02 - OBESITY CHILDREN IN STUDENTS AT ARACAJU CITY

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Nowadays the one of the great concerns world-wide level is the change in the habits of life of the people resultant of the Industrial Revolution. In the industrialized societies we can observe a life style each more depraved time, fruit of the proper product of industrialization ally to the compact conditions of urban life in some cities, associating it everything this, the well-known interest for more passive diversions in substitution of the physical activities more vigorous as also for inadequate alimentary habits, creating of this form ideal conditions for the biggest accumulation of fat and therefore the development of the corporal weight in these populations, getting itself groups of sedentary people and with excess of weight.

Leaving of this estimated we can affirm our increasing interest in developing a study in the area of the Evaluation in Physical Education that could contribute for the improvement of the quality of life of the population.

According to Guedes & Guedes (1995), the excess of fat and corporal weight is followed by bigger susceptibilities of a variety of dysfunction chronic-degenerative, that raise the indices of morbidity and mortality in the world-wide populations.

The young population is each more distant time of the physical activities, mainly for the easiness that the industry placed to make use of the society. This starvation seems to contribute for an increase of the obesity in infancy, what for the development of the child it does not have very to be interesting.

Leaving of the affirmations above presented, this study it has as objective to evidence, to evaluate and to correlate the information how much to the percentage of fat and the anthropometrics measures in populations of young pertaining to school of the public and particular net of education of the city of Aracaju. These results will be of great importance in the diagnosis of the state of health of this population, thus making possible one better agreement of the quality of life between the two studied groups.

Currently, when we speak in health, we must understand that the absence of illnesses is not the health meaning complete, but, over all, she is necessary understands it as a state of complete physical, social and psychological well-being (BOUCHARD et al., 1990). Inside of this conception of health, it is evident that it is not enough, only, not to be sick; she is necessary to present attitudes that move away to the maximum the factors from risk that they can provoke the illnesses (GUEDES, 1997).

One of the illnesses that nowadays are growing very in the entire world is the obesity. In Brazil, currently, 13% of the women, 7% of amazing men and 15% of the children are obeses, a multitude of 16 million people a lot of reasons can lead to this picture of obesity. The sedentary and the bad quality of the feeding are excellent factors in this process. Obese is a person who very presents one weight beyond of that she would have, with this goes accumulating some problems of health. One obese lives, in average, the four six years less of the one than a person of normal weight. The risk to suffer from hypertension is three times bigger in adults with overweight. Obeses women present a risk three times more than to develop cardiovascular illnesses. The probability to develop diabetes type II is three times bigger in obeses individuals. Obeses people with diabetes type II have a life expectancy 35% of the one less than the not obeses ones with the same type of the illness. Men who are above of the weight present practically the double of risk of death for cerebral spill. The death for cancer is 33% greater in men and 55% in women with morbid obesity, (VEJA, 2000).

In the opinion of specialists, the biggest cause is the change in the style of life of old for the current days. In the beginning of Century XX almost it did not exist car, household-electric, remote control, elevators and the people if they put into motion well more (AXELRUD, 1999).

In research carried through for the Brazilian Institute of Geography and Statistics it shows the state of the obesity enters the women of high income, those that frequent academies and live in diet: it fell of 13% in 1989 for 8% in 1998. In compensation, in 20 years, it grew of 6% for 15% between the poor families. The guilt, is given credit, been in the change of alimentary habits provoked by the biggest access foods caloric, increasing, thus, the obesity. Works carried through in Brazil for the Health department and the Organization Pan-American of the Health studying a great one I number of children of diverse the regions, in the capital and the interior the conclusions had arrived that the statisticians of the Brazilian Society of Pediatrics had confirmed, that they show that 15% of the girls and boys are obeses, or either, one in each six children up to 10 years of age are with weight at least 20% above of the ideal. In years 80, only 3% of them were obeses, (VEJA, 2000).

One gives credit that the child and the adolescent with raised adiposity more present one strong trend to become in the future adult obeses. The study of the corporal composition between young child it will be able to offer uneven chance to produce information trustworthy, that come to assist in the identification of the problem, and in turn to contribute so that writ of prevention they are taken, about to the motor behavior and alimentary habits of this population (POEHLMAN et al., 1986; BOUCHARD et al, 1988).

Until recently, the excess of adiposity in the population young became a privilege of the countries highly industrialized; however, in Brazil, some more current studies involving small samples of determined segments of the population, have evidenced an increasing one number of cases of obesity. Indices these that in mainly leave them worried when proving a bigger accumulation of corporal fat in the young parcel of the population, which justifies some intervention (GUEDES, 1984; GUEDES & GUEDES, 1995).

MATERIALS AND METHODS

For composition of the sampling students of the 7 to the 10 years of age of both sex had been chosen intentionally, being 40 boys and 40 girls of a public school in the periphery of the city and also 40 boys and 40 girls students of the same age band of a located private school in noble area of the capital, of this form totalizing 160 searched pupils.

For measurement of the corporal weight a scale with precision of 100g was used, following the methodology proposal

for Filho (1999).

The corporal stature was measured using a metric ribbon with precision of 1cm fixed the wall, point zero was to a meter of the ground, following all the orientation proposals for Filho (1999).

The percentage of fat was evaluated in accordance with the orientation proposals for Slaughter (1988), that it defines the protocol for children and adolescents of 7 the 18 years. The measures of the cutaneous folds (DC) had been carried through the triceps level and to sub scapular using the compass of cutaneous folds "CESCORF". The calculation of the percentage of fat (%G) for the boys and girls was carried through used the regression equation proposal for Slaughter (1988):

² = Calculation DC triceps e sub scapular

Boys G% = 1.21 (²) - 0.008 (²)² - 2.6

Girls G% = 1.33 (²) - 0.013 (²)² - 2.5

Important: when the calculation of the values of thickness of the DC 35mm to present superior, will be used to determine G% the formulas to follow:

Boys G% = 0.783 (²) + 1.6

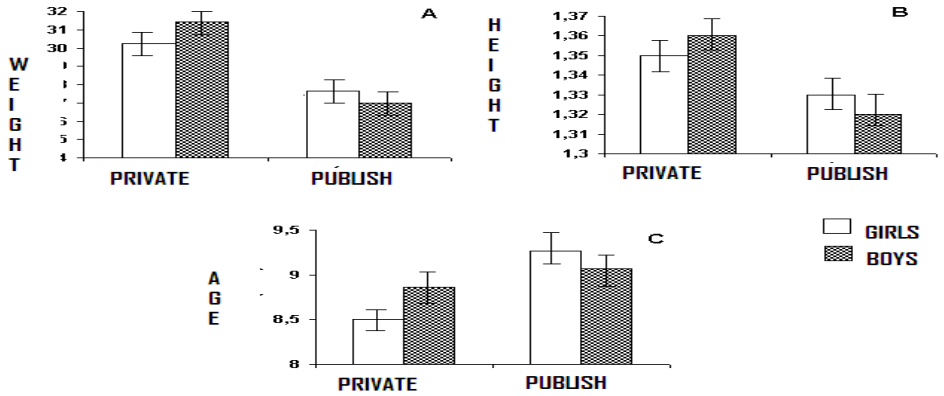
Girls G% = 0.546 (²) + 9.7

The ideal corporal weight was found in the graph of development for boys and girls of 2 the 18 years considered by HAMIL (1979) & TANNER (1970).

The analysis statistics of the differences between the found average values in the two studied populations was carried through using test t student, found in software statistic for Windows version 5.1. The value of used p was of 0,05.

RESULTS AND DISCUSSION

Figure 1 - Graph of the average values of weight (a), height (b) gotten in the anthropometrics measures and age (C). The bars shown in each graph represent the average and shunting line standard of the data collected in the girls and boys of the private school and publish.



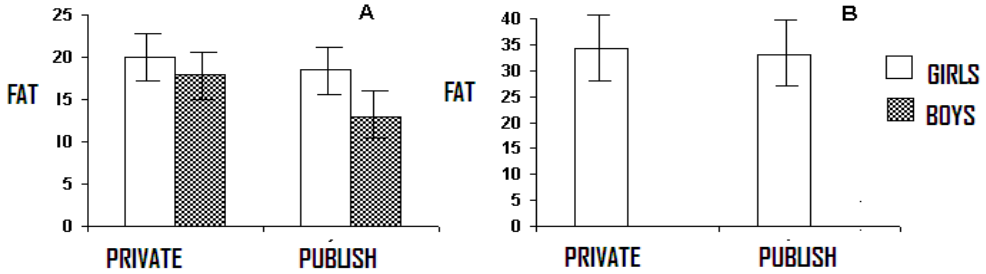
In the results of the contained anthropometrics variable in the graphical A, it can be observed that the children of the particular school had more presented raised average values of corporal weight of the one than of the public school however these had not been significantly different ($p > 0.05$), in such a way for the girls how much for the boys.

With regard to average of the heights presented in the graphical B, the pupils of the particular school they had also presented greater corporal stature that the pupils of the public school however can be observed that the average values had not presented significant difference between them.

With the relation the average of the ages presented in graphical C, the pupils of the public school had presented higher values of the one than the particular school.

After the analysis of the results of the three changeable ones above we can affirm that the children of the particular school are younger, however if they present with raised stature and weight more.

Figure 2 - Graphs of the average values of the percentage of fat (G%) gotten in girls and boys of the private school and publish. In (A) we have G% when the calculation of the cutaneous folds was inferior 35mm and in (B) superior 35mm.

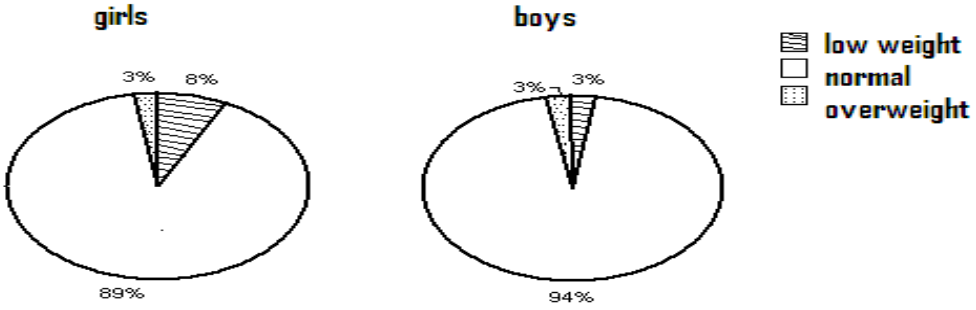


In the graph we can observe It that the average values of fat G% of the girls had been presented higher of the one than of the boys in such a way in the private school how much in the publish. It was still observed that the pupils of the private school had demonstrated higher values of fat G% of the one than of the publish school these had however not been significantly different for one ($p > 0.05$).

In the graphical B we can observe that the average values of fat G% of the girls of the particular school and public school had not presented significance statistics, however these had been bigger in the girls of the private school. With relation to the boys none in case that it were found.

Analyzing the graphs of the percentages of fat of the private school and it publishes we can observe that these values more had been raised in the private school in such a way when the calculation of the cutaneous folds was inferior 35mm and when 35mm was superior, characterizing this as a population with raised index of fat more.

Figure 3 - Graphs demonstrating the distribution of the population studied how much to the corporal weight.



In accordance with the presented graphs of distribution above we can affirm that 89% of the girls present a standard of normal corporal weight. Already in 8% of the population of the girls they had presented low weight and 3% overweight. With relation to boys 94% they met in conditions of normality and only 3% with low weight and 3% with overweight.

CONCLUSION

On the basis of the analyzed data we can conclude that the children of the particular school had presented greater corporal weight, bigger height however lesser age when compared with the children of the school it publishes. This in takes them to suggest that the children of the school publish are with déficts in its development. With relation to the percentage of fat we observe that childrens of the private school had presented higher average values, making possible to conclude us that these have a bigger predisposition to develop futures problems with the obesity.

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OBESITY CHILDREN IN STUDENTS AT ARACAJU CITY

ABSTRACT

The obesity is one of the illnesses that nowadays high level of growth in the world presents. In Brazil according to Brazilian Institute of Geography and Statistics 13% of the women, 7% of amazing men and 15% of the children are obeses. In the opinion of specialists some reasons can lead to the obesity, amongst them the sedentary and the bad alimentary habits are the main ones. The objective of this study was to determine and to compare the anthropometrics measures and the percentage of fat in students of the public and private school. 160 children between 7 to the 10 years of age had been evaluated. The anthropometrics evaluation consisted of the weighing and measure of the stature. The percentage of fat was gotten through the protocol of Slaughter(1988). The results had demonstrated that the students of the private school had presented themselves with raised height and weight more of the one than the pupils of the school publishes. In the evaluation of the percentage of fat the pupils of the public net had presented the percentages lowest. Of this form we can conclude that the lesser values of corporal weight and height observed in the children of the school publish suggest a deficit in its development. With relation to the percentage of fat we observe that the children of the private school had presented higher average values, concluding that these have a bigger predisposition to develop futures problems with the obesity.

KEY-WORDS: anthropometry, percentage of fat and obesity

OBÉSITÉ INFANTILE DANS DES ÉCOLIERS DANS LA VILLE DE ARACAJU
RÈSUMÉ

L'obésité est une dês maladies lesquelles de nos jours présente élevé niveau de croissance dans le monde. Au Brésil selon l'Institut Brésilien de Géographie et de Statistique 13% dês femmes, 7% dês hommes et étonnants 15% des enfants est obèse. Dans l'avis de spécialistes plusieurs raisons peuvent conduire à l'obésité, parmi elles la séddentarité et les mauvaises habitudes alimentaires sont les principaux. L'objectif de cette étude a été déterminer et comparer les mesures anthropométriques et le pourcentage de graisse dans des étudiants du filet public et particulier d'enseignement. Ont été évalués 160 écoliers de 7 la 10 ans d'âge. L'évaluation anthropométrique a consisté du pesage et de la mesure de la stature. Le pourcentage de graisse a été obtenu à travers le protocole de Slaughter (1988). Les résultats ont démontré que les étudiants de l'école particulière se sont présentés avec hauteur et poids plus élevée de ce que les élèves de l'école publie. Dans l'évaluation du pourcentage de graisse les élèves du filet public ont présenté les pourcentages plus basses. De cette forme nous pouvons conclure que les moindres valeurs de poids corporel et la hauteur observée dans les enfants de l'école publient suggèrent un déficit dans leur développement. Concernant le pourcentage de graisse nous observons que les enfants de l'école particulière ont présenté des valeurs moyennes plus élevées, se concluant que celui-là ont une plus grand prédisposition à développer des avenirs problèmes avec l'obésité.

MOTS-CLES: anthropométrie, pourcentage de graisse et obésité

LA OBESIDAD INFANTIL EN ESTUDIANTES EN LA CIUDAD DE ARACAJU
RESUMEN

La obesidad es una de las enfermedades que el alto nivel del crecimiento en el mundo presenta hoy en día. En el Brasil según el instituto brasileño de la geografía y de la estadística los 13% de las mujeres, el 7% de hombres asombrosos y el 15% de los niños son obeses. En la opinión de especialistas algunas razones pueden conducir a la obesidad, entre ellos el sedentario y los malos hábitos alimenticios son los principales. El objetivo de este estudio era determinar y comparar las medidas de las antropométricas y el porcentaje de la grasa en estudiantes de la escuela privada y pública. Habían evaluado a 160 niños entre 7 a los 10 años de la edad. La evaluación de las antropométricas consistió en pesar y la medida de la estatura. El porcentaje de la grasa fue conseguido con el protocolo de Slaughter (1988). Los resultados habían demostrado que los estudiantes de la escuela privada se habían presentado con altura levantada y cargan más de la que las pupilas de la escuela publican. En la evaluación del porcentaje de la grasa las pupilas de la red pública habían presentado los porcentajes lo más bajo posible. De esta forma podemos concluir que pocos valores del peso corporal y de la altura observados en los niños de la escuela publican sugieren un déficit en su desarrollo. En relación al porcentaje de la grasa observamos que los niños de la escuela privada habían presentado valores medios más altos, concluyendo que éstos tienen una predisposición más grande para desarrollar problemas de los futuros con la obesidad.

PALABRAS-CLAVE: antropometría, porcentaje de la grasa y obesidad

OBESIDADE INFANTIL EM ESCOLARES NA CIDADE DE ARACAJU
RESUMO

A obesidade é uma das doenças que nos dias de hoje apresenta elevado nível de crescimento no mundo. No Brasil segundo o Instituto Brasileiro de Geografia e Estatística 13% das mulheres, 7% dos homens e espantosos 15% das crianças são obesos. Na opinião de especialistas vários motivos podem conduzir à obesidade, dentre eles o sedentarismo e os maus hábitos alimentares são os principais. O objetivo deste estudo foi determinar e comparar as medidas antropométricas e o percentual de gordura em estudantes da rede pública e particular de ensino. Foram avaliadas 160 crianças entre 7 a 10 anos de idade. A avaliação antropométrica constou da pesagem e medida da estatura. O percentual de gordura foi obtido através do protocolo de Slaughter (1988). Os resultados demonstraram que os estudantes da escola particular apresentaram-se com altura e peso mais elevado do que os alunos da escola pública. Na avaliação do percentual de gordura os alunos da rede pública apresentaram os percentuais mais baixos. Desta forma podemos concluir que os menores valores de peso corporal e altura observada nas crianças da escola pública sugerem um déficit no seu desenvolvimento. Com relação ao percentual de gordura observamos que as crianças da escola particular apresentaram valores médios mais elevados, concluindo-se que esses têm uma maior predisposição a desenvolver futuros problemas com a obesidade.

PALAVRAS-CHAVE: antropometria, percentual de gordura e obesidade.