135 - NUTRITIONAL STATE OF CHILDREN OF THE CITY OF BOA VISTA - RORAIMA

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Introduction:

The area of the human development, specifically the infantile development, intends to understand the occurred transformations in this period and, to verify, by evaluations, the real and waited state for determined phase of the development. The evaluation of the nutritional state in childhood represents important information on the status of health of a population. It is known, in the literature, that children who present alterations related to the malnutrition or the excess of weight present greater probability to present certain problems on health (GIANT et al. 2003, MONEGO & GARDEN, 2006).

The nutritional state related to the health is consequence of the balance between the consumption of nutrients and the energy expense of the organism to supply the nutritional necessities. In childhood the adjusted alimentary ingestion is associated with the growth and healthful development. On the other hand, the nutritional riots are the resultant consequences of the abuse or disequilibrium in the consumption of nutrients in relation to the nutritional necessities (SOUZA and CRUZ, 2006).

Literature points the existence of a substantial risk of morbidity in children unfed and overweight even though before they reach the adult age. The morbidities are similar to those found in the adult population, including rise of the blood pressure, dislipidemia, bigger prevalence of factors associated with the insulin resistance and to diabetes type II (MONEGO & GARDEN, 2006, PIPE et al., 2005).

Many studies point to an increase on the prevalence of overweight and obesities in recent years (TREMBLAY and WILLMS, 2000; BUNDRED, KITCHINER and BUCHAN, 2001).

In Brazil, the transition of a serious infantile malnutrition to a obesity epidemic has happened in an accented way (FERTILE VALLEY, WEDGE and SICHIERI, 2004), leading to an increasing concern with the creation of public politics of health, interested toward the control in corporal weight (VIGITEL, 2006).

In an inquiry lead for Engstrom and Anjos (1999), a prevalence of 14,4% of malnutrition due to low stature was verified (15.9% in boys and 12.9% in girls). In relation to the prevalence of overweight, Fernandes, Gallo and Advíncula (2006), studying children of the city of Mogi Guaçú, São Paulo, observed that 18.7% and 7.5% of the investigated citizens were overweight and obese respectively. Study carried through for Abrantes, Lamounier and Colosimo (2002) identified a prevalence of obesity of 11,9% in a group of children of Southeastern region and 8.2% in northeast children.

Salomons, Rech and Loch (2007) had evaluated the nutritional state of 1647 scholars (842 boys and 805 girls) of the municipal net of education of the city of Arapoti/PR, with ages between 6 and 10 years. The authors had observed that 59.5% of the boys and 53.2% of the girls were eutrophic. In relation to the prevalence of malnutrition, in the boys the chronic, former and current malnutrition's had respectively presented values of 1,4%, 10.5% and 9.1%. In the girls, these prevalence's had been of 1,4%, 12.2% and 11.1%, respectively. The prevalence of overweight was of 9,4% in boys and 10.6% in girls. In relation to the obesity, it was observed that 10.1% of the boys and 11.7% of the girls presented this characteristic

Objective:

The objective of the study was to identify to the nutritional state of children of both sexes, with ages between 7 and 10 years regularly registered in a public school in the city of Boa Vista/Roraima and classifies them in accordance to the considered criteria of health.

Methodology:

The study was characterized as descriptive-exploratory, the sample was composed for 311 scholars, being 154 boys with average age of 8,3±1,1 years and 157 girls with average age of 8,4±1,1 years. The used instruments were a digital scale (corporal mass), an estadiometer (height) and the registration form of the children in the school (age). The nutritional state was related by the Index of Corporal Mass (IMC) using the criteria of Conde & Monteiro (2006), that were elaborated specifically for use in sample of Brazilian children and adolescents. For analysis of the data it was used descriptive statistics (average, shunting line standard and distribution in frequencies and percentages). For comparison between the sexes test "t" of *student* was used for independent samples.

Results:

The main joined results can be visualized in Tables 1 and 2.

Table 1. Distribution of the averages and shunting lines standards of the IMC, for age and sex.

Age	Index of Corporal Mass (kg/m^2)	
	Male	Female
7 years	15,7 1,8	15,6 2,0
8 years	15,8 1,7	15,9 1,9
9 years	16,0 2,6	16,2 2,4
10 years	17,2 3,3	16,0 1,7

In relation to the averages of the IMC (table 1) an increment in the values with passing of the age in both sexes can be observed, but in the female with 10 years of age. When carried through test "t" in the general sample significant differences (p 0,05>) between the sexes had not been found.

Table 2. Frequency in accordance with the classification of the IMC for sex.

SEX	Classification IMC	Frequency	%
Male	Low Weight	2	1,3
	Eutrophic	133	86,4
	Overweight	17	11
	Obesity	2	1,3
Female	Low Weight	3	1,9
	Eutrophic	129	82,2
	Overweight	21	13,4
	Obesity	4	2,5

In table 2 a bigger concentration of citizens was identified in the classification of eutrophic with 86,4% for the boys and 82.2% for the girls, differentiating itself of studies carried through in other Brazilian regions, where the authors had found a bigger occurrence of overweight cases and obesity (SALOMONS, RECH and LOCH, 2007; FERNANDES, GALLO and ADVÍNCULA, 2006; ABRANTES, LAMOUNIER and COLOSIMO 2002; ENGSTROM and ANGELS, 1999).

Conclusions:

In a general way it can be concluded that the nutritional state of the evaluated citizens was presented inside of normality, without representative values in the extreme degrees of the classifications proposals for this study.

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The area of the human development, specifically the infantile development, intends to understand the occurred transformations in this period and, to verify, by evaluations, the real and waited state for determined phase of the development. In this direction, the objective of the study was to identify the nutritional state of children of both sexes, with ages between 7 and 10 years regularly registered in a public school in the city of Boa Vista /RR and classifies them in accordance to the considered criteria of health. The study was characterized as descriptive-exploratory, the sample was composed for 311 scholars, being 154 boys with average age of 8,3±1,1 years and 157 girls with average age of 8,4±1,1 years. The used instruments were a digital scale (corporal mass), an estadiometer (height) and the registration form of the children in the school (age). The nutritional state was related by the Index of Corporal Mass (IMC) using the criteria of Conde & Monteiro (2006). For analysis of the data it was used descriptive statistics (average, shunting line standard and distribution in frequencies and percentages). For comparison between the sexes test "t" of *student* was used for independent samples. In relation to the averages of the IMC an increment in the values with passing of the age in both sexes can be observed, but in the female with 10 years of age. When carried through test "t" in the general sample significant differences (p 0,05>) between the sexes had not been found. The biggest concentration of individuals was identified in the classification of eutrophic with 86,4% for boys and 82.2% for the girls. In a general way it can be concluded that the nutritional state of the evaluated citizens is presented inside of normality, without representative values in the extreme degrees of the proposals classifications for this study.

Key-Word: Nutritional state, Children, Index of corporal mass

ÉTAT NUTRITIONNEL DE LES ENFANTS DU MUNICIPE DU BOA VISTA - RORAIMA

La zone du développement humain, em spécifique le développement infantile, cherche comprendre les transformations que ont bien dans ce période, et vérifier, au moyen d'évaluations, l'état réel et attendu pour determiné phase du développement. Dans ce sens, l'objectif de l'étude a été identifier l'état nutritionnel d'enfants de l'um et l'autre sexes, avec des âges entre 7 et 10 ans régulièrement matricules dans une école publique dans le municipe de Boa Vista /RR et classifier d'accord les critères de la santé que sant proposés. L'étude a été caractérisé comme descriptif-exploratoire, l'échantillon a eté composté pour 311 écoliers, en train d'être 154 garçons ave l'age moyen de 8,3±1,1 ans et 157 petite filles avec l'âge moyens de 8,4±1,1 ans. Les instruments utilisés ont été une balance digitale (volume corporel), une l'hauteur et la fiche de matricule de les enfants (âge). L'état nutritionnel a été référé opur l'index de Volume Corporel (IMC) en train d'utiliser les critères de Conde & Monteiro (2006). Pour analyse de dés ont utilisé de statistique descriptif (moyens, déviation, paradigme et distribution en fréquences et pourcentages). Pour comparaison entre les sexes ont utilisé le texte « t » de *student* pour échantillons indépendants. Avec

relation les moyens du IMC pous pouvons observer un incremento dans les valeurs avec le passer de l'âge en l'un et l'autre sexes, avec exception dans le sexe féminin à dix ans. Quand ant réalisé le texte « t » dans l'échantillon général n'ont été trouvé différences significatifs (p> 0.05) entre les sexes. La plupart de la concentration de sujets a été identifié dans la classification d'eutrófico avec 86.4% pour les garçons et 82,2% pour les petites filles. En général nous pauvous conclure que l'état nutritionnel des sujets évalué se présente dans la normalité, sans valeurs représentativité dans les degrés extrêmes de les classifications proposé pour cette étude.

Mots clé: État nutritionnel, Enfants, IMC

ESTADO NUTRICIONAL DE LOS NIÑOS DE LA CIUDAD DE BOA VISTA - RORAIMA

El área del desarrollo humano, específicamente el desarrollo infantil, intenta comprender las transformaciones ocurridas en este período y, verificar, por medio de evaluaciones, el estado verdadero y esperado para la fase resuelta del desarrollo. En esta dirección, el objetivo del estudio fue identificar al estado nutricional de los niños de ambos los sexos, con edades entre 7 y 10 años registrados regularmente en una escuela pública en la ciudad de Boa Vista /RR y clasificarlos de acuerdo a los criterios considerados de la salud. El estudio fue caracterizado como descriptivo-exploratorio, la muestra fue compuesta por 311 alumnos, siendo 154 muchachos con la edad media de 8,3±1,1 años y 157 muchachas con la edad media de 8,4±1,1 años. Los instrumentos usados fueron una escala digital (masa corporal), un estadiometro (altura) y la ficha del registro de los niños de la escuela (edad). El estado nutricional fue relacionado por el índice de Masa corporal (IMC) que usaba los criterios de Conde y Monteiro (2006). Para el análisis de los datos fue utilizada la estadística descriptiva (medio, desvío y la distribución en frecuencias y porcentajes). Para la comparación entre sexos la prueba “t” de *student* fue utilizada para las muestras independientes. Con relación a los promedios del IMC se puede observar un incremento en los valores con pasar de la edad en ambos los sexos, con la excepción en el sexo femenino a los 10 años de edad. Cuando echa la prueba “t” en la muestra general no fueron encontradas diferencias significativas (p 0.05>) entre los sexos. La concentración más grande de ciudadanos fue identificado en la clasificación del eutrófico con el 86.4% para los muchachos y 82.2% para las muchachas. De una manera general puede ser concluido que el estado nutricional de los ciudadanos evaluados se presenta dentro de la normalidad, sin valores representativos en los grados extremos de las clasificaciones propuestas para este estudio.

Palabra-llave: Estado Nutricional, niños, Índice de la masa corporal

ESTADO NUTRICIONAL DE CRIANÇAS DO MUNICÍPIO DE BOA VISTA - RORAIMA

A área do desenvolvimento humano, especificamente o desenvolvimento infantil, busca compreender as transformações ocorridas neste período e, verificar, por meio de avaliações, o estado real e esperado para determinada fase do desenvolvimento. Nesse sentido, o objetivo do estudo foi identificar o estado nutricional de crianças de ambos os sexos, com idades entre 7 e 10 anos regularmente matriculados em uma escola pública no município de Boa Vista/RR e classificá-los de acordo com os critérios de saúde propostos. O estudo foi caracterizado como descritivo-exploratório, a amostra foi composta por 311 escolares, sendo 154 meninos com idade média de 8,3±1,1 anos e 157 meninas com idade média de 8,4±1,1 anos. Os instrumentos utilizados foram uma balança digital (massa corporal), um estadiômetro (altura) e a ficha de matrícula das crianças (idade). O estado nutricional foi referido pelo Índice de Massa Corporal (IMC) utilizando os critérios de Conde & Monteiro (2006). Para análise dos dados utilizou-se da estatística descritiva (média, desvio padrão e distribuição em freqüências e porcentagens). Para comparação entre os sexos utilizou-se o teste “t” de *student* para amostras independentes. Com relação às médias do IMC pode-se observar um incremento nos valores com o passar da idade em ambos os sexos, com exceção no sexo feminino aos 10 anos de idade. Quando realizado o teste “t” na amostra geral não foram encontradas diferenças significativas (p>0,05) entre os sexos. A maior concentração de sujeitos foi identificada na classificação de eutrófico com 86,4% para os meninos e 82,2% para as meninas. De um modo geral pode-se concluir que o estado nutricional dos sujeitos avaliados apresenta-se dentro da normalidade, sem valores representativos nos graus extremos das classificações propostas para este estudo.

Palavras-chave: Estado nutricional, Crianças, IMC