163 - BODY COMPOSITION, ALIMENTARY HABITSAND PHYSICAL ACTIVITY OUT OF CLASSROOM OF SCHOLARS IN SOCIAL JEOPARDY.

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This research is a case study with students of a Municipal School of Rio de Janeiro. The study aims to identify the conditions with regard to alimentary habits, the participation in activities out of class and body composition of the children who are part of this community (RENAJORP, 2007).

The research is relevant because it is an indicative of the state of the social situational risk children find themselves, and it might become a way of delineating intervention strategies once the Physical Education teacher is a social intervener, therefore a promoter of health in all its dimensions.

It is possible to affirm the existence of a cultural standard in devoid communities that involve the urban violence. Such phenomenon is due to drug traffic, poverty, lack of educational stimuli by the family, inductive communitarian environment of the abandonment of the school, lack of motor and controlled stimuli by specialists, lack of feeding rules and hygiene (VARGAS, 2002). It is considered that the child and the adolescent are in a risky situation when their development does not occur in an expected way for their age in accordance to the parameters of their culture, and it might constitute a physical, social or psychological risk, originated by external causes or provoked by the individual himself (FLAG, 1996 *apud* HUTZ, 2002) as they suffer some influence from the environment where they live, once the exposition to the violence is a reality and not an isolated fact (ENGLE, 1996 *apud* PESCE et al. 2004).

In Brazil, among nutritional deviations, malnutrition quite frequently appears in all ages and economic stratus. Due to appetite reduction for a long time, they use to accept a limited amount of food or their diets are constituted by little nutritional foods (KRAUSE, 2003). As there is a significant increase in children and adolescents weight all around the country, due mainly to bad alimentary habits and its association with physical inactivity, besides biological and social factors which are related to the attendance (or not) of their basic necessities, such as health, sanitation, education and feeding (HUNTER, 2000 *apud* ESPIRITO SANTO, 2005; CONDE, 2000, OLIVEIRA, 2002 and ENGSTROM, 1999 *apud* CASTRO, 2005).

According to Delgado (2004) all food groups are important to supply the necessities of nutrients and to keep health, therefore, all of them must be consumed in their correct amounts, which vary in accordance to the necessities of each individual. The food pyramid idealized by Walter C. Willett (2002), might serve as an example for a healthful life, where the most important points are water and physical activity, which are adequated to assist in the type of food that must be more or less consumed, aiming the maintenance of our organism and preventing caloric foods that might cause damages to our health.

According to Pereira (2004) citing Lopes (1999), the physical activity is of extreme importance for the growth and development of children and adolescents, and even to make them become active adults, and it's one of the best ways to control and to manipulate the increase of obesity (POLLOCK and WILMORE, 1993 *apud* ESPIRITO SANTO, 2005). Such affirmations are strengthened by studies carried by Taylor, Blair and Malina (1999) cited by Bidone (2000) where they prove that experiences with physical activity in childhood and adolescence can influence this adherence in adult phase.

METHODOLOGY

According to Gil (2002) this study is characterized as direct due to the collection of data have been done with the children themselves, and descriptive for having as a primary objective the description of the characteristics of the community studied. Collection of data followed the methods of bibliographical research, developed on the basis of literature and scientific articles, and it was characterized as a case study once it is possible to determine the sole characteristics of students of the basic education of the studied community, through a field research in a school.

Aiming to picture reality at the moment the research was developed, the sociodemographic factors, alimentary habits, standards of physical activity and body composition had been evaluated simultaneously.

The sample is constituted by 128 pupils, registered at the school year of 2007 who volunteered for the research. Students were both genders, regular practitioners of Physical Education classes. Even though the range of 9 to 18 years chosen for the research constitutes different phases of the body and motor development it was not a relevant factor for inclusion or exclusion.

The diagnosis of the classification of the body composition consisted of anthropometric evaluation of the scholars with weight and height measurements. Weight was measured in a digital scale of mark G-TECH with capacity of 150kg (precision of 100g) placed in a leveled floor, and the scholars were dresses with light clothes and barefoot; remaining erect, in the center of the scale and with arms extended throughout the body. Height was measured using a anthropometric tape (maximum length 2,00m) settled to a smooth wall and leveled floor (making an angle of 90º) without a baseboard. The scholars remained in a vertical position, erect, with bare and parallel feet with heels, shoulders and buttocks leaned on the wall, making the gauging with maximum inspiration, with the precision of 1 cm, as described in Pompeu, (2004), using the index of body mass (IMC) = weight (kg) /height2 (m2).

Such data had been collected in three visits with the pupils who had attended Physical Education classes. The classification of the indexes followed table CDC/NCHS being characterized as obese the percentile = 95, overweight =85 and < 95, normal = 5 and < 85, below weight < 5 (SANCHO, 2007).

To evaluate sociodemographic factors, physical activity and alimentary habits of the children an interview with them was carried adapting the instrument of the questionnaires of Oliveira (2000), CARVALHO (2006) and of the Federal University of Pelotas (Center of Epidemiologic Research - CPE) with (6) open questions e (29) closed ones.

RESULTS

With respect to the **sociodemographic** aspect, 59.4% (79) of the pupils live in apartments and 37.5% (48) in houses, having as main areas of leisure the yard 36.7% (47) and playground 25.8% (33). Of the total, 53.1% (68) live with their parents, 33.6% (43) only with the mother and the resting 12.5% (16) with other members of the family, with an average of 3 adults and 2 children per residence. The prevalence of the scholar degree of the relatives was the High School was 35.1% (45), followed by Basic Education 21.1% (27); it was demonstrated bigger interest and participation in scholar subjects of the child by mothers

44.5% (57), followed by father and mother 33.6% (43).

Among the 128 children who answered to the questionnaire, 93.7% (120) do not work, 76 (59.4%) revealed interest in getting university formation.

With regard to the **alimentary habits** some influences can determine the alimentary ingestion and habits of the children, mainly in the years of development, including among other factors, the familiar environment, social trends and medias (KRAUSE, 2003). Among the analyzed pupils 81.2% (104) use to have lunch at home; 14.1% (18) at school and at home, and only 3.1% (4) have lunch only at school. As a main meal, 88.3% (113) have lunch, followed by a snack in the afternoon and supper with 72,7% (93) each. Analyzing these results we verify the existence of 32% of pupils with a long period of fast, once they don't have breakfast, which can provoke negative influences in their growth, development and in the learning.

As for the quality of consumed foods, we evidence that in accordance with the alimentary pyramid 53.1% of the citizens of the research consume integral cereals, 79.7%, fruits, 67.2%, vegetables while 84% consume candies; 91.4%, soft drinks; and 81.2% snacks rich in carbohydrates, sugar and fat. (Fig.1).

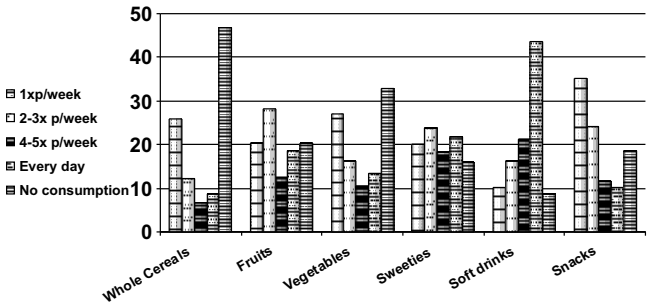

Fig. 1 - Distribuition in relation to frequency of consumption of some foods.

Carvalho (2007) in its study with 466 adolescents at an age ranging from 10 the 19 years, having as an objective observe some aspects of the life style of these pupils, presented similar characteristics to the pupils of this sample, however a little better, where also they make the meals of the coffee of the morning (85.6%), lunch (90.1%) and dinner (88.6%).

In relation to **physical activity practice**, among all analyzed children, 94.5% take part in Physical Education curricular activities and 74% (95) practice some physical activity out of classroom guided by a professional. When asked on which activities they practice there was an evidenced of a preference for sports with 66,5% and other activities 33.5%, from which 26% (34) do not practice any guided activity.

In relation to **physical activities in leisure time**, the majority of the subjects take part in games and recreative activities (95.3%), with a greater interest in volley 11.3% (91), bicycle 10.8% (87) and soccer 10.3% (83) (fig.2). Similar result was also verified in the study of Pereira (2004) where the preference was to play soccer and ride a bicycle.

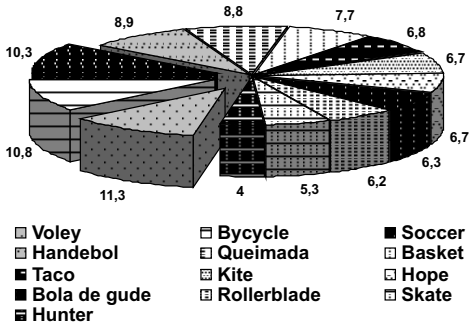

Fig. 2 Distribuition of activities practiced in leisure time.

The practice of physical activity in relation to the moving to school, we verify that subjects live next to the school once 89.8% (115) walk to school and only 8.6% (11) use collective transportation with an average time of 8 minutes to move themselves. In this aspect it is not demonstrated a sedentary behavior which is therefore considered a positive result.

In relation to **body composition**, according to the analysis of the percentiles of growth in the "National Center for Health Statistics" (NCHS) on the basis of the Body Mass Index (BMI), analyzed pupils had been classified as normal weight 57.8% (74); under weight 24.2% (31); pré-obese 12.5% (16) and obese 5.5% (7) (Fig.3). When asked about their perception on their weight, they answered they were normal 50.8% (65); lean 22.7% (29) and fat 14.8% (19).

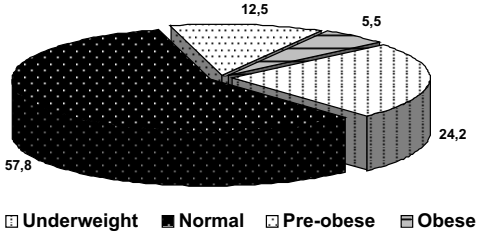

Fig. 3- Distribution of BMI.

CONCLUSION

Considering the objectives of the research and the limitations, it was possible to conclude that the studied pupils, although living in a devoid community, and being exposed to many factors which might influence their development, present a positive answer on educational stimuli given by the family and on motor stimuli controlled by specialists.

We understand that the family and the school have the responsibility to favor the adoption of a healthful behavior for the children, which should find an alimentary balance and stimuli for the practice of physical activity as to reach a good quality of

life, and it's important to create attractive and nutritional options to children and adolescents with the intention of substituting fat snacks, candies and soft drinks. The adoption of a healthful alimentary behavior of scholars can be pointed as an important measure of promotion of health, with positive repercussions in adult life, and there is a propitious moment in this phase to delineate intervention strategies to promote health in all the dimensions.

The result of this study showed an evidence that in relation to body composition, there was no have prevalence of obesity and overweight, all pupils had an ideal weight in relation to the percentiles of growth. In relation to the practice of physical activity habits, the study shows that the levels of physical activity prove good once the analyzed pupils were involved in physical activities both in leisure time and in activities guided by a professional out of school environment.

In relation to alimentary habits it was verified that a great part of these pupils does not have the first meal when they wake up, which indicates a long period of fast until the main meal. It is suggested a verification of the familiar alimentary habits once it was observed a high consumption of candies, fat snacks and soft drinks and a low daily consumption of cereals, fruits and vegetables and also a high percentage of those who do not consume any of these foods.

Data suggest that the interventions on education and promotion of health in this community be based on alimentary habits, stimulating and valuing the importance of the main meals emphasizing the benefits of an adequate and balanced feeding, increasing the consumption of fruits, vegetables and cereals and diminishing the consumption of candies, soft drinks and fat snacks. The development of healthful styles of life must then be stimulated.

REFERENCES

BIDONE, V.; SANTOS, T. M. **Padrões de atividade física aeróbia, de força e de flexibilidade numa comunidade escolar militar do rio de janeiro.** Universidade Estácio de Sá. Fisiolab. Rio de Janeiro, 2000.

CARVALHO A.; RODRIGUES V., CARVALHO G. S. de, GONÇALVES A. **Um olhar sobre os hábitos alimentares e de lazer de jovens adolescentes**. Universidade Minho. Instituto de Estudos da Criança. Disponível em: http://hdl.handle.net/1822/6692 . Acesso em: 04 set. 2007.

CARVALHO A. Questionário Hábitos de Saúde - Alunos. [mensagem pessoal]. Mensagem recebida por <amanciocarv@hotmail.com> 18 de outubro de 2007.

CASTRO, T. G. de; NOVAES, J. F. de; SILVA, M. R.; COSTA, N. M. B.; FRANCESCHINI, S. do C. C.; TINÔCO, A. L. A.; LEAL, P. F. da G. **Caracterização do consumo alimentar, ambiente socioeconômico e estado nutricional de pré-escolares de creches municipais.** Revista de Nutrição, 2005, vol.18, n. 3, ISSN 1415-5273. Disponível em: http://www.scielo.br/scielo.php?pid=S1415-52732005000300004&script=sci_arttext&tlng=pt Acesso em 06 out. 2007.

Centro de Pesquisas Epidemiológicas **Questionário para o adolescente.** Universidade Federal de Pelotas. 2000. Disponível em: http://www.epidemio-ufpel.org.br/_projetos_de_pesquisas/coorte1982/ Acesso em: 17 out. 2007

DELGADO, Leonardo de Arruda. **Avaliação da aptidão física**: projeto de elaboração de sistema de informação. 2004. 75 f. Monografia (Licenciatura em Educação Física) - Departamento de Educação Física, Universidade Federal do Maranhão, São Luis, 2004. Disponível em: http://www.boletimef.org/?canal=12&file=902. Acesso em: 5 set. 2007.

ESPIRITO SANTO, E.; MERCÊS, G. **Sobrepeso e Obesidade Infantil: Influências dos Hábitos Alimentares e da Prática de Atividade Física.** Ano 4, n. 2 (ago/dez. 2005). Disponível em: http://www.fsba.edu.br/dialogospossiveis/artigos/7/08.pdf. Acesso em: 06 out. 2007.

GIL, Antônio Carlos. **Como elaborar projetos de pesquisa**. 4. ed. São Paulo: Atlas, 2002.

HUTZ, C. S., SILVA, D. F. M. da. **Avaliação psicológica com crianças e adolescentes em situação de risco.** jun., vol.1, no.1 [citado 04 Setembro 2007], p.73-79. Universidade Federal do Rio Grande do Sul, 2002. Disponível em: http://pepsic.bvs-psi.org.br/scielo.php?script=sci_arttext&pid=S1677-04712002000100008&lng=pt&nrm=iso. Acesso em: 8 set. 2007.

KRAUSE, M. V; MAHAN, L. K. **Alimentos, nutrição e dietoterapia**: um livro-texto do cuidado nutricional. Tradução Alicia Regina de Almeida. 5. ed. São Paulo: Roca, 2003.

NCHS. National Center for Healths Statistics. Clinical Charts with 5th ant 95th children 2 to 20 years. Disponível em: http://www.cdc.gov/search.do?sort=date%3AD%3AL%3Ad1&ie=cp1252&subset=nchs&q=imc+&filter=p&ud=1&oe=utf8&start=10 . Acesso em: 16 Out. 2007

OLIVEIRA, J. A. **Estudo das rotinas de vida: o lazer das crianças de campo grande.** Rio de Janeiro. 139 f. Dissertação (Mestrado em desenvolvimento da criança) Universidade Técnica de Lisboa, Centro Universidade Moacyr Sreder Bastos, Rio de Janeiro: 2000.

PEREIRA, R. R.; BARROS, J. F.. Estilo de vida dos escolares de Montes Claros MG. **Revista Digital** - Buenos Aires - Año 10 - N° 75 - Agosto de 2004. Disponível em: http://www.efdeportes.com/efd75/escolar.htm. Acesso em: 09 set. 2007.

PESCE, R. P.; ASSIS, S. G; Santos, N.; OLIVEIRA, R. de V. C. de. Risco e proteção: Em busca de um equilíbrio promoter de resiliência. **Psicologia: Teoria e Pesquisa,** 2004, v. 20, n. 2. Disponível em: http://www.scielo.br/scielo.php?pid=S010237722004000200006&script=sci_arttext&tlng=pt Acesso em: 09 set. 2007.

POMPEU A. M. S. F. **Manual de cineantropometria**. Rio de Janeiro: Sprint, 2004.

RENAJORP. **Comunidade do Muquiço pede socorro contra violência policial.** 11/05/2007. Disponível em: http://redecontraviolencia.org. Acesso em 10 Out. 2007.

SANCHO, T. S. **O que é a obesidade?** Fórum Algarve: Mexa-se. Administração Regional de Saúde do Algarve, IP. Disponível em: www.portaldasaude.pt/NR/rdonlyres/667FAC22-43DA-406A-8237-CED1E4E35D11/0/obesidadeinfantilforum2007.pdf. Acesso em: 16 Out. 2007.

VARGAS, A. L. S. **Sementes da marginalidade**. Rio de Janeiro: Forense, 2002.

WILLET, W.C. **Coma, beba e seja saudável.** São Paulo: Campus, 2002.

BODY COMPOSITION, FEEDING HABITS AND OFF-SCHOOL PHYSICS ACTIVITY PRACTICE.

Poor communities culturally submitted to urban violence tend to induct children and adolescents to risky situations through lack of educational stimuli from the family, lack of motor stimuli, feeding rules and hygiene. It can be frequently perceived that physical inactivity and bad feeding habits lead to body composition alterations not only in adulthood and also to the development of a lot of chronic-degenerative diseases. This study has a direct and descriptive approach aiming to characterize feeding habits, off-school physical activity practice and body composition of students of a public school at a poor community. Data

collection was carried through a questionnaire and anthropometric measures. It was verified a positive answer on motor stimuli and body composition and prevalence of obesity and overweight was not observed. As to feeding habits, a high consumption of sweeties, soft drinks and fat snacks was verified. Data suggest that educational and health promotion interventions on this community be based on strategies of development of good feeding habits.

Keywords: risky community, lack of food, children´s obesity.

LA COMPOSITION CORPORELLE, LES HABITUDES ALIMENTAIRES ET L'ACTIVITE PHYSIQUE EXTRA-SCOLAIRES CLASSE DE RISQUE DANS LE DOMAINE SOCIAL.

Les personnes indigentes communautés, la culture urbaine imprégnée par la violence, ont tendance à inciter les enfants et les adolescents à la situation de risque par manque d'éducation des stimuli de la famille, le manque d'incitations moteurs, les règles d'hygiène et de nutrition. Il n'est pas rare de se rendre compte que l'inactivité physique et une mauvaise alimentation entraîner des changements dans la composition corporelle, non seulement dans l'âge adulte, entraînant le développement de plusieurs maladies dégénératives chroniques. L'étude est directement et caractère descriptif dans le but de caractériser les habitudes alimentaires, la pratique de l'extra-classe de l'activité physique et la composition corporelle des étudiants de 2 et 3 cycles de l'éducation de base du réseau public de l'éducation, l'appartenance à une communauté pauvre. La collecte de données est l'utilisation de questionnaires et des mesures anthropométriques. Il y avait une réponse positive en ce qui concerne les moteurs et la composition corporelle stimuli, n'étant pas observé la prévalence de l'obésité et du surpoids. En ce qui concerne les habitudes alimentaires, il ya une forte consommation de confiseries, les boissons gazeuses et les collations gras. Ces données suggèrent que les interventions de l'éducation et la promotion de la santé dans cette communauté, sont fondées sur des stratégies visant à développer des habitudes alimentaires.

Mots-clés: communauté à risque, de l'alimentation, l'obésité chez les enfants.

LA COMPOSICIÓN CORPORAL, HÁBITOS ALIMENTARIOS Y LA ACTIVIDAD FÍSICA EXTRA-ESCOLAR CLASE DE RIESGO EN EL PLANO SOCIAL.

Las comunidades necesitadas, cultural impregnado por la violencia urbana, tienden a inducir a niños, niñas y adolescentes a la situación de riesgo por falta de estímulos educativos de la familia, la falta de incentivos los motores, las normas de higiene y nutrición. No es raro darse cuenta de que la inactividad física y la mala nutrición conducir los cambios en la composición corporal, no sólo en la edad adulta, que inducen el desarrollo de varias enfermedades crónico-degenerativas. El estudio es directa y de carácter descriptivo con el objetivo de caracterizar los hábitos alimentarios, la práctica de la extra-clase de actividad física y la composición corporal de los estudiantes 2 y 3 ciclos de la educación básica de la red pública de la educación, la pertenencia a una comunidad pobre. La recopilación de datos es en el uso de cuestionarios y mediciones antropométricas. Hubo una respuesta positiva en lo que respecta a los motores de la composición corporal y los estímulos, no se observó la prevalencia de la obesidad y el sobrepeso. En cuanto a los hábitos alimentarios, hay un alto consumo de golosinas, refrescos y aperitivos grasos. Estos datos sugieren que las intervenciones de educación y promoción de la salud en esta comunidad, se basan en estrategias encaminadas al desarrollo de hábitos alimenticios.

Palabras clave: comunidad en situación de riesgo, la alimentación, la obesidad infantil.

COMPOSIÇÃO CORPORAL, HÁBITOS ALIMENTARES E ATIVIDADE FÍSICA EXTRA-CLASSE DE ESCOLARES EM RISCO SOCIAL.

As comunidades carentes, culturalmente permeadas pela violência urbana, tendem a induzir crianças e adolescentes à situação de risco através da carência de estímulos educacionais oriundos da família, ausência de estímulos motores, regras de alimentação e higiene. Não raro percebe-se que a inatividade física e maus hábitos alimentares acarretam alterações na composição corporal, não somente na fase adulta, induzindo o desenvolvimento de diversas doenças crônico degenerativas. O estudo é de caráter direto e descritivo com o objetivo de caracterizar os hábitos alimentares, a pratica de atividade física extra-classe e a composição corporal de alunos do 2º e 3º ciclos do ensino fundamental da rede pública de ensino, pertencentes a uma comunidade carente. A coleta de dados constitui-se no uso de questionário e medidas antropométricas. Verificou-se uma resposta positiva no que se refere aos estímulos motores e a composição corporal, não sendo observado a prevalência de obesidade e sobrepeso. Quanto aos hábitos alimentares, verifica-se um alto consumo de doces, refrigerantes e lanches gordurosos. Os dados obtidos sugerem que as intervenções de educação e promoção da saúde nesta comunidade, sejam baseadas em estratégias de desenvolvimento visando os hábitos alimentares.

Palavras chave: comunidade de risco, carência alimentar, obesidade infantil.