117 - EATING HABITS, NUTRITIONAL PROFILE AND PHYSICAL ACTIVITY LEVELOF SCHOOLCHILDREN IN THE CITY ABADIANIA-GO

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INTRODUCTION

In previous decades, obesity was a problem for adults. Nowadays, this complication is affecting younger people. The childhood obesity compromises the health of the child. It can be diagnosed in individuals suffering from obesity problems like type 2 diabetes, hypertension and high blood cholesterol and triglycerides. In addition, children may develop psychological problems. The jokes, intimidation, or rejection by classmates, being marginalized by the look they have, can cause low self-esteem and eating disorders (FELGUEIRAS, 2011).

The practice of regular physical activity is often recommended as part of an action for reducing the excessive accumulation of body fat (RIBEIRO et al., 2012). Furthermore, the combination of a good diet with healthy habits promotes a better cardiac and muscular functioning, being able to provide a better quality of life (KRUG; MARCHESAN, 2009).

Upon the occurrence of physical inactivity by the young and by the increase in obesity (MORAES et al., 2009) it becomes important to make a diagnosis of the current situation of the nutritional profile, eating habits and physical activity levels in a group of school children who are exposed to greater nutritional risk and changes in lifestyle. The objective of the study was to identify the profile of eating habits and physical activity of schoolchildren aged 8 to 10 years, comparing the nutritional profile of school children of both sexes and verifying if the eating habits of students are achieving the values needed for good nutrition.

METHODOLOGY

This study was transversal, descriptive and quantitative. The research was done in an educational institution in the city of Abadiânia-GO. The population consisted of school children, with a sample of 55 children of both sexes aged 8 to 10 years who were invited to participate in this study and whose parents signed a consent form.

Height was measured with a WCS wall stadiometer. Body mass was measured using a plataform scale of the brand Filizola. With these data, it was calculated the body mass index (BMI), defined as weight in kilograms divided by height in meters squared (COLE et al., 2000).

To proceed with the search, a modified lifestyle questionnaire was used (BARROS; NAHAS, 2003), which evaluated the physical activity level of children and identified their eating habits, according to the procedures described by Venancio (2006).

The questionnaire allows, through retrospective information of self-remembrance, the obtainment of information about: a) demographics (gender and age), b) perception of physical activity, c) distance from home to school, d) transport used to go to school, and) sports f) housework and leisure activities of the ones assessed.

For this, it was considered the type of physical activity, the intensity of physical exertion (mild, moderate, vigorous) and the weekly frequency of these activities. For conversion of the obtained information in physical activity in estimated values of energy expenditure, it was used the compendium of physical activities proposed by Ainsworth et al. (2000), which provides information on energy expenditure, in metabolic equivalent units of work for a particular activity, for almost five hundred forms of physical activity.

As a result, it was established a cutting point, through the overall score obtained in the sum of physical activities, using the classification of quartiles where were considered physically inactive children who scored below the 25 percentile, the insufficiently active were those with percentile between 25 and 50, moderately active ones showed between 50 and 75 percentile and active children above 75 percentile.

For the children's eating habits, it was used as a reference the new food pyramid cited in other studies (BARBOSA; COSTA; SOARES, 2006; VENÂNCIO, 2006).

After summed portions, the eating was classified as: adequate (3 nutrients within the desirable portions of the pyramid), insufficient (3 nutrients below the desirable portions of the pyramid), and excessive (3 nutrients above the desirable portions of the pyramid).

To fulfill the objective of this study a descriptive analysis was done as average, standard deviation and frequency and the Mann-Whitney "t" test to detect differences between sexes using SPSS 11.0 software.

RESULTS AND DISCUSSION

Table 1 presents the anthropometric characteristics of the study sample. When analyzing the children's BMI average, it appears that both sexes are within the range considered healthy according to Cole et al. (2000).

Tabela 1. Anthropometric characteristics of the surveyed children.

Characteristics	Gender		
	Male(n=24)	Female (n=32)	Total (n=56)
Age (years)	---	9,28 ± 0,72	9,28 ± 0,77
Height (m)	1,40 ± 0,48	1,38 ± 0,05	1,39 ± 0,05
Weight (Kg)	35,51 ± 2,46	36,40 ± 3,57	36,02 ± 3,15
BMI (Kg/m^2)	18,09 ± 1,60	18,99 ± 1,88	18,61 ± 1,80

The development of the present study has highlighted some important findings, it was found that 36.8% of children were overweight and 61.4% had acceptable weight, there were no children with obesity (Figure 1). It is known that obesity and

overweight children are growing worldwide and it predisposes the child to become an obese adult. Obesity is a risk factor for cardiovascular disease, and is associated with several diseases that cause premature death (MORAES, 2009). Keher et al. (2007) found that the younger children are overweight, more likely they will be obese in adulthood.

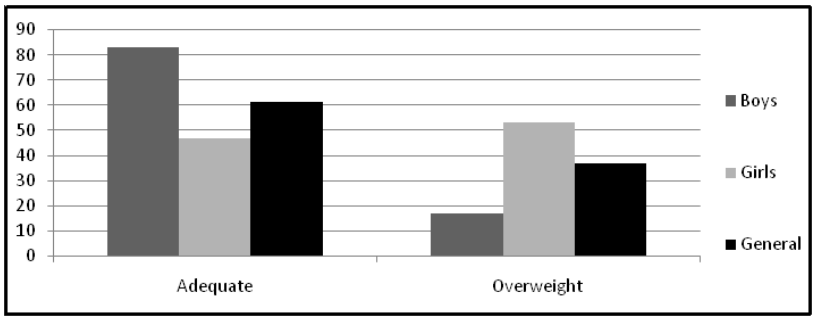


Figure 1 - Characterization of the overall nutritional profile and comparison between sexes. (p = 0.006).

By analyzing the nutritional profile of children it was found that 72% have insufficient eating, 23% had an eating considered adequate and 5% had excessive food consumption, as shown in Figure 2.

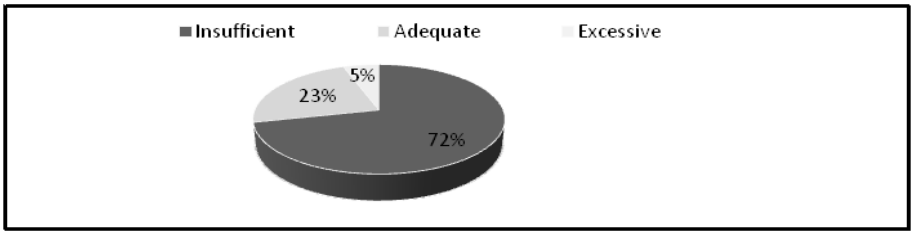


Figure 2 - Classification of Eating habit of the children surveyed.

According to Maria et al. (2006) and Teixeira et al. (2011) the child is very vulnerable in terms of nutrition, when inadequate food supplies can be crucial to her health. In the present study it was found that children's feeding is insufficient, this feeding behavior may contribute to future health problems. It was also found that 5% of children have excessive eating and that this behavior can lead to overweight and obesity in the future. Garcia et al. (2003) highlights that inadequate nutrition is one of the factors that may promote childhood obesity and bring serious damage to the health of children.

Figure 3 confirms the result of insufficient nutrition, however, in the comparison between the sexes, both boys and girls are with insufficient eating, there was no difference between the sexes.

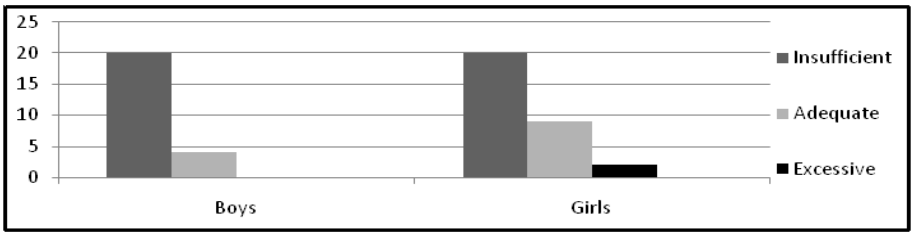


Figure 3 - Comparison of the nutritional profile of both sexes. (P = 0.071).

It appears that children may in the future have some health problems due to the inadequate feeding. With regard to these health problems, Sawaya (2006) highlights that there is a vicious cycle of inadequate food consumption / increase some health hazards as: weight loss, poor growth, impaired immunity, poor food absorption, gastrointestinal damage, among others. Dornelles et al. (2012) in a study on nutritional risk and malnutrition in children and teenagers say the correct nutritional diagnosis, effective nutritional intervention may be suggested to mitigate future health complications. These results found can give parameters so that future interventions with these children can be performed.

According to Figure 4, the time spent by children out of school is spent as follows: 43% said they do sports, 21% watch TV, 18% play and 18% help at home.

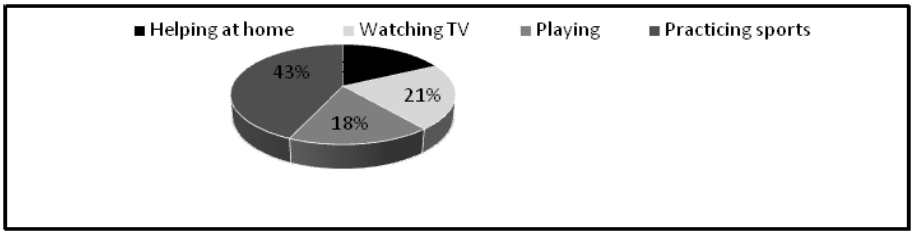


Figure 4 - Time spent by children out of school.

The results show that most children spend their time outside of school practicing sport, however, it is important to consider in the results that 39% of children are in activities that do not represent energy expenditure as helpin at home and

watching TV. Toigo (2007) when analyzing the level of physical activity during leisure time in children and adolescents highlighted alarming aspects of the low level of systematized physical activities done outside of school.

The difference between the sexes in terms of time spent out of school, there was a tendency for boys to practice more sports than girls, as shown in Figure 5. The boys help more at home than girls, boys play less than girls, girls watch more TV than boys. However, statistically there was no significant difference between the sexes.

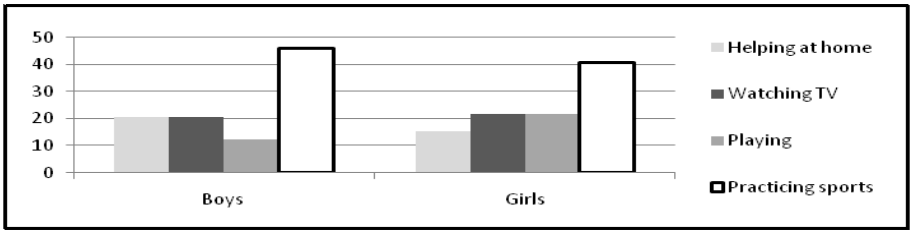


Figure 5 - Time spent out of school for both sexes. (P = 0.972).

In the study conducted by Costa and Assis (2010) with students from seven to ten years as well as in this study, it was found that the habit of watching TV was more common among girls, while the boys were spending the same time with greater frequency in front of a videogame. It is up to the family to dose this situation which allied to the school should promote education for an active and healthy lifestyle.

In Figure 6 it was compared the physical activity levels between boys and girls. Among the girls 21.9% are active and boys 45.8% are. The moderately active activities are present in 25% of the girls while in the boys are 12.5%. As for activities classified as insufficiently active, girls are 25% and boys are 20.8%. Concerning the sedentary behavior, girls are with 28.1% and boys with 20.8%. There was no difference between the sexes.

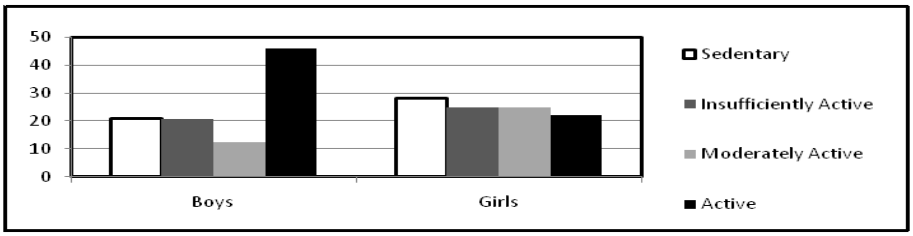


Figure 6 - Classification of the physical activity level for both sexes. (P = 0 473).

According Assis and Costa (2010) the practice of physical activity in children can bring immediate and future benefits, preventing disease and promoting quality of life. The data suggest that boys benefit from the physical exercise by presenting a more active lifestyle.

In the present study, girls have a tendency of a lower level of physical activity than boys. Thus, authors such as Keher et al. (2007) advocate that intervention with physical activity is needed since childhood, because by doing so it is possible to obtain effectiveness in combating obesity and its consequences.

CONCLUSION

The survey revealed that the students are not generally in a state of obesity, however, reached 36.8% of overweight schoolchildren. Children are generally active, although some fit in the sedentary and insufficiently active categories. Most children spend their time outside of school practicing sport, however, it is important to consider in the results that 39% of children are in activities that do not represent energy expenditure as helping at home and watching TV. As for food consumption, 72% of children have insufficient eating, 23% have a diet considered adequate and 5% have excessive food consumption.

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EATING HABITS, NUTRITIONAL PROFILE AND PHYSICAL ACTIVITY LEVELOF SCHOOLCHILDREN IN THE CITY ABADIANIA-GO

ABSTRACT

This study aimed to identify the nutritional profile, eating habits and physical activity of school children aged 8 to 10 years comparing the sexes. The study was transversal, descriptive and quantitative. The population consisted of students who were 55 children of both sexes aged 8 to 10 years. We used a modified lifestyle questionnaire of Barros and Nahas (2003), which evaluated the physical activity level of children and identified their eating habits. To the completion of this work, a descriptive analysis and the Mann-Whitney "t" test to detect differences between the sexes were done using the SPSS 11.0 software. It was found that 46.42% of children were overweight and 53.58% were with an acceptable weight. As for eating habits it was found that 72% have insufficient, 23% adequate and 5% excessive eating. The time spent by children outside of school is spent as follows: 43% play sports, 21% watch TV, 18% play and 18% help at home. As for the level of physical activity, 21.9% of female students are active against 45.8% of male students. Concerning children with sedentary behavior, girls are 28.1% and 20.8% boys. It was concluded that overweight has reached almost 50% of school children who in general are active, as for food consumption, 72% of the children had insufficient eating and most children spend their time outside of school practicing sport.

KEYWORDS: school, overweight, nutritional profile, physical activity, childhood obesity.

HEBITUDES ALIMENTAIRES, L'ÉTAT NUTRITIONNEL, L'ACTIVITÉ PHYSIQUE DE L'ÉCOLE DANS LA VILLE D'ABADIANIA-GO.

RÉSUMÉ

Cette étude visait à déterminer l'état nutritionnel, les habitudes alimentaires et l'activité physique des écoliers âgés de 8 à 10 ans comparant les sexes. L'étude était transversale, descriptive et quantitative. La population était composée d'étudiants âgés de 55 enfants des deux sexes âgés de 8 à 10 ans. Nous avons utilisé un questionnaire modifié le mode de vie Barros et Nahas (2003), qui a évalué le niveau d'activité physique des enfants identifiés et leurs habitudes alimentaires. Pour réaliser ce travail, une analyse descriptive et de Mann-Whitney test pour détecter les différences entre les sexes, en utilisant le logiciel SPSS 11.0. Il a été constaté que 46,42% des enfants étaient en surpoids et 53,58% de poids étaient acceptables. En ce qui concerne les habitudes alimentaires a révélé que 72% ont une alimentation insuffisante, 23% suffisante et 5% trop. Le temps consacré par les enfants à l'extérieur de l'école est dépensé comme suit: 43%faire du sport, 21%regardent la télévision, 18% jouent et 18% d'aide jeu à la maison. L'évaluation du niveau d'activité physique a montré que 21,9% des filles sont actives contre 45,8% des garçons. L'inactivité physique a été identifiée dans 28,1% des filles et 20,8% des garçons. Nous concluons que le surpoids a atteint près de 50% des étudiants. Les enfants sont habituellement active. En ce qui concerne l'apport alimentaire, 72% des enfants avaient une nourriture insuffisante et la plupart des enfants passent leur temps à l'extérieur de l'école pratique d'un sport.

MOTSCLÉS: école, surpoids, état nutritionnel, activité physique, obésité infantile.

HÁBITOS ALIMENTICIOS, PERFIL NUTRICIONAL Y NIVEL DE ACTIVIDAD FÍSICA DE ESCOLARES DE LA CIUDAD DE ABADIÂNIA – GOIÁS

RESUMEN

El presente estudio tuvo como objetivos identificar el perfil nutricional, los hábitos alimenticios y la práctica de actividad física de escolares de edades comprendidas entre los 8 y los 10 años, comparando ambos sexos. El trabajo tuvo un carácter transversal, descriptivo y cuantitativo. La muestra fue constituida por 55 niños y niñas en edad escolar. Fue utilizado un cuestionario modificado de estilo de vida de Barros e Nahas (2003), que evaluó el nivel de actividad física de los niños y niñas e identificó sus hábitos alimenticios. Para efectuar la investigación fue realizado un análisis descriptivo y la prueba “t” Mann-Whitney, con el objetivo de verificar las diferencias entre ambos sexos, utilizando el Software SPSS 11.0. Se constató que el 46,42% de los escolares mostraban sobrepeso y el 53,58% presentaban un peso aceptable. Respecto a los hábitos alimenticios, se identificó que el 72% presentaban una alimentación insuficiente; el 23%, adecuada y el 5%, excesiva. El tiempo libre de los escolares, fuera del colegio, es utilizado de la siguiente forma: el 43% practica deporte; el 21% ve la televisión; un 18% juega y el 18% restante ayuda en las tareas del hogar. En lo tocante al nivel de actividad física, el 21,9% de las niñas son activas con respecto al 45,8% de los niños. El 28,1% de las niñas presentaron un estilo de vida sedentario frente al 20,8% de lo niños. Se concluye que el sobrepeso alcanzó casi al 50% de los escolares, aunque los niños y niñas, en general, son activos. Sobre el consumo alimentario, se concluye que el 72% de los escolares presentaron una alimentación insuficiente y que la mayor parte de los niños y niñas gasta su tiempo fuera del colegio practicando deporte.

PALABRAS CLAVE: escolares, sobrepeso, perfil nutricional, actividad física, obesidad infantil.

HÁBITOS ALIMENTARES, PERFIL NUTRICIONAL E NÍVEL DE ATIVIDADE FÍSICA DE ESCOLARES DA CIDADE DE ABADIÂNIA-GO

RESUMO

O presente estudo teve como objetivos identificar o perfil nutricional, hábitos alimentares e a prática de atividade física de escolares de 8 a 10 anos comparando os sexos. O trabalho teve caráter transversal, descritivo e quantitativo. A população constituiu de escolares, sendo 55 crianças de ambos os sexos na faixa etária entre 8 a 10 anos. Foi utilizado um questionário modificado de estilo de vida de Barros e Nahas (2003), que avaliou o nível de atividade física das crianças e identificou seus hábitos alimentares. Para a realização deste trabalho foi feita uma análise descritiva e o teste "t" Mann-Whitney para verificar as diferenças entre os sexos, utilizando o Software SPSS 11.0. Constatou-se que 46,42% das crianças eram sobrepesadas e 53,58% apresentavam peso aceitável. Quanto aos hábitos alimentares identificaram que 72% apresentam uma alimentação insuficiente, 23% adequada e 5% excessiva. O tempo despendido pelas crianças fora da escola é gasto da seguinte maneira: 43% praticam esporte; 21% assistem TV; 18% brincam e 18% ajudam em casa. Quanto ao nível de atividade física, 21,9% das meninas são ativas contra 45,8% dos meninos. Com o estilo sedentário, as meninas apresentam 28,1% e os meninos 20,8%. Conclui-se que o sobrepeso atingiu quase 50% dos escolares, as crianças em geral são ativas, quanto ao consumo alimentar, 72% das crianças apresentaram uma alimentação insuficiente e a maior parte das crianças gasta o seu tempo fora da escola praticando esporte.

PALAVRAS CHAVE: escolares, sobrepeso, perfil nutricional, atividade física, obesidade infantil.