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A revista Motricidade (ISSN 1646-107X, eISSN 2182-2972) é uma publicação científica trimestral, propriedade das Edições Desafio Singular. A política editorial da revista visa contribuir para o desenvolvimento e disseminação do conhecimento científico de caráter teórico e empírico nas áreas científicas do desporto, psicologia e desenvolvimento humano, e saúde, adotando sempre que possível uma natureza interdisciplinar.

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Journal Motricidade is a scientific electronic journal, publishing quarterly and property of Desafio Singular Editions. Its editorial politics aim is contributing to the development and dissemination of scientific knowledge of theoretical and empirical character in the context of sports, psychology and human development, and health assuming whenever is possible an interdisciplinary commitment.

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Index Coverage

O15. PéAtivo program: Baseline results of physical activity, overweight, caloric intake of snacks and screen activities

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INTRODUCTION

The contemporary society is characterised by technological and scientific processes, among others, that have triggered the creation of new social, economic and cultural contexts with repercussions in the way of life. Among the major changes in current society's behaviour patterns, there is an increase in the levels of sedentarism and hypercaloric diets, on detriment of physical activity (PA) practice and healthy eating habits. The aims of this study were to characterise, and to compare between sexes, the baseline values of overweight, PA levels, hours of sleep, time spent on screen activities and the nutritional value of the snacks in pre-school children.

METHODS

The sample consisted of 241 pre-school children (121 boys and 120 girls), aged between 3 and 6 years old (4.49 ± 0.69), from Bragança city. Several anthropometric variables were evaluated and the nutritional value of the snacks was calculated based on photographic record. The PA levels were monitored using the New-Lifestyles NL-2000 pedometer. A questionnaire was used to categorize the sedentary behaviours and the sleeping hours. To compare between sexes, it was used a chi-square test for the nominal variables and a t-test for continuous variables.

Table 1

Mean values \pm standard deviations of anthropometric variables, hours of sleep, time spent watching television (Tv) and playing videogames (Pc/games) on weekdays and weekends, caloric value of morning and afternoon snacks, and number of steps (PA) performed on weekdays and at the weekends, by sex.

| | Mean \pm SD ♂ | Mean \pm SD ♀ | Mean \pm SD ♂ | p value |
|--------------------------|------------------------|------------------------|------------------------|---------|
| Age (years) | 4.49 \pm 0.69 | 4.50 \pm 0.68 | 4.48 \pm 0.68 | 0.93 |
| Height (m) | 1.09 \pm 0.06 | 1.08 \pm 0.06 | 1.09 \pm 0.06 | 0.93 |
| Body mass (kg) | 19.27 \pm 3.61 | 19.13 \pm 3.99 | 19.42 \pm 3.14 | 0.59 |
| BMI (kg/m ²) | 16.25 \pm 1.79 | 16.30 \pm 1.97 | 16.19 \pm 1.57 | 0.68 |
| Abdominal Perimeter (cm) | 53.11 \pm 4.91 | 53.06 \pm 5.49 | 53.18 \pm 4.16 | 0.88 |
| % Fat | 23.31 \pm 3.39 | 24.38 \pm 2.53 | 22.07 \pm 3.83 | 0.00* |
| BMI Percentil | 55.96 \pm 29.20 | 55.76 \pm 29.59 | 56.15 \pm 29.03 | 0.94 |
| Hours of sleep (hours) | 9.94 \pm 1.04 | 9.88 \pm 1.06 | 10.01 \pm 1.02 | 0.44 |
| Tv week (hours) | 1.46 \pm 0.77 | 1.55 \pm 0.74 | 1.35 \pm 0.80 | 0.12 |
| Tv weekend (hours) | 2.24 \pm 1.05 | 2.19 \pm 0.99 | 2.30 \pm 1.11 | 0.52 |
| Pc/games week (hours) | 0.55 \pm 0.55 | 0.51 \pm 0.55 | 0.60 \pm 0.56 | 0.32 |
| Pc/games weekend (hours) | 1.01 \pm 0.91 | 0.90 \pm 0.91 | 1.14 \pm 0.90 | 0.11 |
| Morning snack (Kcal) | 195.36 \pm 103.54 | 183.48 \pm 104.45 | 207.61 \pm 101.95 | 0.19 |
| Afternoon snack (Kcal) | 361.77 \pm 119.13 | 360.86 \pm 118.20 | 362.78 \pm 121.20 | 0.93 |
| PA week (steps n°) | 13927.94 \pm 3652.37 | 13956.02 \pm 3791.77 | 13894.35 \pm 3512.12 | 0.93 |
| PA weekend (steps n°) | 11819.35 \pm 4593.51 | 11721.65 \pm 4624.64 | 11919.88 \pm 4592.91 | 0.80 |

*p \leq 0.05.

RESULTS

The results showed that 6.7% of the children had lower weight, 79.1% normal weight and 14.2% overweight. Regarding the levels of PA, the results showed that: on weekdays, 8.1% had low levels of PA, 52.0% were physically active and 39.8% were very active; on weekends, 25.7% had low levels of PA, 52.9% were physically active and 21.4% were very active. On screen activities, it was found that 50.6% of the children spent more than 2 hours/day in weekdays and 88.3% at the weekend. Regarding the snacks that children took to kindergarten, 24.8% were considered healthy, 44.4% little healthy and 30.8% unhealthy. 74.5% of children slept less than 10 hours/day. None of these variables presented statistically significant differences between sexes. The Table 1 shows mean values comparisons of the different variables, by sex. Only significant differences were found in the percentage of fat (girls = 24.38 ± 2.53 and boys = 22.07 ± 3.83 ; $p < 0.05$).

CONCLUSIONS

The prevalence of overweight in pre-school children in Bragança is high. The PA levels are lower on weekend compared to weekdays, and only 1/4 of the children took healthy snacks to the kindergarten. These results highlight the importance of a structured intervention on pre-school level to increase children's PA, through active transportation to school and promotion of healthy lifestyles through meetings and lectures with the parents.