Table 26 Boys

| Response variants | | a | b | c | d |
|-------------------|----------|-------|-------|-------|------|
| | 11 years | 24.07 | 12.96 | 57.41 | 5.56 |
| Frequency (%) | 12 years | 16.48 | 30.77 | 49.45 | 3.30 |
| | 13 years | 17.02 | 29.79 | 48.94 | 4.26 |
| | 14 years | 17.17 | 35.35 | 44.44 | 3.03 |

CONCLUSIONS

After administering the questionnaire to a number of 757 schoolchildren from several General Schools of Braşov Municipality, following conclusions can be formulated:

- ■30,67% of the schoolchildren from the 14 years age group are consuming sweets between main meals (Table 11 a and 12 a),
- ■14,89% of the schoolchildren from the 13 years age group are consuming fast-food, once a day (Table 13 b and 14 b)
- ■8% of the girls do not practice free time activities (Table21 d and 22 d),
- ■A high percentage of schoolchildren who spend more than 4 hours a day in front of the computer or TV set (Table 23 c and 24 c).
- ■adopting an inadequate lifestyle by most schoolchildren as they approach the second stage of puberty period..

The absence of conscientization programmes for schoolchildren, parents, teaching and medical staff regarding the negative effects of inadequate lifestyles, lead to increased numbers of those exposed to greater risk for developing excess weight and cardiovascular diseases.

RECOMMENDATIONS

- 1. The inadequate food habits should be assessed by identifying caloric excess foods.
- 2. Reducing and eliminating sedentarism in pubertal schoolchildren.
- 3. Involving schools in programmes that promote healthy foods.

BIBLIOGRAPHY

- 1. Arion, C-tin.; Dragomir, D.; Popescu, V. "Obezitatea la sugar, copil și adolescent", Editura Medicală, București, 1983;
- 2. Beers, M., H. și colaboratorii "Manualul Merk de diagnostic și tratament", Ed. a XVIII a, Editura All, București, 2006;
- 3. Căpraru, E. și Căpraru, H. "Mama și copilul", Editura Medicală, București, 2006;
- 4. Paveliu, F., S. "Supraponderalitatea și obezitatea—de la prevenție la tratament", Editura Infomedica, București, 2002;

http://www.justmed.eu/cursuri_pediatrie.php
(17.05.2011)

THE ROLE OF PHYSICAL EXERCISES IN THE TREATMENT OF THE OBESITY AT CHILDREN

Ana-Maria SIMIONESCU

"Ştefan cel Mare" University from Suceava anamaria sim@yahoo.com

Summary

In the industrial countries the feeding up is a direct cause for the death of many persons, large amounts of money being used yearly for the food and for the utilization of different diets and means of lasing weight, while in other sub-developed countries a considerable number of person die daily because of the malnutrition.

The endocrine diseases and, among them, specially obesity on purpose represents a health problem for the contemporary world.

An important alarm signal is represented by the lack of the movement and an inadequate food, specially for children. That's why the obesity installs at an early age and it is difficult to treat it.

Physical exercises are efficient means for controlling and treating this disease.

Keywords: recovery, weight, program

INTRODUCTION

Obesity in the childhood influences the health of the adult in 10-30% of cases. The probability for an obese child to become an obese adult is smaller if the period of time between the

beginning of the obesity and the mature age is longer, but the disease becomes more severe if it appears in the adolescence or it is the result of a familial pattern.

From an anthropometrical point of view:

- The relation weight/waist that overtake percentile 95 for age and sex shows an over-weight child:
- The relation present weight being more than 120% shows an obese child;
- The thickness of the tricipital cutaneous fold being over percentile 85 for age and sex shows the child's obesity.

ETIOLOGY

The genetic predisposition was proved having a look at families with obese persons. The children, who come from families in where one or both parents are obese have a raising susceptibility of being obese.

The obesity was often considered as a result of an endocrine lack of balance, because one or many endocrine glands that are involved in the control of the weight don't work properly. However, many researchers said that it would be "greediness" not a hormonal imbalance. The significance of this theory is very different: in the first case the subject of obesity is seen as having no possibility of voluntary control on his weight, and in the second case that he is directly responsible.

MEDICAL SUPPLIES AND METHODS

The group of children with whom we worked are from "M. Kogalniceanu" secondary School from Dorohoi. The children were made anthropometrical measures with the opportunity of

a test of screening of the obesity at the children. 372 pupils were measured. We noticed that 40 pupils had obesity of different stages. From all of these only 24 pupils agreed to take part in this program. Their parents agreed, too and they helped their children a lot.

The group was formed of 13 girls and 11 boys, their ages between 7-11, they were diagnosed with different forms of obesity (I, II, III). They agreed to have a diet and to take part in 2 meetings of kinetic activity, weekly.

Data about each child were written in a register card: name/first name, sex, age, heredocollateral case history, personal case history, occupation (pupil in the...grade), height, weight, BMI (initial and final), the evolution of the composition of the body.

The exercises were thought to be attractive, for the children. That's why, it was varied. The parents were asked to support their children. On Saturdays, the activity was optional. So, the children needed their parents help. They had to do an indoor or outdoor activity.

Kinetic therapy in the gym was based on exercises which were made with or without medical supplies.

RESULTS

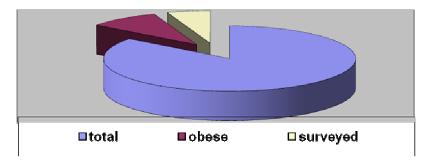
I synthesized the evolution of the parameters which we had in view, in the next table:

| e <u>tricai me</u> | asures with | the op | portun | ity oi | | | | | |
|--------------------|-------------|--------|--------|--------|--------|---------|-------|---------|-------|
| No.crt. | Name | Age | Sex | Class | Height | Weight | | BMI | |
| | First | | | | | Initial | Final | Initial | Final |
| | name | | | | | | | | |
| 1 | Τ.□ | 7,11 | M | I | 123 | 43 | 40 | 29 | 27 |
| 2 | B.C | 8,10 | M | II | 127 | 44 | 39 | 28 | 25 |
| 3 | A.E. | 7,11 | F | I | 131 | 46 | 40 | 28 | 23 |
| 4 | B.V | 8,10 | M | II | 137 | 62 | 59 | 34 | 31 |
| 5 | H.L | 8,9 | M | II | 128 | 52 | 48 | 32 | 29 |
| 6 | M.L | 9,9 | M | III | 133 | 48 | 41 | 28 | 24 |
| 7 | M.A. | 7,2 | F | I | 119 | 43 | 37 | 30 | 26 |
| 8 | E.A | 8,11 | F | II | 124 | 41 | 35 | 29 | 23 |
| 9 | P.M | 8,9 | F | II | 124 | 42 | 36 | 28 | 24 |
| 10 | D.G. | 7,11 | F | II | 124 | 37 | 32 | 25 | 22 |
| 11 | B.L. | 10,1 | F | III | 144 | 58 | 49 | 28 | 24 |
| 12 | B.A.M | 9,7 | F | III | 134 | 45 | 39 | 27 | 24 |
| 13 | D.M | 9,8 | F | III | 131 | 46 | 39 | 26 | 23 |
| 14 | F.I | 8,8 | M | III | 130 | 45 | 40 | 28 | 25 |
| 15 | A.G. | 9,8 | M | III | 136 | 57 | 50 | 31 | 28 |
| 16 | C.R. | 10,7 | M | IV | 150 | 74 | 67 | 32 | 30 |
| 17 | □A | 9,11 | M | III | 138 | 54 | 45 | 29 | 24 |
| 18 | C.D. | 10 | F | III | 130 | 44 | 39 | 28 | 24 |
| 19 | L.S. | 10 | F | III | 134 | 47 | 40 | 27 | 22 |
| 20 | E.C. | 10,8 | M | IV | 139 | 67 | 57 | 36 | 30 |
| 21 | L.C. | 10,2 | M | IV | 143 | 63 | 54 | 31 | 27 |
| 22 | D.V. | 11,2 | F | IV | 143 | 62 | 55 | 30 | 27 |
| 23 | N.E. | 10,8 | F | IV | 142 | 53 | 49 | 28 | 25 |
| 24 | S.A. | 10,9 | F | IV | 148 | 58 | 51 | 28 | 25 |

Table no.2 – "Yuhasz" table

| No.crt. | Name | | Initial | Final Marks Physical state | | % Adipose tissue | |
|---------|------------|-------|----------------|-------------------------------|-------|------------------|-------|
| | First name | Marks | Physical state | | | Initial | Final |
| 1 | T.Ş | 5 | Obese | 7 | Obese | 19 | 18,3 |
| 2 | B.C | 5 | Obese | 9 | Fat | 18.7 | 16,3 |
| 3 | A.E. | 10 | Obese | 28 | Plump | 36 | 30 |
| 4 | B.V | 0 | Obese | 5 | Obese | 21 | 20 |
| 5 | H.L | 1 | Obese | 4 | Obese | 19,8 | 19,1 |
| 6 | M.L | 6 | Obese | 9 | Fat | 18,8 | 17,6 |
| 7 | M.A. | 5 | Obese | 8 | Obese | 36 | 35,5 |
| 8 | E.A | 11 | Obese | 30 | Plump | 36 | 30 |
| 9 | P.M | 7 | Obese | 18 | Fat | 36 | 33 |
| 10 | D.G. | 8 | Obese | 29 | Plump | 35 | 30 |
| 11 | B.L. | 4 | Obese | 15 | Fat | 36 | 33 |
| 12 | B.A.M | 9 | Obese | 13 | Fat | 36 | 32 |
| 13 | D.M | 8 | Obese | 31 | Plump | 36 | 30 |
| 14 | F.I | 3 | Obese | 6 | Obese | 19,8 | 18,3 |
| 15 | A.G. | 4 | Obese | 6 | Obese | 19,2 | 18,5 |
| 16 | C.R. | 5 | Obese | 7 | Obese | 18,8 | 18,2 |
| 17 | Ş.A | 7 | Obese | 16 | Fat | 18,4 | 15 |
| 18 | C.D. | 7 | Obese | 15 | Fat | 36 | 32 |
| 19 | L.S. | 5 | Obese | 31 | Plump | 36 | 30 |
| 20 | E.C. | 6 | Obese | 10 | Obese | 19 | 18,2 |
| 21 | L.C. | 3 | Obese | 8 | Obese | 19,8 | 18,7 |
| 22 | D.V. | 5 | Obese | 9 | Obese | 36 | 35 |
| 23 | N.E. | 7 | Obese | 13 | Fat | 36 | 32 |
| 24 | S.A. | 6 | Obese | 14 | Fat | 36 | 32 |

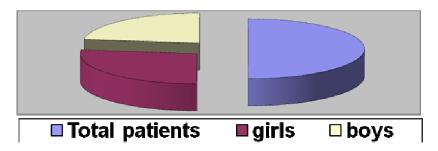
Diagram no.1 – The distribution was done taking into consideration the participation at the program



We can distinguish the big number of overweight and obese children, 40 (10,7%) – a situation which is, unfortunately confirmed by statistical data offered by the different non -governmental organizations.

Taking into consideration that more than a half of the children involved wanted to take part in the program proves that the parents are starting to realize the risks of the obesity.

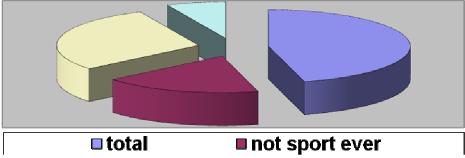
Diagram no.2 – The distribution having in view children's sex



At the end of the period (when we worked) we noticed that the two persons, who lost less than 3 Kg, were 2 boys who didn't succeed in stopping of eating sweets and paradoxically, they weren't

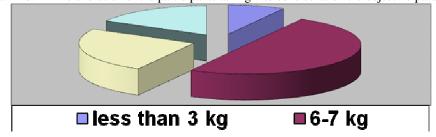
interested in the way they look like, either. Maybe this is because they are young. 3 boys and a girl got good results in the end. They lost weight more than 7 Kg.

Diagram no.3- The distribution having in view the physical activity

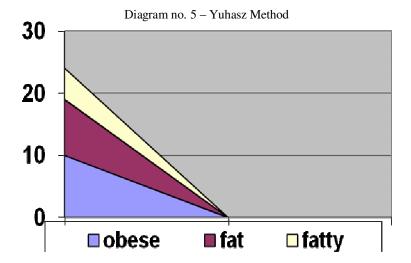


We can notice that most of the children (13) did never do sports until their participation at this program. Only 3 of them did it twice a week. That's why, they could work better than the others and the time of an activity could reach 60 min. after 3 weeks.

Diagram no.4 – The evolution of the participants taking into consideration the objective parameters



We could notice that most of the children lost about 6-7 Kg in weight. Maybe, it is not too much but it is good taking into consideration that the little children can't stop eating sweets.



There aren't so many plump children, but we must have in mind that the program lasted only 5 months and the participants were just little children. We could make them participate at the physical exercises only when these were attractive.

CONCLUSIONS

- After 5 months of activities the values of the monitored parameters improved;
- The differences of the weight show that 50% of the participants lost 6-7 Kg and only 8% of them lost under 3 Kg;
- I recorded the improvement of this category of the 24 obese participants, 9 participants were recorded as being fat, 5 of them being plump and 10 participants being obese;
- The general parameters and the general metabolism improved at the same time with an economical answer at the physical effort of the apparatus of the body;
- The main argument for practicing physical exercises regularly as a method of treatment or of preventing the obesity and its involvement is the improving of the life quality. The idea was considered a good one by 20 of the 24 participants involved in the activity;
- Finally, I noticed that all the obese children had a good perception on the practicing of physical exercise.

Perspectives

• Involving children in physical exercises programs, indoors and outdoors;

- Trying to reduce the number of children who don't take part in physical education lessons, as the documents of the Ministry of the Public Health;
- Parents must keep an eye on their children in order to avoid eating so many sweets, crisps or fast food products;
- To be aware on the matter of the healthy food, aesthetical aspect and the general strength of the obese child;
- Replacing the sedentarily activities (watching TV for a long time, spending too much time in front of the computer) with extra- curriculum sport activities.

REFERENCES

American College Of Sport Medicine, "Guidelines for exercise testing and prescription", Philadelpfia: Lea&Febiger

Bota Cornelia, "Fiziologie generală aplicată la efortul fizic", Editura Medicală, 2002

Ciofu E., "Elemente de pediatrie practică", Ed. Medicală, 2003

Colson J., Collison F, "Progresiv exercises therapy", Wright PSG, Londra 1983

Dragnea A., "Antrenamentul sportiv", București, Editura Didactică și Pedagogică, 1996

Fletcher G, Banja J, Woolf S, "Rehabilitation medicine" Ed. Iea and Febiger, Philadeplhia, 1992 Mârza Doina, "Kinetoprofilaxie primară", Tehnopress, Iași, 2005

Sbenghe T.,"Kinetologie profilactica, terapeutic si de recuperare", Editura Medicală, 1981