftercare.

**Transforming the Future of Work:** With the fourth industrial revolution, digital technology, robotics, and other automated tools offer a wealth of opportunities for current and future workforce health issues - if sector actors are open to it [2].

The ratio of health expenditure to GDP declined by 0.9 percentage point between 2005 and 2008, by 0.4 percentage point, mainly as a result of the economic downturn measures, budgetary rigor and the reform of the pharmaceutical price support system.

Between 2007 and 2009, the real value of per capita spending on health has declined, and after 2011, it has recorded a curve similar to that of GDP, although it has not reached the GDP growth rate. In 2012–2013, even the negative sign of change was in positive territory, and in 2015 it reached the level of GDP growth. From 2012 onwards, besides the budgetary aspects, the structural transformation started also had an impact on the GDP-proportionate expenditure. The amount of pharmaceutical price support declined in 2012–2013 as the so-called 'price-list' was introduced. "Blind" procedure. The essence of this is that the National Health Insurance Fund (OEP) announces a competition for medicines containing the same active ingredient, and after choosing the cheapest offer for the same preparation containing the same active substance amount of aid. In addition, if the pharmacy the "active ingredient" of the same active ingredient is "lower" to provide the consumer with daily therapeutic costs, benefit.

The health spending per capita in Hungary in 2015 was € 1,371, with Hungary accounting for the lowest third of the EU member states (the EU-28 average was € 2,781). We also occupy the lower third of the 7.1% of GDP spending on health expenditure (EU-28 average 9.9%). Health expenditures in relation to Gross Domestic Product reaches or exceeds slightly in three EU countries.

11%: Germany, Sweden and France, but Europe is a non-EU country, Switzerland is the leader (11.5%). We have a similar value to ours in Slovakia, but at the same time, we have lower GDP-related spending in our two neighbors, Croatia and Romania, as well as Poland, Cyprus and the three Baltic states.

The economic crisis of the last decade in most EU countries has not had a significant impact on the real value of health spending. After a decline in 2007-2009, the real value of spending in Hungary decreased again in 2012, and although it will be postponed after 2013 the average for the change in the Visegrad countries, 2005 is the base year level has not yet been reached [4].

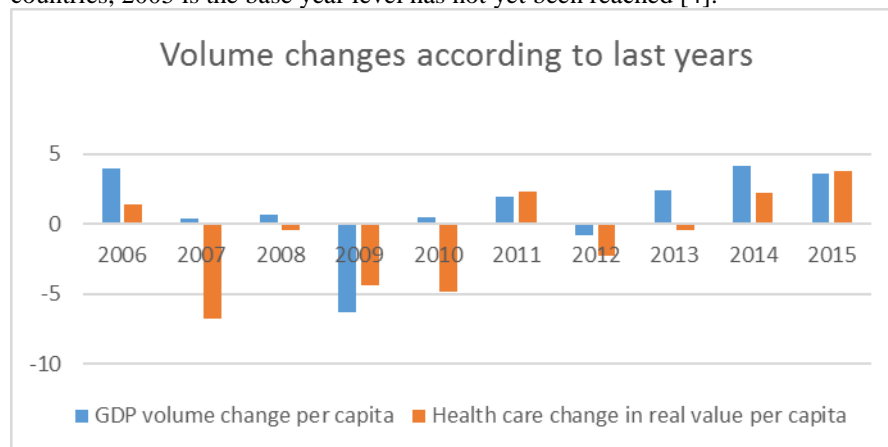


Figure 5. Volume changes according to last years Source: KSH, 2017

### 3. Health conditions and of Youth in Hungary

First of all, we can look at the subjective health condition of Hungarians. Based on a subjective assessment of health, 89% of the population is satisfied with their health or at least consider it satisfactory. 61% of respondents (65% of men and only 58% of women) consider their health to be good or very good. Compared to the 2009 ELEF data, it can be stated that in 2014, the population evaluated their health status more precisely. Both sexes increased (from 59 to 65% for men, from 50 to 58% for women) from their own health, and decreased (from 12 to 10% for men, from 17 to 12% for women) Negative Rate.

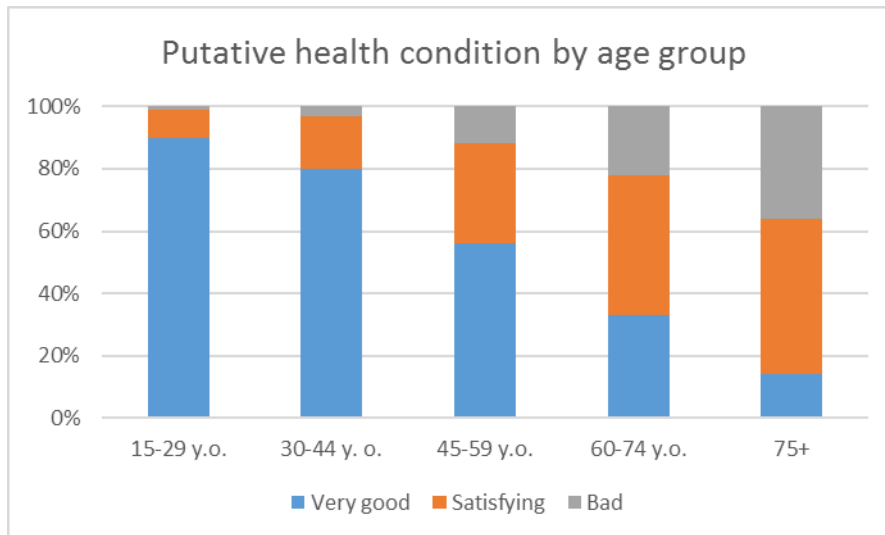


Figure 6. Putative health condition by age group 2014 Source: KSH, 2015

It means that while the human is young no having problems and pains, they think everything is good and very good, but the affect of the faults cannot be felt.

Among lifestyle factors, smoking is considered to be one of the most important threats to health. One of the most important causes of cancer (especially in the case of lung cancer), but also in many other diseases (cardiovascular and respiratory system). It is now clear that not only does an active smoker's lifestyle have health disadvantages, but passive smoking can also damage health.

According to ELEF 2014 data, 29% of the adult population smokes compared to 31% in 2009. However, only the proportion of casual smokers has fallen between the two dates, and the number of regular smokers has not changed significantly (28 in 2014, 27% in 2009). In 2014, the proportion of occasional lighters is negligible, only 1.6%. The difference between the two non-smoking habits is significant and slightly increased compared to 2009: fewer than a quarter of women and one third of men are regular smokers.

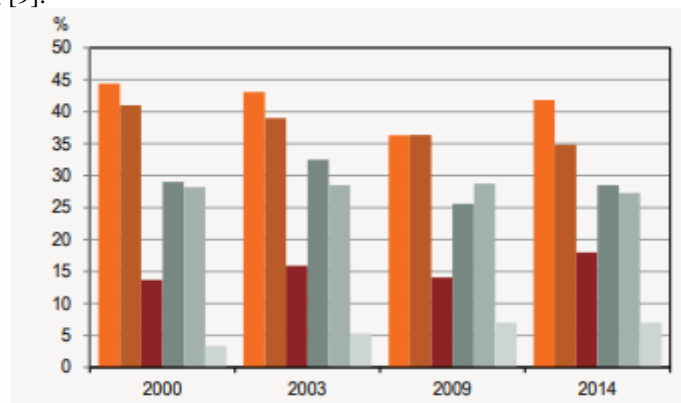
Smoking habits vary greatly in different age groups. Among 15- to 18-year-olds, 14% of girls smoked, while almost a quarter of boys in the same age group smoked. This is significantly higher for women in the next two age groups (18–34 and 35–64 years) however, there is no significant difference between the two age groups (29% and 27%, respectively). However, only 7% of women over 65 are regular smokers.

In men, the proportion of young people in the young adult age group (18–34 years) is almost twice as high as that of juveniles. The 42% ratio shows a significant increase compared to 36% in 2009. There is no significant change for



middle-aged people: 35% compared to 36% in 2009. Finally, only 18% of the oldest men smoke regularly, and among them is a the highest rate of quits (38%). However, in the case of women, most cohorts due to cohort effects occur not in the retired age group but in the middle-aged. When today's seniors were young, smoking was even more male-like compared to the current one, so fewer women used it, and so they knew less. Gender differences, even today, are still prevalent, but with this emancipation, women are more likely to have this harmful passion [7].

According to a survey in 2018 152 persons smoke from 328 responders which means 46,3%. But this survey is not representative it can sign higher percentage than domestic average. 6% of the responders is under 18 and 22% is 18-25 years old. So 28,5 % is youth. Plus 14% is passive smokers. 50% of young smokers there is smokers in the family and 50% of ones thought about giving the habits of smoking [9].



1, Men 18-34 y.old, 2, Men 35-64 3, Men +65 4, Women 18-34, 5, Women 35-64 6, Women +65

Figure 7. Regular smokers ratio by gender and age group 2014 Source: KSH, 2015

Among the legally available addictive agents, besides tobacco products, alcohol is the one where excessive consumption causes the most significant problems, both on an individual and social level. Binge drinking poses a significant risk for various health problems, such as liver cirrhosis, stroke, cancer, birth defects. At the same time, moderate alcohol consumption can have a beneficial effect on health: according to research, chance of developing vascular diseases. In the ELEF questionnaire, the frequency of alcohol consumption and each we asked him about quantities consumed on occasions. Based on the self-declared values, we classified the population into four categories: big drink, moderate alcohol, rarely consumed alcohol, and non-alcoholic consumers keep the actual consumption and report less quantity. About a third of the population say they never drink alcohol - women are more than twice as likely to be abstinent (40%) as men (18%). By age group, juveniles (15-17 years old) and the oldest (over 65 years) are among the highest in

this category, while the least abstinence in this field is 18-34 years old. More than half of retired women never drink alcohol while only one in seven young men. At the same time, the problem of binge eating is most affected by the oldest age group of both genders, although the proportion of big boys is negligible for women: 2% of those over 65 belong to this group (1.4% of all women), while for men it is 14%. -a (9.9% of all men). Overall, 5.4% of the total adult population can be classified among the grandparents based on reported values. This represents a slight increase compared to the 4.6% estimated in 2009 [8].

Exercise plays an important role not only in achieving and maintaining proper body weight, but can also help prevent many diseases. Nearly half of the population is mostly sitting or working (this is not just about the role in the labor market, but also about other work-related activities such as housework, family care, and learning). Passivity characterizes women to a greater extent than men, while work that involves physical exertion is more of a male characteristic, and only a minimal proportion of women. Not only is there a little movement associated with work activity, but a leisure, sport-specific exercise is also rare and modest in duration. Two-thirds of the population (67%) do not play 10 minutes a day. The most sporty people who exercise every day of the week make up only 4.5% of the adult population. The proportion of those who work on muscle strength and endurance exercises on a daily basis is only 3.2%, compared to 76% of those who are completely neglected.

Regular walking or cycling is also a proven health protection. The data show that walking does not affect only 15% of the population at all, with the overwhelming majority walking at least 10 minutes a day. At the same time, 53% of the population do not spend half an hour on an average day. Cycling is much less frequent: 60% of adults do not use this tool at all, but one in ten people rounds up on a daily basis. More than half of cyclists spend less than 30 minutes on average per day, while 15% spend at least one hour a day.

I would just point out one aspect of healthy eating: the right amount of vegetable and fruit consumption. According to the results of the survey, the vast majority of the population aged 15 years and over (96%) consume some vegetables and / or fruits daily.

The proportion of consumers consuming several times a day is also relatively high, two-thirds of the total population. There are some differences between women in this respect: while women are 72, only 62% of men eat vegetables and fruits several times a day. There are also age differences: the oldest 79 and the youngest 60% belong to the regulars. .

Overweight, obesity is a disease in itself, but it also contributes significantly to the development of many other diseases (such as coronary heart disease, ischemic stroke, diabetes, and cancer). The degree of obesity was determined by the body weight index (BMI<sup>12</sup>), measured in kilograms of body weight and square meters of height measured in meters. The survey questionnaire includes self-reported

values, and according to the instrumental measurements<sup>13</sup> in the ELEF sub-sample in 2009, people often underestimate their weight and overestimate their height. That is why it is particularly unfavorable that more than half (54%) of the total population is among the overweight-obese based on the self-reported values. This is higher for men (61%) than for women (48%). According to the experience of 2009, women are more inclined to declare less weight than real [8].

#### 4. Consumer' habits and trends

The research would like to analyse and compare to Hofer's research in 2006. and ask the question whether there would be change compared to 2006. research. The analysing about what has happened in the past 11 years. According to demographic data, the research examined household income and consumers, consumption habits. The survey answered the question of the beneficial and disadvantageous properties. In 2017, 102 students of Obuda University were reported in this research.

Table 2. Basic data of the survey

Age	23,29
The number of persons living in the household	3,02
Children under 18 age	0,40
Net income of the household in thousand HUF	326,60
Consumption of food in thousand HUF	53,84

Source: own research

Because of the health reason, consumption can be increased. This also effects a more environmentally friendly technological method, which can improve the environmental performance. Hofer thinks that the main motivation factor of consumption is health protection and the environment protection and economical competitiveness is consequence [3]

The survey consisted of 20 questions. The topics of the questions were environment pollution, healthy nutrition, awareness of consumers, self sufficiency, marketing tools.

Table 3. Some basic data from the 2 difference surveys

Category	2006. Hofer	2017. Obuda
Ratio of gender	29,6 % male	50% male
Average age	28,8	23,3
Ratio of organic consumers	56,40%	74,50%

Source: own research and Hofer 2009.

This research consisted of more males and younger responders than Hofer's one. We have to ask: what are the main factors for consumption of organic food. Hofer's answer is health, prevention. However health care and children health care are the main answers. According to newer survey for example marketing tools can affect lower level for the consumption. Newer research showed better quality (which is a marketing tool possibility) and health reasons are the main reasons. In the newer one most of the responder the main motivation is having children and child's health was more important than today. Food security, healthy life, offering of a doctor were the other motive. In Hofer's survey the responders's opinion was that organic food is healthier. Cereals, fruits and vegetables, meat, dairy productions are the favourite organic food. The more fruit and vegetables consumption seems to be more healthier according to food science. Lack of using chemicals and artificial fertilizer helps to be more healthier of organic food therefore it can help to the health.

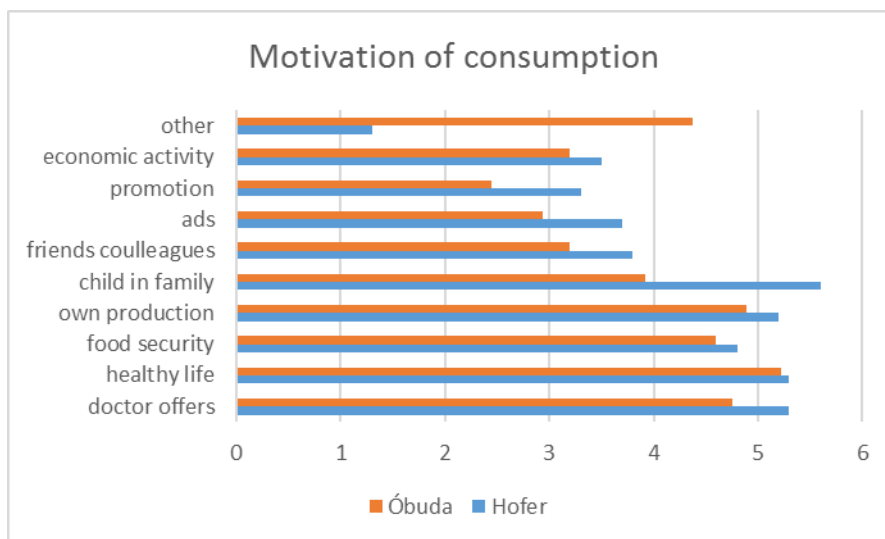


Figure 5. Motivation of consumption  
Source: own research and Hofer 2009.

However it is apparent from consumers' requires to promote better distribution, it is essential to be broad and deep reach possibility. With the help of basic marketing tools, the consumer can be increased by using more modern, digital tools of marketing [1].

### Conclusions

The health thinking and conditions between the youth is not bad but we have a subjective aspects of the question. Unfortunately, smoking, alcohol drinking and

overweight are main problems, which is available in this age group. The role of the education is essential.

White et al. say the importance of education interventions early in the education process for health professions students. Education programs, especially for public health education students, may prevent stereotyping attitudes and behaviors and with these can help that students should recognize that in the future can help the individual development towards the health [10].

The lack of effect on dietary habits could be explained by a number of factors. First, due to low budget, shorter time willingness for the dietary, which likely did not adequately capture dietary habits. Fruits and vegetables prices are higher, a fact that might have limited the availability of fruits and vegetables among our low-income students [6].

Attitude scales for health education two factors were found as “attitude towards teaching factor in health education” and “attitude towards learning factor in health education.” This means as attitude and stereotypes changes need for health thinking changes the education thinking changes need toward the school system changes. This can be the evidence that the teachers consider the health education not only as an information transfer but also the student dimension [5]

The health factor of domestic organic-products is the great importance, but it is not enough for developing the health parameters. The consumer price of the product range is one of the biggest obstacles to widespread use of these products. But its background stand the stereotypes and lack of change willingness. The role of mistrust is significant. Comfortable is good for the human and they do not change in lot of cases when the trouble is large.

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