182 - GROWTH AND NUTRITIONAL STATE OF SCHOOLCHILDREN OF THE CENTER OF SPORT AND LEISURE SANTA ETELVINA - NORTH AREA OF MANAUS.

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INTRODUCTION

The growth and the nutritional state have been the indicators more used for the attendance of the infantile development, during the period in that the child is linked to the school. It is known that the period of the beginning of the education corresponds to the prelude of the pull of the growth, time in that the child tries an accelerated growth provoked by the beginning of the puberty (KREBS & POHLS, 2000).

For Marcondes (1988) apud Corseuil (1998) the study of the child's growth tries to detach the individual differences, and that it forms the aspects biopsicossociais influence in that process. Because the growth depends on the genetics and of favorable environmental factors to happen in a satisfactory way.

The environmental factors that more has been receiving researchers' special attention through studies are: the level of physical activity and the feeding, for they be fundamental for the growth process and the child's development and of the adolescent. Besides the growth and development, other subject that it deserves attention it is the nutritional state, that actually depends a lot on the conditions of the child's life and of the adolescent. An appropriate feeding contributes to a nutritional state considered normal, a poor feeding in nutrients will implicate for a malnutrition state, and a feeding in excess can contribute for the obesity state.

The objective of this research was to analyze and to identify the growth levels and the children's nutritional state and adolescents, in the age group from seven to 14 years, visitors of the Center of Sport and Lazer Santa Etelvina North Area of Manaus-AM

METHODOLOGY

The sample is constituted by children and adolescents, being 87 female and 178 male. For the mensuração of the weight variables and stature, the procedure was used described by Ferreira (2005). once obtained the data for weight and stature, the evaluation of the nutritional state was accomplished by the peso/estatura criteria and estatura/idade, being used as reference pattern the model of National Center it goes Health and Statistics (NCHS), recommended by the World Health Organization (WHO, 1995). The data were submitted to the program of Evaluation and Nutritional State in Pediatrics (PED) to execute the calculations of the nutritional state and the respective weight percentis and stature (I AX & KREBS, 1997). Para the statistical treatment, we opted for the exploratory descriptive technique, where the values of average, medium, were analyzed divert pattern and variation width.

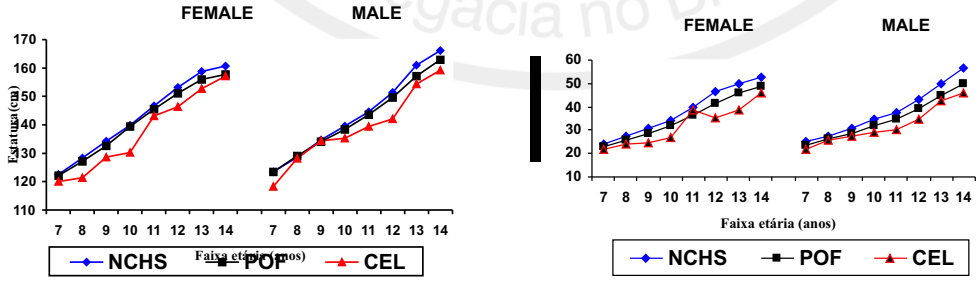
COLLECTION OF DATA

For measurement of the stature, a portable estadiômetro was used, of scale milimetrada. The appraised was put on the base of the estadiometro, tends their points of the heel, of the hip, of the scapular waist and the area occipital leaned in the measurement board, with the head positioned in the plan of Frankfurt. The reading of the measurement was made by the appraiser when the base of the cursor of the measurement board leaned the vertex of the appraised.

For the collection of the corporal weight, a mechanical scale was used, of the mark Filizola, with capacity of 150 Kg. The appraised was put in the center of the emborrachado of the scale, in static position, with the minimum of clothes so that the appraiser made the reading of the corporal weight, and to each ten weightings, the scale was gaged.

RESULTS AND DISCUSSION

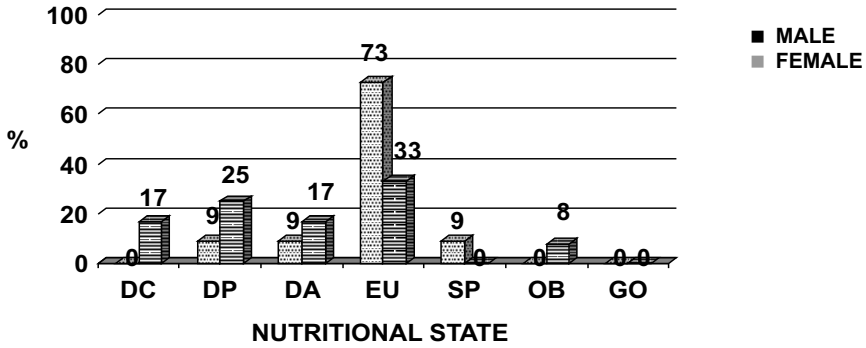
In agreement with the obtained results, we observed that, regarding the growth the scholars of Santa Etelvina's CEL presented in the stature variables and corporal weight, smaller values to the of the comparison studies, in both sexes, as we observed in the graphs 1 and 2:



The appraised schoolchildren are shown below the pattern of reference of NCHS, being shown contrary to the study of Poletto (2001) that investigated the level of scholars' growth in the same age group of this research, and, however he/she obtained positive results, because the appraised scholars presented superior values to the of the pattern of reference of NCHS, as well as the studies of Coppet (1996), Arruda (1997) and Machado (1997), that you/they also found values above the reference pattern NCHS. That fact demonstrates that our scholars tend to present corporal weight and smaller stature than the one of other studies accomplished in Brazil, in the areas south and southeast.

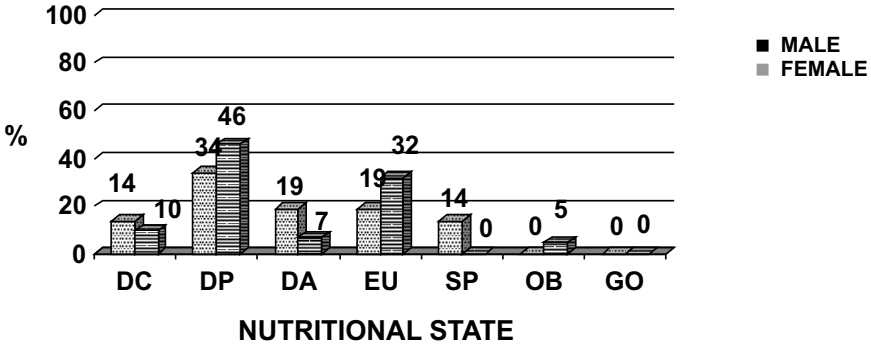
Through the results obtained in the nutritional state verified that there is a great malnutrition index among the appraised scholars, being those values distributed among the studied age groups. In the graph 3 we can observe this prevalence in the 7 year-old age group, mainly for the masculine sex that it presented the three malnutrition forms, prevailing the state of past malnutrition. The graph 5 represents the 13 year-old age group, where the feminine sex presented more cases of past and current malnutrition, besides some cases of overweight. And the masculine sex, in spite of most be eutrophic, there was case of

chronic and current malnutrition, and it was also observed case of obesity. In the graph 4 we can observe the malnutrition prevalence in the 12 year-old age group, where both sexes presented state of past malnutrition. The graph 6 represents the 14 year-old age group, where we observed cases of overweight and past malnutrition for both sexes and obesity in the masculine sex. Cases of eutrophic (the individual that presents weight considered ideal for his/her stature and stature considered ideal for his/her age) they were identified in both sexes.



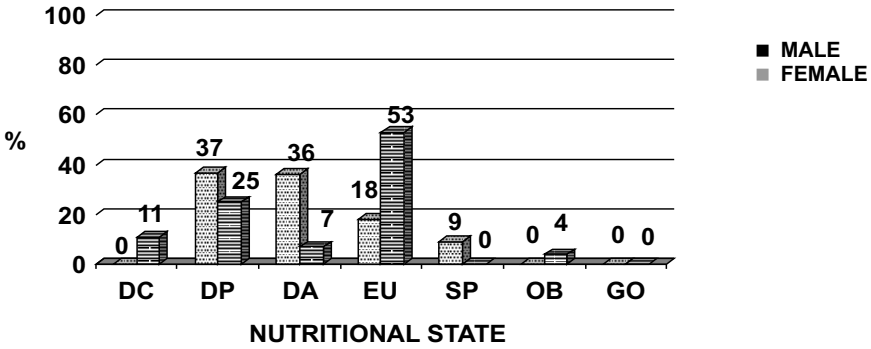
DC - CHRONIC UNDERNOURISHED DP - UNDERNOURISHED PAST OF THE - UNDERNOURISHED CURRENT ME - EUTROPHIC SP - SOBREPESO OB - OBESE GO - BIG OBESE

Graph 3: Children's nutritional state and adolescents, of both sexes, in the age group of 7 years of Santa Etelvina's CEL.



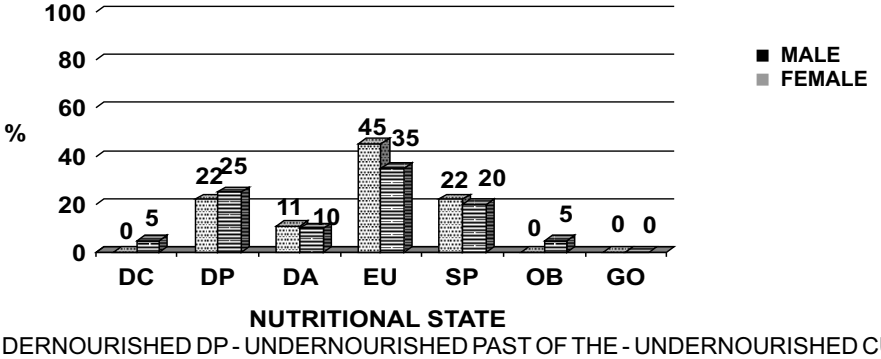
DC - CHRONIC UNDERNOURISHED DP - UNDERNOURISHED PAST OF THE - UNDERNOURISHED CURRENT ME - EUTROPHIC SP - SOBREPESO OB - OBESE GO - BIG OBESE

Graph 4: Children's nutritional state and adolescents, of both sexes, in the age group of 12 years of Santa Etelvina's CEL.



DC - CHRONIC UNDERNOURISHED DP - UNDERNOURISHED PAST OF THE - UNDERNOURISHED CURRENT ME - EUTROPHIC SP - SOBREPESO OB - OBESE GO - BIG OBESE

Graph 5: Children's nutritional state and adolescents, of both sexes, in the age group of 13 years of Santa Etelvina's CEL.



DC - CHRONIC UNDERNOURISHED DP - UNDERNOURISHED PAST OF THE - UNDERNOURISHED CURRENT ME - EUTROPHIC SP - SOBREPESO OB - OBESE GO - BIG OBESE

Graph 6: Children's nutritional state and adolescents, of both sexes, in the age group of 14 years of Santa Etelvina's

CEL

With base in the presented results, we can verify that there is a great malnutrition index among the appraised scholars. Similar result was found in the study accomplished by Mendonça (2000), that it presented an index of 37, 8% of malnutrition among the appraised ones. Likewise as in the Nutritional Call, that he/she found a prevalence of 8,5% of malnutrition for children of the city of Manaus, and 15,8% for children of the interior of the State of Amazon.

This way, we observed that our study as in other studies they bought the malnutrition incidence in scholars, what sends us to take preventive measures and to give a better attention as for the that is concerned the feeding and the basic conditions of the child's health and of the adolescent.

CONCLUSION

Inside of the objectives of this research that it was of analyzing the growth and the scholars' nutritional state from seven to 14 years, of both sexes, of Santa Etelvina's CEL, and in agreement with the found results, we concluded that the appraised of CEL present nutritional problems in all of the ages, mainly for malnutrition, what can be committing the process of those children's growth and adolescents, so much that the appraised ones showed values of corporal weight and stature below the values of the studies that we used to compare our results. These results coincide with discoveries of other studies of this same research line, and that you/they were accomplished in the city of Manaus, and they take us to evaluate the offer or the quality of the feeding is adapted for children and adolescents in school age and sport apprentices.

REFERENCES

ARRUDA, Miguel de. **Crescimento e Desempenho Motor em Pré-escolares de Itapira-SP: Um Enfoque Bio-socio-cultural**. 1997. Dissertação (Mestrado) Faculdade de Educação Física, Universidade Estadual de Campinas.

COPETTI, F. & KREBS, R. J. **O desenvolvimento de crianças interpretado pelo Paradigma dos Sistemas Ecológicos.** In: KREBS, R. J. (Ed.) **Teoria dos Sistemas Ecológicos.** Santa Maria: Edições Kinesis, pp: 67-99, 1997.

CORSEUIL, Herton Xavier.**Perfil de Desenvolvimento dos Escolares de 7 A 14 anos do Município de Marechal Cândido Rondon PR.** 1998. Dissertação (Mestrado) Universidade Federal de Santa Maria RS.

FERREIRA, I. J. **Desempenho Motor, Composição Corporal e Crescimento em Escolares da Cidade de Manaus**. 2005. Dissertação (Mestrado) Escola de Educação Física e Esportes, Universidade de São Paulo, São Paulo.

GUEDES, Dartagnan Pinto. **Crescimento, Composição Corporal e Desempenho Motor de Crianças e Adolescentes do Município de Londrina PR.** 1994. Dissertação (Doutorado) - Escola de Educação Física e Esportes, Universidade de São Paulo, São Paulo.

HAEFNER, L.S. **Comparação de crescimento, maturação sexual e estado nutricional de escolares de 7 a 14 anos**. Dissertação de Mestrado em Ciência do Movimento Humano, apresentada ao Centro de Educação Física e Desportos da Universidade Federal de Santa Maria, Santa Maria, 1995.

KREBS, R. J. & POHL, H. **Perfil de crescimento e estado nutricional de Santa Cruz do Sul**. Cinergis, v.1, n. 1. jan./jun. 2000, pp. 81-93

MACHADO, Dalmo Roberto; BARBANTI, Valdir J. **Maturação Esquelética e Crescimento em Crianças e Adolescentes**. Revista Brasileira de Cineantropometria do Desempenho Humano, março/ 2007.

MENDONÇA, Margareth Maria de Barros**. Condições de Saúde, Nutrição e Sobrevivência de Pré-escolares Atendidos no Instituto de Saúde da Criança do Amazonas-Manaus**. Dissertação (mestrado)--Universidade do Amazonas, Manaus, 2000. Disponível em: http://mapara1.inpa.gov.br/bibliopac.htm, acessado em 10/01/08 ás 10h00min hs.

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GROWTH AND NUTRITIONAL STATE OF SCHOOLCHILDREN OF THE CENTER OF SPORT AND LEISURE SANTA ETELVINA - NORTH AREA OF MANAUS.

This research has the objective of analyzing the growth and children's nutritional state and adolescents, in the age group from seven to 14 years, of both sexes, of Santa Etelvina's CEL. This study is characterized as a descriptive research, where the measures anthropometrics body weight and stature will be collected, using the procedure described by Ferreira (2005). The evaluation of the nutritional state will be accomplished by the criteria of Waterlow (1976), being used as reference pattern the model of National Center it goes Health and Statistics (NCHS) and the classification of Waterlow, recommended by the World Health Organization (WHO, 1995). The data will be submitted to the program of Evaluation and Nutritional State in Pediatrics (PED). The sample is constituted of 265 school, being 87 female and 178 male. The results show that regarding the growth, for both sexes the values are below the patterns of reference of NCHS and of the Program of Family budget (POF), and as for the state nutritional, same most being classified as eutrophic, there is still a very big prevalence of malnutrition, and these school ones are distributed as undernourished chronic, undernourished past and undernourished current. They were found few cases of overweight and obesity, demonstrating that, it is with the problem of the malnutrition that we should worry, therefore this can cart serious problems for the child, committing his/her physical and cognitive development.

Key-words: growth, nutritional state and malnutrition.

L'AUGMENTATION EST ALIMENTAIRE D'ÉCOLIERS DU CENTRE DE SPORT ET LOISIR SANTA ETELVINA - RÉGION NORD DE MANAUS.

Cette recherche a l'objectif d'analyser l'augmentation et l'état alimentaire d'enfants et adolescents, dans la tranche d'âge de sept à 14 années, des deux sexes, du CEL de Santa Etelvina. Cette étude est caractérisée comme une recherche descriptive où le poids du corps de l'anthropometrics des mesures et la taille sera rassemblée, en utilisant la procédure décrit par Ferreira (2005). L'évaluation de l'état alimentaire sera accomplie par les critères de Waterlow (1976), être utilisé que comme modèle de la référence le modèle de Centre National il, va Santé et Statistique (NCHS) et la classification de Waterlow, a recommandé par l'Organisation de la Santé Mondiale (QUI, 1995). Les données seront soumises au programme d'Évaluation et

État Alimentaire dans la Pédiatrie (PED). L'échantillon est constitué de 265 école, en étant 87 femme et 178 mâle. Les résultats montrent que concernant l'augmentation, les valeurs sont au-dessous des modèles de référence de NCHS pour les deux sexes et du Programme de budget de la Famille (POF), et comme pour l'état alimentaire, même la plupart de l'existence a classé comme eutrophic, il y a encore une très grande prédominance de malnutrition, et ces scolaires sont distribués comme passé chronique, mal-nourri mal-nourri et courant mal-nourri. Ils ont été trouvés peu de cas d'excès de poids et obésité, en démontrant que, c'est avec le problème de la malnutrition que nous devrions inquiéter, par conséquent cela peut camionner des problèmes sérieux pour l'enfant, en commettant son développement physique et cognitif.

Mots-clef: augmentation, état alimentaire et malnutrition.

EL CRECIMIENTO Y EL ESTADO NUTRITIVO DE ESCOLARES DEL CENTRO DE DEPORTE Y OCIO SANTA ETELVINA - EL ÁREA NORTE DE MANAUS.

Esta investigación tiene el objetivo de analizar al crecimiento y el estado nutritivo de niños y adolescentes, en el grupo etario de siete a 14 años, de ambos sexos, del CEL de Santa Etelvina. Este estudio se caracteriza como una investigación descriptiva dónde el medidas anthropometrics cuerpo peso y la estatura se coleccionará, mientras usando el procedimiento descrito por Ferreira (2005). La evaluación del testamento estatal nutritivo se logre por el criterio de Waterlow (1976), usándose como el modelo de la referencia el modelo de Centro Nacional él va Salud y Estadística (NCHS) y la clasificación de Waterlow, recomendó por la Organización de Salud Mundial (QUIÉN, 1995). Los datos se someterán al programa de Evaluación y el Estado Nutritivo en la Pediatría (PED). La muestra se constituye de 265 escuela, mientras siendo 87 hembra y 178 varón. La muestra de los resultados que para ambos sexos los valores están debajo de los modelos de referencia de NCHS con respecto al crecimiento, y del Programa de presupuesto Familiar (POF), y en cuanto al estado nutritivo, mismo más ser clasificado como el eutrophic, hay todavía un predominio muy grande de desnutrición, y estos escolares son distribuídos como el pasado crónico, desnutrido desnutrido y la corriente desnutrida. Ellos fueron encontrados alguno embala de sobrepeso y obesidad, mientras demostrando que, está con el problema de la desnutrición que nosotros debemos preocupar, por consiguiente esto puede carretear los problemas serios para el niño, mientras comprometiendo el his/her el desarrollo físico y cognoscitivo.

Palabras claves: crecimiento, estado nutritivo y desnutrición.

CRESCIMENTO E ESTADO NUTRICIONAL DE ESCOLARES DO CENTRO DE ESPORTE E LAZER SANTA ETELVINA ZONA NORTE DE MANAUS.

Esta pesquisa teve o objetivo de analisar o crescimento e estado nutricional de crianças e adolescentes, na faixa etária de sete a 14 anos, de ambos os sexos, do CEL de Santa Etelvina. Este estudo é caracterizado como uma pesquisa descritiva, onde foram coletadas as medidas antropométricas peso corporal e estatura, utilizando o procedimento descrito por Ferreira (2005). A avaliação do estado nutricional foi realizada pelos critérios de Waterlow (1976), utilizando-se como padrão de referência o modelo da National Center for Health and Statistics (NCHS) e a classificação de Waterlow, recomendada pela World Health Organization (WHO, 1995). Os dados foram submetidos ao programa de Avaliação e Estado Nutricional em Pediatria (PED). A amostra foi constituída de 265 escolares, sendo 87 do sexo feminino e 178 do sexo masculino. Os resultados mostraram que com relação ao crescimento, para ambos os sexos os valores encontram-se abaixo dos padrões de referencia do NCHS e do Programa de orçamento Familiar (POF), e quanto ao estado nutricional, mesmo a maioria estando classificados como eutrófico, ainda há uma prevalência muito grande de desnutrição, sendo que estes escolares encontram-se distribuídos como desnutrido crônico, desnutrido pregresso e desnutrido atual. Foram encontrados poucos casos de sobrepeso e obesidade, demonstrando que, é com a problemática da desnutrição que devemos nos preocupar, pois esta pode acarretar sérios problemas para a criança, comprometendo seu desenvolvimento físico e cognitivo.

Palavraschave: crescimento, estado nutricional, desnutrição.