INTRODUCTION
The overweight and the obesity in children, teenagers and adults are public health crescent problems not only in developed countries, therefore the World Health Organization (WHO) announced recently that the obesity is the newest world syndrome, in view that a high prevalence may be found also in rising economic nations, the case of Brazil (DUTRA, ARAUJO e BERTOLDI, 2006).

National studies about the prevalence of overweight and obesity, in Brazil, are scarce. Normally the available data about it are those obtained in National study of the Familiar Expenditure (Estudo Nacional da Despesa Familiar - ENDEF), done in 1974-75; in the National Research about Health and Nutrition (Pesquisa Nacional sobre Saúde e Nutrição - PNSN), done between June and September in 1998; and in the Research about the Life Styles (Pesquisa sobre Padrões de Vida - PPV), done in 1996-1997 only in the southeast and northeast regions from Brazil (COSTA, CINTRA e FISBERG, 2006).

In the last years have been observed a rise of obesity prevalence in the poorer regions and reduction in the richer ones, becoming this way the obesity present in the different economic levels, like in the first world countries, where the biggest majority of the overweight or obese children belong to a medium-low economic level families (REZENDE, 2006; RONQUE et al., 2005).

A fact that has concerned the specialists is that the overweight and obesity developing are been verified each time more in earlier ages. This way, the obesity prevalence in childhood and adolescence has occupied a detach duty in discussions related to the young health, motivating the achievement of diverse studies, once a time that the body fat excess in children and teenagers, like that in older populations, may represent a danger risk factor to the health (MONTEIRO et al., 2000).

The rise of obesity prevalence in teenagers, is accompanying a tendency already observed some years ago in the developed countries, even in regions where the prevalence appointed the undernourishment and the knowledge about these advances may contribute to a better comprehension of the problem and possible interventions (VASCONCELOS & SILVA, 2003).

Therefore this study aims to verify the overweight and obesity index in both sex teenagers in a public school from Fortaleza-CE.

METODOLOGY
Sample
This study has a transversal character, was done with students from the Liceu do Ceará school, in the city of Fortaleza-CE, comprehending the age of 14 - 19 years old, which the sample was chose by convenience. The data collect was done in August and September 2006.

<table>
<thead>
<tr>
<th>AGE</th>
<th>Female</th>
<th>Male</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>14</td>
<td>8</td>
<td>3</td>
<td>11</td>
</tr>
<tr>
<td>15</td>
<td>42</td>
<td>27</td>
<td>69</td>
</tr>
<tr>
<td>16</td>
<td>63</td>
<td>54</td>
<td>117</td>
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<tr>
<td>17</td>
<td>24</td>
<td>24</td>
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</tr>
<tr>
<td>18</td>
<td>15</td>
<td>17</td>
<td>32</td>
</tr>
<tr>
<td>19</td>
<td>2</td>
<td>5</td>
<td>7</td>
</tr>
<tr>
<td>Total</td>
<td>154</td>
<td>130</td>
<td>284</td>
</tr>
</tbody>
</table>

Instruments and Procedures
Before the data collect, was done a training of the evaluators in view of guarantee the precision of the measure obtained and the faithfulness of the study. The technical material used was a flexible rule, with precision of 1 cm, brand Easy read, model Cateb. Also was used a digital balance, brand Plenna, model Wind, graduated in 100g and maximum capacity of 150 kg.

To determinate the stature was adopted this procedure: The children barefoot, with the heels on the wall where the rule was put, looking forward orientating the head to let the Frankfurt Line parallel to the floor and with non-breathing inspiration, after a maximum expiration. To determinate the body weight was adopted this procedure: The children stood up, looking forward, non-touching anywhere and wearing only light clothes. After the data acquisition, was applied the BMI form (Weight/Height² ) and after that the result was inserted in the curls of the Centers for Disease Control and Prevention (CDC) that give the BMI according to the age, and later the result was inserted in one of the levels: undernourishment, normal, overweight or obesity. The Waist Circumference was measured in the natural waist, like, between the down ribs and the iliac top.

To analyze the results was used the descriptive statistic and the Test of "Qui-Quadrado", among the male and female groups and Person to correlaction using the statistic package SPSS 13.00.

RESULTS
Were evaluated 286 students, being 156 females (54,5%) and 130 males (45,5%). In the table 1, are the percentages of overweight, obese, undernourishment and normal weight students. The overweight and the obesity, together, reached 17,7% of the boys and 12,1% of the girls.

TABLE 2. SAMPLE CLASSIFICATION ACCORDING TO THE GENDER.

<table>
<thead>
<tr>
<th>Sex</th>
<th>Undernourishment</th>
<th>Adequated</th>
<th>Overweight</th>
<th>Obesity</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boys</td>
<td>N %</td>
<td>N %</td>
<td>N %</td>
<td>N %</td>
<td>N %</td>
</tr>
<tr>
<td>Girls</td>
<td>N %</td>
<td>N %</td>
<td>N %</td>
<td>N %</td>
<td>N %</td>
</tr>
</tbody>
</table>

The overweight and the obesity prevailed in the age of 14 - 16 years old respectively, with 10,7% and 4,6%. Trough the Qui-Quadrado Test was verified the exists a dependence between the sex and the nutritional classification with a significant level.
(α = 5%).

About the WC and BMI correlations, the data showed an association statistically relevant (r = 0.64) among the measured teenagers. See graphic 1.

![Graphic 1](attachment:image.png)

About the physical activity practice among the teenagers the results (50%) were equal to both genders.

**DISCUSSION**

In this study the weight adequacy index showed was considered relevant. However, the overweight and obesity index showed was considered high in the sample studied. Like nutritional classification method, was used the BMI that comes being advised by the International Obesity Task Force to describe the obesity prevalence in children and teenagers in the whole world and analyze the secular tendencies (SOUZA LÉAO et al. 2003).

The National Health and Nutrition Examination Survey made a research in the years 1999 - 2000, which indicated that 15.5% of the american teenagers, among 12 - 16 years old were classified as overweight. Not being limited until the USA, also was verified that teenagers in Mexico and from Africa that already were living in the country, were 26.6% classified as obese (SLYPER, 2004).

In Brazil the overweight and obesity index comes rising relevantly. Some studies showed a high overweight index in teenagers from better economic levels (GUEDES & GUEDES, 1999). However other studies start to detach the rise of excess weight in teenagers from a lower economic level, like in the USA where the overweight and obesity index have bigger representative, related to the low and medium economic level classes (Bar-Or, 2003; SOUZA LÉAO, 2003; COSTA, CINTRA e FISBERG 2006).

In the city of Fortaleza already was observed, through a study with students from the public school web, that 72.7% of the children are in the normality, 4.6% are obese and 6.6% are in overweight. In the same study was verified an undernourishment decline and increase in the obesity and overweight index (MORAIS et al., 2006). Corroborating what is cited by other studies when they emphasize the transition from undernourishment to the obesity and overweight in lower economic levels.

This study, just like many others is proving that in some places in Brazil the overweight and obesity index comes being detached specially in male students, mainly from the public school web (QUADROS, et al. 2006; COSTA, CINTRA e FISBERG, 2006; SILVA et al., 2003).

Being opposite to this study, articles prove that the overweight index among the female gender, is much bigger than the male gender (ABRANTES, LAMOUNIER e KOLOSSIMO, 2003; SILVA & MALINA, 2000).

Even that the female gender have more tendency to the overweight, because the bigger fat and body weight accumulation get worse in the adolescence (GUEDES & GUEDES, 1998).

Even that the aim of this study was not the nutritional prevalence, being present in many articles of this same research line, the nutritional question is really relevant. Even during the data collect many measured students were consuming candies that have a great caloric index and a low nutritional quality, like, candies, snacks, among many others in the same nutritional line. Like risk factor, the obesity duty is controversy, however, the best explanation to the relation among obesity and heart illness is that this would happen in an obese subgroup, like, in the people that show accumulation of localized fat in the abdominal, or central, even in the absence of the generalized obesity. In the newest studies, the abdominal fat is being considered like a strong heart risk, in contraposition to diverse others fat indicators like cardiovascular factor (PITANGA & LESSA, 2006).

In the analyses between the BMI and the WC was found a good correlation (r=0.64), confirming other studies which showed a bigger coefficient when is related BMI and WC than when is related BMI and RCQ (SOAR et al., 2004; TAYLOR et al. 2000). This way was verified that, even with the incidence of overweight does not have reached it majority like in other studies, the correlation shows a good indicative to coronary illness among the measured students.

The reasons of the nowadays epidemic of the young obesity are not clear. However can not be excluded the nutritional consume and the sedentary. This way, the incentive to the physical activity practice should be stronger among the children and teenagers, because already many students come showing relation between obesity and free time watching TV. In this study, was verified that 50% of the students practiced physical activities, being the school physical education the most cited among them (BAR-OR, 2003; CRESPO & COL, 2001; NHANES III, 1996).

**CONCLUSION**

The results of this study revealed that the overweight and obesity index were bigger in the male students than in the female gender, being a relevant difference in the relations between the gender.

With the results obtained in this research, suggest an accompanying in the nutritional diet to improve the health conditions of these streets, and an incentive to the physical activity practices at home, at gym or in the school.

**REFERENCES**


CRESPO, C.J.; E. Smit, R.P. TROIANO, S.J. BARTLETT, C.A. MACERA, and R.E. Andersen. Television watching...


El sobrepeso y la obesidad no solo son recientes en países desarrollados. Recientemente la organización mundial de la salud (OMS) consideró a la obesidad la más nueva síndrome mundial. En Brasil, estudios de prevalencia de sobrepeso y obesidad todavía son escasos, por ende especialistas están seguros que, el desarrollo de sobrepeso y obesidad está atingiendo edades cada vez más precoces. Por lo tanto el presente estudio tiene como objeto verificar el índice de sobrepeso y obesidad en adolescentes de ambos sexos de una escuela pública de Fortaleza-CE. El estudio tuvo un carácter transversal y fue realizado en el Colegio Liceu do Ceará con escolares de 14 a 19 años de edad, fue realizado un entrenamiento con los avaladores para garantizar la precisión de las medidas y la versatilidad del estudio. Para la recolección de los datos fue utilizada una trena flexible (Easyread) con precisión de 1 cm y una balanza digital Plenna con capacidad de 150 kg. Fue mensurado el peso y la estatura para la determinación del IMC, según los criterios del CDC. Los resultados fueron analizados a través de estadística descriptiva y realizados los test de Qui-quadrado e Person. De los 284 escolares avalados, 154 son del sexo femenino (54,5%) e 130 del sexo masculino (45,5%). El sobrepeso e obesidad fueron mayores en el sexo masculino, prevaleciendo en la faixa etária de 14 a 16 años. El test qui-quadrado constató dependencia entre sexo e clasificación nutricional. La correlación IMC e CC presentó asociación de r=0,64 y la realización de actividad física fueron iguales para ambos sexos. Los resultados obtenidos en esta pesquisa sugieren un acompañamiento nutricional para mejorar el estado de salud de estos estudiantes, además del incentivo a la práctica de actividades físicas en casa y en las escuelas de los mismos.

Palabras-chave: obesidad, sobrepeso, escolares.