

# Teachers' Perceptions on the Relevance of Specific Health Education Topics in School

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**Abstract:** This paper illustrates the results obtained through the analyzing of the teachers' feed-back, expressed at the graduation moment of the accredited training program "Modern Approaches in Health Education", organized in the frame of the Erasmus+ project "Let's make it better! Raising the awareness of the triad nutrition-health-food safety in school education", coordinated by Valahia University Targoviste, Romania. Two Modules and 8 related topics were designed, consisting in 18 hours of courses and 36 hours for practical training, in the format of face-to-face and on-line meetings. 67 trainees - from which 98,5% women - graduated the program dedicated to primary and secondary education.

Three concepts were identified as the most important to be learned by students in school - Food Composition and Food Groups, Food Hygiene and Related Risks and Food Labelling -. On the other hand, New Food Products and the Impact of the Food Industry on the Environment were considered less important, despite the efforts and care concerning the environment protection, shown in the last years at the legislative and consumers' level throughout the world. Related to competencies, attitudes and values, the most important topics in order to be developed in school were: Awareness of the Relationship between Food and Health, Changing in the Food Consumption Manner and Personnel Hygiene. The Self-esteem related to the Physical Aspect and the Appetite Control were overwhelmingly considered less important (by more than 90% from respondents).

Almost 95% from the interviewed teachers agreed that the presence of trainers (especially teachers) - through which the Education for Health is promoted - is vital. But a higher percent agreed that it is not enough to discuss about a specific topic related to the Education for Health, in order to change the students' behavior.

**Keywords:** *Health education; nutrition education; training program; related health education topics; teachers' feed-back; Erasmus+ EduforHealth project.*

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## 1. Introduction

According to World Health Organization, “health education is any combination of learning experiences designed to help individuals and communities to improve their health, by increasing their knowledge or influencing their attitudes” (WHO, n.d.a).

People health and wellbeing are strongly related to food, both in its quantitative and qualitative terms. If the Food Security was defined to be the access of all people to safe and nutritious food, in order to meet their dietary needs for an active and healthy life (FAO, 1996), the quality of food is a very complex issue, including its safety and sensorial attributes. The FAO Resolution 35/70 from 5 December 1980 stated food as “a requisite for human survival and well-being, and a fundamental human necessity” (United Nations General Assembly, 1980).

In Romania, the national program “Education for health in Romanian school”, launched in December 2001, aimed to introduce for the first time, Education for Health as an elective discipline (integral offer) and/or as classes integrated in other disciplines, but also as extracurricular activity too, in order to develop responsible attitudes among the students, towards their own health and those around them (MEC, n.d.). As a result, in 2004, it was approved the content of the discipline Education for Health, for all the school cycles, addressing the students aged from 7 to 18-19 years old.

Despite the efforts made till present, in the abovementioned context, it is obvious that more can be done in the segment of promoting students' health and well-being, respectively prevention, especially having in view that Education for Health is far to be static in terms with what it is happening in the real world on the one hand, and the children' needs on the other hand. Thus, Education for a Healthy Diet could be considered part of Education for Health, compulsory starting from early ages, the role of the family and school being needed to be intertwined.

As dedicated projects seem to be one of the most important channels to promote health education, in the frame of the Erasmus+ project: “Let's make it better! Raising the awareness of the triad nutrition-health-food safety in school education”, having Valahia University Targoviste, Romania, as coordinator, an accredited training program dedicated to primary and secondary teachers - entitled “Modern Approaches in Education for Health” - tried to underline the importance of Education for a Healthy Diet, in order to make teachers informed on how to design didactic demarches on this topic and make proper interventions in classrooms.

Two modules (Innovative aspects of training in the context of Education for Health and Current challenges in Food Science), together with 8 related topics were designed. 18 hours for courses and 36 hours for practical training, in the format of face to face / on-line meetings were focused on the following subjects: Education for Health in the European curricular context, Didactic design in Education for Health, Evaluation strategies, ICT tools in teaching Education for Health (first module), Nutrients and their role in a healthy diet, Control of the chemical and biological risks associated to food, Food labelling, Food hygiene (second module).

The final evaluation was made on the basis of a Portfolio, approaching at least one of the proposed topics. Both for teachers and their students, questionnaires were designed, with a view to know their perception related to the training program and to the Education for Health as discipline, part of the national curriculum.

## 2. Materials and methods

The research was oriented on finding answers to several aspects concerning Health Education, as crucial topic introduced in pre-primary, primary and secondary school, with the objective to provide relevant knowledge and healthy life skills, in order to raise the students' awareness related to physical, mental and social health problems, to make them able to identify deficiencies and illnesses and to accustom them to request medical assistance when needed.

In this respect, the graduates of the training program "*Modern Approaches in Education for Health*" were asked to express their opinions related to the most important Health Education topics to be approached in schools, the relevant skills, attitudes and values necessary to be enhanced by Health Education - together with the proper methodologies which must be embraced by teachers -, the main responsible actors for disseminating Health Education in schools.

The group of graduates was relative heterogeneous, being composed from primary teachers (63%), Biology teachers (19%), Chemistry teachers (10%) and class masters / guidance counselors (8%) - all of them from Dambovită County.

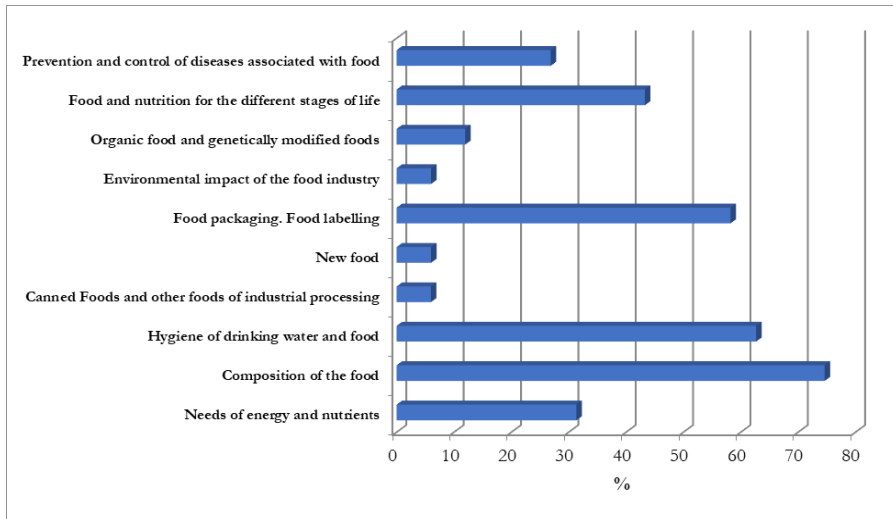
The abovementioned structure of the questioned group was in accordance with the profile defined in the training program, established at the moment of accreditation by the Ministry of Education.

The questionnaire addressed to all 67 graduates included questions which requested binary answers (“Yes”/“No”), and also responses considering a scale ranging from “*Strongly agree*” to “*Strongly disagree*”, aimed also to gather the teachers’ opinion regarding their satisfaction in relationship with the training programme. The data were collected in spreadsheets and processed and analyzed using statistical functions.

### 3. Results and discussions

The first part of the questionnaire addressed teachers’ personal data. Even their answers were not compulsory at this part, more than three quarters of them provided information. It is interesting to note that the average age of the trained teachers was 40.8 years. In this respect, it seems the group of teachers was experienced, situated relatively close to the middle of their professional career, but at the same time, becoming potential candidates for implementing the needed changes within the educational system in Romania, in particular for transferring to students important aspects and contents related to *Food Science Education*. From the total number of trainees, 98.5% were women and had long term studies as professional background, working mainly with children aged between 7 and 15 years. Their participation to the course was the result of a real need of updating the knowledge related to *Health Education*.

Figure 1 concatenates the teachers’ answers referring to *Health Education* topics. The three topics identified as the most important in order to be learned by students in school were *Food Composition* and *Food Groups* (74.62%), *Food Hygiene and Related Risks* (62.68%) and *Food Labelling* (58.2%) respectively. *New Food Products* and the *Impact of the Food Industry on the Environment* were considered less important, reaching only 6% each from the total of answers. In Romania, the present curricula at the elective discipline *Education for Health* already comprises topics such as *Food Groups* and *Food Hygiene*, approached gradually from primary to secondary level of education. The knowledge related to nutrients (type, what are “good” or “bad”, the energetic and biological value provided by each group, their relationship with health and wellbeing) should be deeply acquired starting from pre-primary school, due to their importance in the human life. It can be supposed that the teachers’ answer focused on the topics just mentioned, is linked on the one hand with their own professional position, and on the other hand, by the real situation in which those teaching units are not granted with enough time in the frame of the weekly activities with the students.



**Figure 1.** Teachers' feedback concerning the most important Health Education topics to be treated in schools (source: authors' own statistics)

Worldwide, a lot of diseases are yet related to the lack of *food hygiene*, despite to the important number of programs, for prevention and for amelioration of a particular status too, developed by *World Health Organization* and other interested bodies, at the international and national level. It means that especially the youngsters should learn about concepts such as food safety, undesirable microorganisms and factors involved in their growth in food, handling of raw materials and also food preparation at home. The young people should be aware that applying all those concepts in their future life will lead to protect them and their families too.

*Food labelling* could be considered a new and challenge issue, having in view that the legislation in force is changing, due to numerous factors: new additives and research related to their risks for human health, ethics issues such as food adulteration, people option for choose healthy foods and so on. Nowadays, surprisingly, the small children are more familiar to read the label, the teenagers being in general indifferent to the aspects related to food labelling. More frequently, the girls are interested by the number of calories or by the presence of fats in foods, having the tendency to choose those ones without other criteria, the main target being to keep the body weight under control, regardless if this one is equivalent with an unbalanced nutrition.

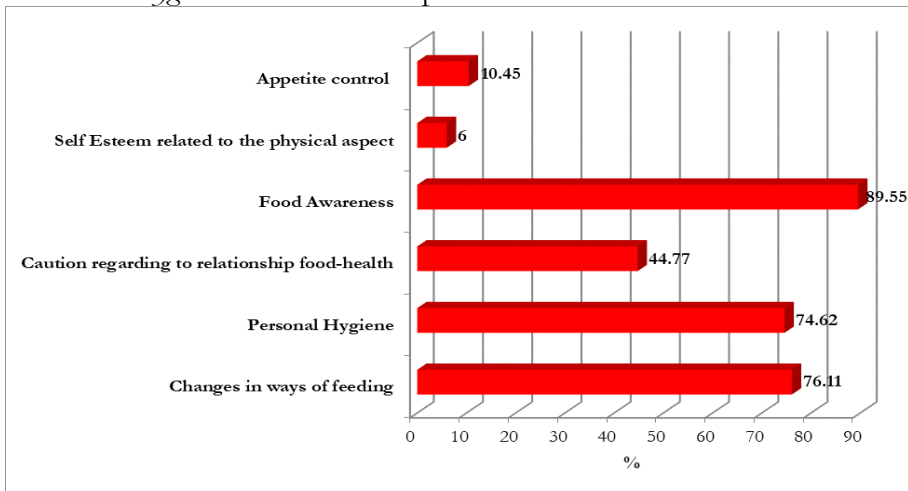
*New Food Products*, *Impact of the Food Industry on the Environment* and *Canned Foods and other foods related to industrial processing* were identified by teachers as topics not so important to be treated in schools. Related to *New Food Products*, it is possible that its content may not have been fully

understood by trainees, being relative recent introduced in the scientific literature. Efforts should be made in the direction to be known to a large audience, because the production of innovative new food and drinks is compulsory for changing the marketplace and in the last years, this means the use of minimally processing techniques and/or new packaging technologies. Thus, the students from the secondary level of education could be trained in order to be familiar with the concept of *New Food Products*, having in view that in concrete terms, the life cycle of a certain food is short.

A little bit upsetting, the *Impact of the Food Industry on the Environment* was not regarded by teachers as important. At least, for the secondary level of education, this concept should be treated in a responsible manner, in the context in which many policies concerning the environment protection were developed and implemented so that to diminish, for example, the impact of the non-usable packages or different emissions on the quality of air, or on the environment as whole.

*Organic Foods and Genetically Modified Foods* is a topic credited by almost 12% from respondents with importance within the schools. Although it unifies two distinct categories of food products, both are very strong related to health, different controversies being yet around the consumers' trust in certified organic foods or the ethics of some biotechnologies.

Figure 2 was generated on the basis of the answers to the question regarding the skills, attitudes and values promoted by Health Education. According to the teachers answers, *Food Awareness*, *Changes in way of feeding* and *Personal Hygiene* are the most important.



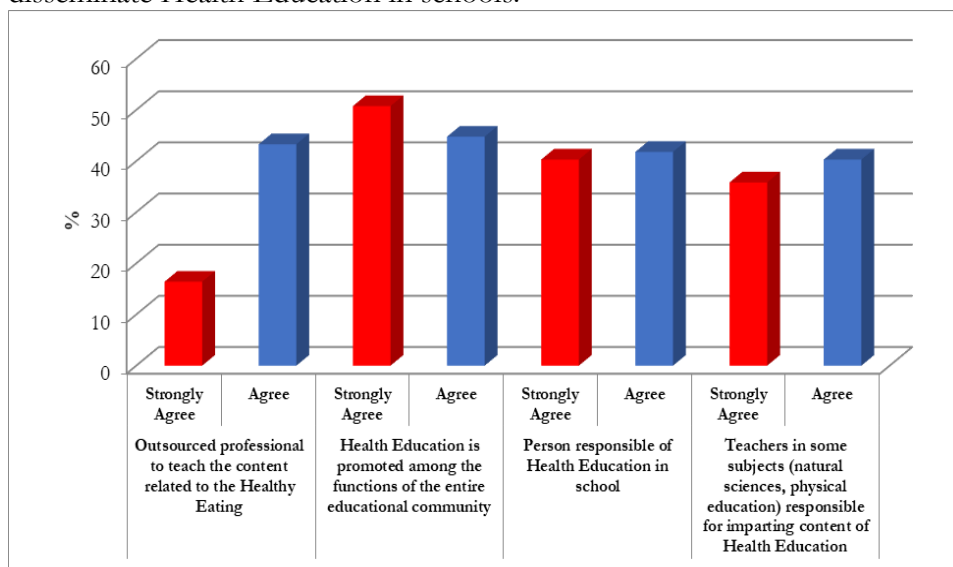
**Figure 2.** Teachers' feedback related to the most important skills, attitudes and values promoted by Health Education (source: authors' own statistics)

Surprisingly, *Self-esteem related to the Physical Aspect* and the *Appetite Control* were overwhelmingly considered less important, although those ones are strongly related to overweight and obesity. The question in discussion is if the teachers' opinion overlaps on the students' opinion, having in view, for example, that generally, the overweighted children are marginalized by peers and confronted thus with a real socio-emotional situation. Avoiding or insufficient approaching of this subject, in the frame of the lesson activities, just contributes to deepen the gap between children, in terms of communication and collegiality, and in long term, to formation of an adult population with an unhealthy status. Not in the end, it should be borne in mind that according to *World Health Organization*, childhood obesity is one of the most serious public health challenges in this century, especially having in view that non-communicable diseases - like diabetes and cardiovascular diseases - can be developed at a younger age by overweight and obese children (WHO, n.d.b). In Europe, it can be noticed that 1 from 3 children, aged between 6 and 9 years old, is overweight or obese, while worldwide 1 in 3 adults, aged over 18 years old, is overweight, and 1 out of 10 is obese (WHO, 2016). In Romania, the evaluation of the nutritional status of the children from primary level of education, expressed by the results of the project "*European Childhood Obesity Surveillance Initiative (COSI)*", revealed that the prevalence of overweight at 8 years old children is at a percentage of 26.75%, while the obesity prevalence is 11.64% (INSP, 2013).

Strongly related to the previously mentioned aspects, Figure 2 illustrates that the topic *Caution regarding to relationship food-health* was quoted by only 44.77% from teachers as important for developing skills, attitudes and values related to Health Education. It seems that this topic should be rethought or largely debated with teachers and all the involved parties, especially having as background the *Investing in Children: European Child and Adolescent Health Strategy 2015-2020* (WHO, 2014) approved in the frame of the 64<sup>th</sup> session of the *WHO Regional Committee for Europe*. In Romania, the *National Health Strategy 2014-2020 - Health for Prosperity* (Ministerul Sănătății, 2014), and the *National Strategy for protection and promoting the children's rights for period 2014-2020* (ANPDCA, 2014) pursue, regarding the behavioral health risks at teenagers, different behaviors such as: tobacco, alcohol and drugs consumption, lack of physical activity, TV and internet consumption, but also improper food behaviors. Thus, the role of the teachers and school as a whole in the students' correct information is central and should be better fitted on the children profile and needs.

The teachers' answers to the following question targeted to outline a proper profile of the professionals responsible for carrying out Health

Education in schools. 50.74% of them strongly agreed and 44.77% agreed that among the functions of the entire educational community, and especially the teaching staff, must be ways of promoting Health Education (Figure 3). According to the respondents, 59.69% agreed that is essential the presence of an outsourced professional to teach the content related to the healthy eating (32.83%), which is a little bit contradictory to another answer, 76.11% of the same group considering that teachers, concerning subjects like *natural sciences and physical education*, are responsible for imparting content of Health Education. Indeed, the teaching frameworks could be different, but new approaches proper for informal / non-formal education are useful for completing a profile of responsible professionals in charge to disseminate Health Education in schools.



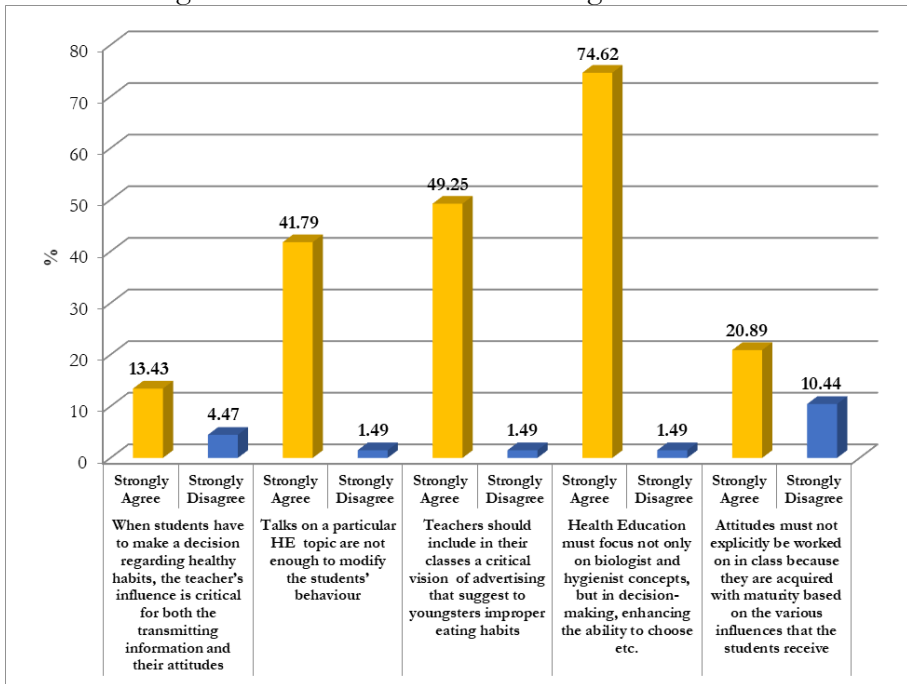
**Figure 3.** Teachers' feedback concerning the professionals responsible for carrying out Health Education in schools (source: authors' own statistics)

For a school, to have a person responsible for Health Education, is considered necessary by 82% of teachers, aspect that emphasizes the importance of this topic from the teachers' perspective, especially having in view that the knowledge behind is not static, and on the contrary, it needs a permanent attention to be updated, in the light of new scientific research and legislative requests.

Figure 4 revealed the teachers' agreement or disagreement in relation with different statements regarding the methodology to be used on teaching Health Education topics. Thus, 18% of respondents considered as non-



critical the teacher's influence for both the processes of delivering the information and modelling the students' attitude when they have to decide regarding healthy habits. More, reflections and measures should be considered, as expressed by 97% of teachers who agreed that talking on a particular Health Education topic is not enough to modify the students' behavior. Naturally, the question that arises is if the role of the teacher should not be reconsidered in this context, in the sense to find those levers that could strengthen the force of the sent messages to students.



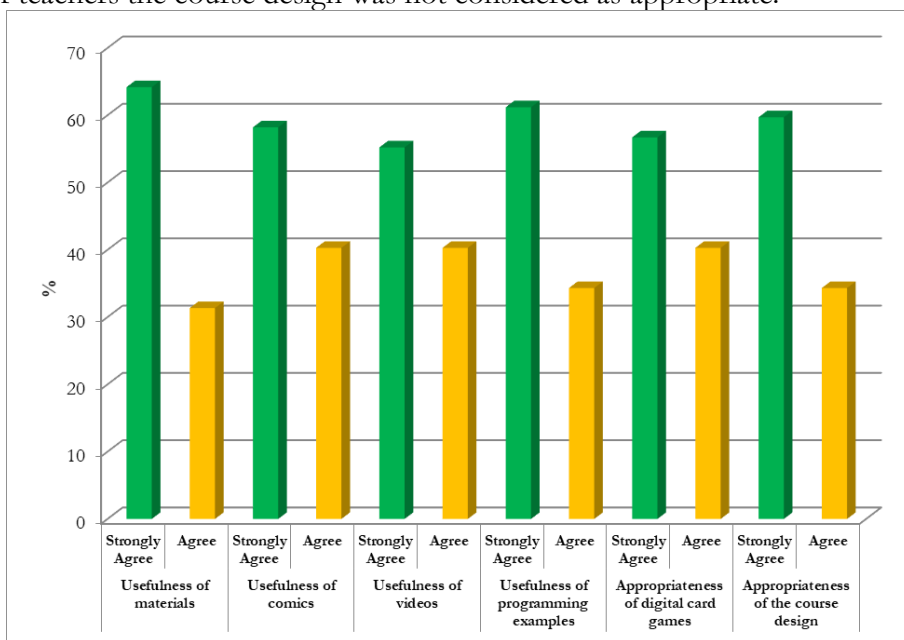
**Figure 4.** Teachers' feedback related to the methodology to be used in relation to teach Health Education topics (source: authors' own statistics)

In a world in which advertising is very aggressive (less or more honest), including the huge number of artefacts designed for food products, 94% of the teachers agreed that they should include in their classes a critical vision for the advertisements that suggest to youngsters improper eating habits.

Based on the definition previously mentioned for Health Education, the teachers were also asked to express their opinion about the learning experiences that could influence the students' attitude related to the concept. Thus, 50 from 67 graduates of the training programme "*Modern Approaches in Education for Health*" strongly agreed that Health Education must focus not

only on biologist and hygienist concepts, but also on decision-making, enhancing the ability to make proper choices, helping so the students to face the challenges. On the other hand, reiterating again the teachers' role on delivering knowledge related to Health Education, 35.82% of respondents disagreed that such attitudes must be explicitly acquired in classes, because there is a need of time for becoming mature, considering the various influences on students' behavior.

Finally, figure 5 shows the teachers' feedback in relation to the training programme followed by them. 95.5% considered that the materials provided during the activities are useful for the development of such topics for the level they are working at, and also the examples of different didactic modules represent a good aid for preparing the lessons. However, for 5.97% of teachers the course design was not considered as appropriate.



**Figure 5.** Teachers' feedback concerning the evaluation of the training programme (source: authors' own statistics)

In the frame of the Erasmus+ project “*Let's make it better! Raising the awareness of the triad nutrition-health-food safety in school education*”, there were designed and realized, as intellectual outputs, digital stories, digital card games and videos, linked to various topics of *Food Science Education* (Food nutrients, Chemical risks associated to food, Biological risks associated to food and their prevention, Food labelling, Concept of Recommended Daily

Intake, and so on). All were implemented in the classrooms, in order to ensure the project sustainability and to offer to teachers resources useful for their own activities. Analyzing the teachers' perception concerning the usefulness of all those tools, 98.49% and 97% were satisfied by digital stories and digital card games respectively. At the same time, a low percentage (4.47%) of respondents considered the use of videoclips as not being suitable for their students.

Having those results in mind and also counting the high participation of the primary teachers to the training program, and later, to the survey addressed to them after the evaluation stage, it can be assumed that a validation of the findings comes in line - in a great proportion - to the profile of the teachers who work especially with young students. Although the research could be extended to other categories and core data can be obtained considering additional variables (such as teachers' age, their level of training, rural or urban area in which the educational activity is carrying out and so on), the obtained results are useful both for people interested in designing or improving training programs related to Health Education, but also for the curriculum decision makers. In this respect, diversifying the curricular contents and its updating according to the actual trends, should be a compulsory task for those responsible for implementing Health Education in the Romanian school.

#### **4. Conclusions**

The results obtained from the questionnaires addressed to teachers can be used to improve the structure of the training program and the contents dedicated to Education for Health, regardless of the addressed educational level. Topics directly linked to Food (Human Nutrition, Food Hygiene, Food Safety and so on) should be compulsory in curricula.

Since school represents an institution with a higher moral authority, the efforts to enlarge the activities related to Health Education must be continued, including the continuous professional development of teachers, as a main priority.

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The authors of this paper stipulate, on their own responsibility, that the subjects who participated in the research have been informed related to the voluntary nature of their participation, the understanding of the received information and the fact that the withdrawal from the research process can be done at any time without any negative consequences on participants. The whole research respected the actual ethical standards and the participants expressed their consent to participate in the undertaken research.

The contribution of the authors is equal.

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## References

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- Food and Agriculture Organization of the United Nations (FAO). (1996). Rome Declaration on World Food Security. Retrieved from <http://www.fao.org/docrep/003/w3613e/w3613e00.htm>
- Institutul Național de Sănătate Publică (INSP). (2013). *Evaluarea stării de nutriție a copiilor din ciclul primar prin participarea la proiectul "European Childhood Obesity Surveillance Initiative (COSI)". Raport național 2013*. Retrieved from <http://insp.gov.ro/sites/cnepss/wp-content/uploads/2014/12/COSI-2013.pdf>
- Ministerul Educației și Cercetării (MEC). Direcția Generală pentru Activități Extrașcolare. (n.d.). *Program Național "Educația pentru Sănătate în Școala Românească"*. Retrieved from [http://gov.ro/fisiere/program\\_e\\_fisiere/program-educatie-sanatate.pdf](http://gov.ro/fisiere/program_e_fisiere/program-educatie-sanatate.pdf)
- Ministerul Muncii, Familiei, Protecției Sociale și Persoanelor Vârstnice. Autoritatea Națională pentru Protecția Drepturilor Copilului și Adopție (ANPDCA). (2014). *Strategia națională pentru protecția și promovarea drepturilor copilului 2014-2020*. Retrieved from [https://www.prostemcell.ro/images/stories/download/anexa\\_1\\_strategia\\_nationala\\_drepturile\\_copilului\\_2014-2020.pdf](https://www.prostemcell.ro/images/stories/download/anexa_1_strategia_nationala_drepturile_copilului_2014-2020.pdf)
- Ministerul Sănătății. (2016). *Strategia Națională de Sănătate 2014-2020 - Sănătate pentru prosperitate*. Retrieved from <http://www.ms.ro/strategia-nationala-de-sanatate-2014-2020/>
- United Nations General Assembly. (1980). *Resolution 35/70 from 5 December 1980, World Food Day*. Retrieved from <http://www.un.org/documents/ga/res/35/a35r70e.pdf>
- World Health Organization (WHO). (2014). *European Child and Adolescent Health Strategy 2015-2020*. Retrieved from <http://www.euro.who.int/en/about->

- us/governance/regional-committee-for-europe/past-sessions/64th-session/documentation/working-documents/eurrc6412-investing-in-children-the-european-child-and-adolescent-health-strategy-20152020
- World Health Organization (WHO). (2016). *Global Report on Diabetes*. Retrieved from  
[http://apps.who.int/iris/bitstream/10665/204871/1/9789241565257\\_eng.pdf?ua=1](http://apps.who.int/iris/bitstream/10665/204871/1/9789241565257_eng.pdf?ua=1)
- World Health Organization (WHO). (n.d.a). *Health education*. Retrieved from  
[http://www.who.int/topics/health\\_education/en/](http://www.who.int/topics/health_education/en/)
- World Health Organization (WHO). (n.d.b). *Childhood overweight and obesity*. Retrieved from  
<http://www.who.int/dietphysicalactivity/childhood/en/>