



New Trends and Issues Proceedings on Humanities and Social Sciences



Volume 4, Issue 1 (2017) 504-510

ISSN 2421-8030

www.prosoc.eu

Selected Papers of 9th World Conference on Educational Sciences (WCES-2017) 01-04 February 2017 Hotel Aston La Scala
Convention Center, Nice, France

The relationship between diet and body weight way perception on a lot of teenagers at a high school in the city of Piatra Neamt, Romania

Adriana Albu^{a*}, Department of Medicine, Iuliu Hațieganu University of Medicine and Pharmacy, 407035, Cluj-Napoca, Romania.

Raluca Mihaela Hodorca^b, Department of Medicine, Iuliu Hațieganu University of Medicine and Pharmacy, 407035, Cluj-Napoca, Romania.

Sabina Dorofte^c, Department of Medicine, Iuliu Hațieganu University of Medicine and Pharmacy, 407035, Cluj-Napoca, Romania.

Ionut Ono^d, Department of Medicine, Iuliu Hațieganu University of Medicine and Pharmacy, 407035, Cluj-Napoca, Romania.

Suggested Citation:

Albu, A., Hodorca, M. R., Dorofte, S. & Ono, I. (2017). The relationship between diet and body weight way perception on a lot of teenagers at a high school in the city of Piatra Neamt, Romania. *New Trends and Issues Proceedings on Humanities and Social Sciences*. [Online]. 4(1), pp 504-510. Available from: www.prosoc.eu

Selection and peer review under responsibility of Prof. Dr. Jesus Garcia Laborda, University of Alcala, Spain.

©2017 SciencePark Research, Organization & Counseling. All rights reserved.

Abstract

Nutrition is an essential factor for ensuring appropriate development/growth of children and youth. Objectives: knowledge of teenagers and how food is influenced by the perception of body appearance. Material and methods: the study was conducted on a sample of 189 young people at a high school. Eating habits have been appreciated with the help of a questionnaire of weekly savings, which has been applied in 2010 and 2014. Results and discussion: body weight is considered good in 70.30% cases, the differences obtained after 4 years are being statistically insignificant. Dairy products appear in menus especially 1-3 times per week (69.84%) the situation encountered and the eggs (63.49%). Animal products studied is deficient intake, which is a big problem. The dominant contribution of bread and fruit is 4-7 times per week, adapted the rules of rational nourishment. No statistically significant differences occur depending on how the perception of body weight. Conclusions: educational programs are needed which would lead to real food needs to be adapted in the body of the young.

Keywords: Diet; bodyweight; teenagers.

* ADDRESS FOR CORRESPONDENCE: **Adriana Albu**, Department of Medicine, Iuliu Hațieganu University of Medicine and Pharmacy, 407035, Cluj-Napoca, Romania.

E-mail address: adriana.albu@aut.upt.ro / Tel.: +40-256-403253

1. Introduction

The image that a person has on their own body, especially during adolescence, owing to their imaginations, emotions, perceptions and sensations. Basically, we are talking about a psychological aspect influenced by confidence and self-esteem (Bruchon-Schweitzer, 1990; Braconnier, 1999).

The problem is difficult to women where they often appear corporeal appearance-related grievances. In adolescents, the situation is made more difficult because they are looking for patterns that correspond to their aspirations and to subsequently identify themselves (Gavat, Albu & Petrariu, 2006). Models are often chosen from among the stars, top models, interpreters of music or famous footballers. Young/young looks adequate body weight adjusted to height, but cannot compare to the beauty ideal acceptable socially. In this context he/she can do a number of its appearance do not progress related to the body. The person is often seen as agile and successful, active and intelligent, while the overweight/growing is considered lazy, greedy and lacking in willpower (Craggs-Hinton, 2006).

Based on these considerations, the young begin to control their diets, but they do most of the time in an invalid way. They resort to many slimming cures, which can trigger a series of metabolic imbalance that ultimately lead to the emergence of serious health problems. Often, after surrendering to slimming cure appears gain gain favours development towards supraponderability and even obesity (Rada, 2016).

Are necessary for nutrition education programs, but to be properly carried out, starting from the specifics of nutrition. Initiating a program of providing fruit to snack, in schools is pointless on a population already consumes them. Starting from the knowledge of the dietary habits of the population can achieve consistent and effective education programs (Albu, Moraru &, Hodorca, 2015).

Educational programs intended for adolescents must be nutritional well-designed (adapted to specific nutritional imbalances adolescents), because there is a danger the manifestation of "forbidden fruit". Even if initially did not consume a particular foodstuff, at the time of his ban he gets interesting, fashionable and desirable.

Study objectives: appreciation of how young people perceive their own body weight and comparing results obtained every 4 years; Objectifying perceptions related to the appearance of the body with the help of the national standards (on adolescents questioned in 2014); assessment of the dietary habits and the extent to which these changes from one year to another; knowledge of the way in which the nourishment is changed/does not change the basis of the perception of one's own body weight; comparison of results with those obtained in other studies and even other countries.

2. Material and Method

The study was conducted on a group of teenagers (189) from the National College of computer science in the city of Piatra Neamt. Young people have between 15 and ages 18 years and older. The investigation was conducted in 2 years-in 2010 were polled 89 students and 100 teenagers in 2014. To these young people has been a weekly frequency questionnaire the food intake. We insist only on intake of dairy products and eggs for the foodstuffs of animal origin and consumption of bread and fruit or vegetables.

Response options are: zero; 1-3 times a week; 4-7 times a week. The questionnaire includes a question related to the perception of body weight: "do you think that your weight is: too low; too high; just good ". For 2014 was possible making real appreciation of how the layout of your own body through inclusion in the questionnaire of some questions about height and weight. The results obtained were compared with those of national standards.

Reference values from Romania to allow employment to weight and height in the sigmatic class. Average (mean) values are between media +/-sigma, big ones between +sigma and mean +2sigma and the bigger one mean +2sigma. Studied indicators may be small and (media -sigma and sigma-2) or very low (less than-2 sigma) (Cordeanu, Bucaleț, Stanescu, Dumitrache, & Nicolescu, 2008).

Albu, A., Hodorca, M. R., Dorofte, S. & Ono, I. (2017). The relationship between diet and body weight way perception on a lot of teenagers at a high school in the city of Piatra Neamt , Romania. *New Trends and Issues Proceedings on Humanities and Social Sciences*. [Online]. 4(1), pp 504-510. Available from: www.prosoc.eu

Higher levels of average 3 sigma and sigma media-3 are considered (for weight indicates obesity and malnutrition respectively, for her gigantism height respectively dwarfism). In this study we have insisted that there is a correlation between height and weight, what is the diagnosis of physical development. If your height and weight are placed in the same range the development is harmonic (Bardov, 2009).

If the two pointers are placed in different sigma intervals development is disharmonic with additional weight (e.g. a height set in small-or medium-range and weight in at high or very high) or minus weight (eg. height in large or medium range and weight in at low or very low) (Adriana & Cornelia, 2014).

The results will be presented and compared those two years study, which will allow us an appreciation of the extent to which they appear do not appear/changes in dietary habits. Results for the year 2014 will be processed starting from the perception of one's own body weight. Statistical processing was performed using the Pearson Chi-Square test.

3. Results

The first aspect was taken into study is the perception of their own tied body weight, dependent on the perception of the current ideal of beauty. Note the presence of 70.37% young people satisfied with the appearance of the body. There are young people who consider themselves obese, but also teenagers who must be assessed with malnutrition. Year, the differences are not significant statistically calculated ($p > 0.05$, $f = 2$, $\chi^2 = 2.942$) and leads us to the idea of the existence of a similar body appearance perceptions (Table I).

Table 1. Correlation between diagnostic and perception of one's own body weight

Development diagnosis	Too small	To big	Good	Total
Harmonic	7	13	49	69
Nonharmonic with - Weight	7	-	13	20
Nonharmonic with + Weight	-	8	3	11
2014	14	21	65	100
2010	8	13	68	89
Total	22	34	133	189
%	11.64	17.98	70.37	

For 2014 was possible perception related to making real his own body weight with the help of the diagnosis of physical development. The result is disturbing because the perception of students was concordant with the diagnosis of physical development only in 64% of cases.

The second aspect taken into study is the eating habits of strapping teenagers polled. In the category of milk products yogurt, buttermilk enters, or kefir (table II). These products are high in animal protein, mineral elements and vitamins, but it does offer a high caloric intake.

Table 2. The frequency with which dairy products appear in menus

Weekly intake	Zero	1-3 times/week	4-7 times/week	Total
Too small	3	7	4	14
Too big	2	18	1	21
Good	18	39	8	65
2014	23	64	13	100
2010	5	68	16	89
Total	28	132	29	189
%	14.81	69.84	15.34	

Dominant dairy intake is 1-3 times per week (69.84%) what is totally insufficient, balanced consumption being present only in 15.34% cases. Attention 14.81% youth who do not consume such products. The differences calculated per year are statistically significant $p < 0.01$ ($f = 2$, $\chi^2 = 11.388$) and turning to the increasing number of young people who do not consume dairy products.

For the investigation of the 2014 we can appreciate the distribution of answers depending on how perception of body weight. The results are not significant statistically ($p > 0.05$, $f = 4$, $\chi^2 = 8.225$) which is a

Albu, A., Hodorca, M. R., Dorofte, S. & Ono, I. (2017). The relationship between diet and body weight way perception on a lot of teenagers at a high school in the city of Piatra Neamt , Romania. *New Trends and Issues Proceedings on Humanities and Social Sciences*. [Online]. 4(1), pp 504-510. Available from: www.prosoc.eu

big problem, because young people tend not to change eating habits depending on how the perception of one's own body weight.

Eggs are a group of foods that have nutritional value, but it also offers modest caloric intake (table III). The dominant consumption of eggs is 1-3 times per week (63.49%), which is totally insufficient.

Attention 11.11% negative responses that highlight the existence of serious nutritional mistakes. A year is not significant statistical differences calculated ($p > 0.05$, $f = 2$, $\chi^2 = 0.022$), and in 2014 on how perception of body weight observed the presence of the same statistical insignificant differences ($p > 0.05$, $f = 4$, $\chi^2 = 4.242$). The study group is observed the existence of a strong anchorage in the present situation, traditions and other research carried out in the area.

Table 3. Intake of eggs in the batch study

Weekly intake	Zero	1-3 times/week	4-7 times/week	Total
Too small	2	7	5	14
Too big	4	14	3	21
Good	5	43	17	65
2014	11	64	25	100
2010	10	56	23	89
Total	21	120	48	189
%	11.11	63.49	25.39	

Vegetable products studied are bread and fruit. You need to pay special attention to the consumption of bread, as most young people do slimming cures tend to pull out of the diet. 20.10% of cases arise from insufficient consumption (1-3 times per week) which is a wake-up call (table IV). The situation is even more difficult to 5.29% youth who do not consume. The differences calculated years are not significant statistically ($p > 0.05$, $f = 2$, $\chi^2 = 0.353$) product that must face the idea of dietary patterns similar to the students polled.

Table 4. Weekly Consumption of bread

Weekly intake	Zero	1-3 times/week	4-7 times/week	Total
Too small	0	0	14	14
Too big	5	5	11	21
Good	1	16	48	65
2014	6	21	73	100
2010	4	17	68	89
Total	10	38	141	189
%	5.29	20.10	74.60	

Depth study conducted for students questioned in 2014 allows highlighting differences statistically significant at a $p < 0.001$ ($f = 4$, $\chi^2 = 19.561$). Students must be assessed with a body weight too low consume of bread 4-7 times a week. It's a heartening response, which orients the possibilities of existence, however the idea of amending formulae and adapting it to the body of the young necessities.

The evaluation of the fruit is very important due to the national programmes that were conducted in schools and by offering students the fruit snack. Attention 1.09% adolescents do not consume fruits and for which there is no question of initiating a national educational program. Follows young who recognize 38.62% insufficient intake of fruits. Should be monitored daily and the frequency with which they are consumed, since at a weekly frequency from 1 to 3 times, if there is a daily consumption of 3-4 times is it possible to ensure necessities(table V).

Albu, A., Hodorca, M. R., Dorofte, S. & Ono, I. (2017). The relationship between diet and body weight way perception on a lot of teenagers at a high school in the city of Piatra Neamt , Romania. *New Trends and Issues Proceedings on Humanities and Social Sciences*. [Online]. 4(1), pp 504-510. Available from: www.prosoc.eu

Table 5. The frequency with which fruits appear in the menus of the students from the study

Weekly intake	Zero	1-3 times/week	4-7 times/week	Total
Too small	1	7	6	14
Too big	0	8	13	21
Good	1	27	37	65
2014	2	42	56	100
2010	0	31	58	89
Total	2	73	114	189
%	1.06	38.62	60.31	

Assessment years observation differences not significant statistically ($p > 0.05$, $f = 2$, $\chi^2 = 2.962$), a result which appears in 2014 study on the basis of the perception of one's own body weight ($p > 0.05$, $f = 4$, $\chi^2 = 2.885$). Basically, eating food is a well-ingrained habit in the family, so that it is maintained from one generation to the next.

4. Discussion

The examination carried out has been targeted on two main directions, represented by: the perception of body weight and eating habits.

Perception of body weight is a key element, because students who perceive their body weight as being good does not have to be concerned about slimming belts. Unfortunately, the batch of study appear numerous young (36.00%) to which the perception of one's own body is flawed.

Such a situation is encountered and in France. French international survey data "Health Behaviour in School-aged children-HBSC" from 2006 reveals to 25.00% students who had a normal weight or small and they appreciate being too fatty, being dissatisfied with their body appearance. Godeau, Arnaud and Navarro (2008) was making real perceptions performed using reference values existing in Romania since 1957. Comparing with these values is preferable, due to the existence of the phenomenon of accelerated growth, a phenomenon present in all over the world. According to this phenomenon in the present children's height and weight at birth is higher than 50-60 years of age, puberty occurs more rapidly and growth ceases sooner, phenomena that cannot be highlighted by using the body mass index (Eveleth & Tanner, 1990; Alexander, 2010).

Assessment of these indicators was done starting from the students' statements, the interpretation of the results with caution, since the eigenvalues can be incorrectly known or estimated. It's a situation encountered and in studies on the French school population. Guillbert, Gautier and Baudier (2004) the proportion of children with disharmony with extra weight gain (11.00%) is not too large, being overtaken by that of the young with disharmony with minus weight (20.00%). It is a very important aspect because it often is only on young people with obesity, malnutrition has often neglected.

Assessment of dietary habits has been compared with the results of the 2010 and 2014 and by reference to the way of perception of one's own body weight for 2014. Adolescents who perceive themselves as being too fatty puts the issue of slimming cures, so their food investigation is essential. It is important to compare the results with those of colleagues in order to assess the trend of change/do not change any of the food on the basis of the appearance of the body.

Foodstuffs of animal origin are studied (dairy, eggs) and vegetables (bread and fruit).

Comparison of the results obtained in 2010 at the 2014 we obtained statistically insignificant differences frequently what orients the existence of similar eating habits. Except dairy products to which it has achieved a significant increase in the number of pupils who do not consume in 2014 as compared to results obtained in 2010 (an accentuation of problems existing already). Intake of dairy products and eggs is insufficiently questioned students contant, which in turn requires the development of coherent educational programs geared towards balanced consumption of these products. Plant products studied

Albu, A., Hodorca, M. R., Dorofte, S. & Ono, I. (2017). The relationship between diet and body weight way perception on a lot of teenagers at a high school in the city of Piatra Neamt , Romania. *New Trends and Issues Proceedings on Humanities and Social Sciences*. [Online]. 4(1), pp 504-510. Available from: www.prosoc.eu

does not give rise intake, as in most cases the values of 4-7 times a week. Bread and cereal products are rich in carbohydrate caloric intake offering over 250 kcal/100 g product.

They should not be removed from the diet because protein intake ensures consistent, but it requires the presence of balanced amounts in menus. Another finding what should be done is linked to the presence of balanced menus. The students polled by national programs to supplement benefits.

The situation is especially difficult when we do reporting of how perception of body weight. Dairy products are rich in protein normalized quality, have a moderate content of lipids and calories (50-60 kcal/100 g of product) (Zugravu & Culinca, 2009). However there is a tendency for the modification of food according to the necessities of a slimming regimen. The same situation occurs and the eggs. They are rich in protein quality, have moderate amounts of fat and caloric intake provides low (around 170 kcal/100 g of product). Webster-Gandy and Madden (2006) the differences calculated statistically insignificant face lack of concern in adapting to real food needs a slimming cure.

The results are interesting when it comes to the intake of bread, because significant statistical differences are due to the orientation of young people with a body weight too low daily consumption and not for people with a body weight too high to a low intake.

The fruits are present in the menus of most teenagers, regardless of how they perceive their own body weight. They have a low caloric value (between 50 and 70 kcal/100 g of product) being recommended for slimming cure (Wardlaw & Kessel, 2002). There appears an increasing consumption of fruit per students perceive their body weight as being too high. It is an alarming situation because they will orient to other ways of reducing body weight, represented by forgoing food intake or use of some miraculous products purchased over the internet. Such a result appeared in a survey conducted in Moldova where the number of daily meals is becoming smaller (Zaporojan, Zepca & Tarcea, 2015).

5. Conclusion

It is necessary for the development of coherent programmes of nutrition education, because results obtained are not those expected. Perception of body weight is sometimes poor, and ways of remedying the excess of weight gain are not the most suitable. Further study is needed, based on the peculiarity of nutrition of the population represented by a strong anchor in traditions. There is the possibility to influence the dietary habits, but this action must be properly designed and carried out by the specialists in the field.

Albu, A., Hodorca, M. R., Dorofte, S. & Ono, I. (2017). The relationship between diet and body weight way perception on a lot of teenagers at a high school in the city of Piatra Neamt , Romania. *New Trends and Issues Proceedings on Humanities and Social Sciences*. [Online]. 4(1), pp 504-510. Available from: www.prosoc.eu

References

- Albu, A. & Cornelia, R. (2014). The dynamics of anthropological markers among Romanian teenagers between 1978-1999. *Annuaire Roumain d'Anthropologie*, 51, 65-72.
- Albu, A., Moraru, C. E. & Hodorca, R. M. (2015). The evaluation of some eating habits at a group of teenagers studying at Dimitrie Cantemir Highschool of Iasi. *Procedia - Social and Behavioral Sciences*, 197, 1947- 1951.
- Alexander, R. (2010). *Children, their world, their education*. London and New York: Routledge.
- Bardov, A. 2009. *Hygiene and ecology*. Vinnytsya: Nova Knyha Publishers.
- Braconnier, A. (1999). *Copilul tău de la 10 ani până la 25 de ani*. București: Ed.Teora.
- Bruchon-Schweitzer, M. (1990). *Une psychologie du corps*. Paris: Presses Universitaires de France.
- Cordeanu, A., Bucleț, C., Stanescu, C., Dumitrache, C. & Nicolescu, R. (2008). Dinamica dezvoltării fizice a copiilor și adolescenților din Romania in ultimii 50 de ani. *Revista de Igiena și Sanatate Publica*, 58(2), 97-106.
- Craggs-Hinton, C. 2006. *Tulburările alimentare și silueta*. Filipeștii de Targ: Ed. Antet XX Press.
- Eveleth, P. & Tanner, J. (1990). *Worldwide variation in human growth*. Cambridge: Cambridge University Press.
- Gavat, V., Albu, A. & Petrariu, F. D. (2006). *Alimentația și mediul de viață în relație cu dezvoltarea copiilor și a tinerilor*. Iași: Ed."Gr.T.Popa".
- Godeau, E., Arnaud, C. & Navarro, F. (2008). *La santé des élèves de 11 à 15 ans en France/2006*. Paris: Éditions Inpes.
- Guillbert, P., Gautier, A. & Baudier, F. (2004). *Baromètre santé 2000. Les comportements des 12-25 ans*. Paris: Éditions Inpes.
- Rada C. (2016). Body mass index and eating habits in young adults from Romania. *International Journal of Medical Research & Health Sciences*, 5(5), 42-50.
- Wardlaw, G. & Kessel, M. (2002). *Perspective in nutrition*. Boston, Toronto: McGraw-Hill Companies, Inc.
- Webster-Gandy, J. & Madden, A. (2006). *Oxford handbook of nutrition and dietetics*. New York: Oxford University Press.
- Zaporojan, A., Zepca, V. & Tarcea, M. (2015). Regimul alimentar ca factor de risc pentru sanatatea elevilor din localitatile rurale ale Republicii Moldova. *Rev. Anthropological Researchs and Studies*, (5), 34-40.
- Zugravu, C. A. & Cilinca, G. (2009). *Igiena alimentației și nutriție*. Bucuresti: Ed.MATRIX.