



## ANTHROPOMETRIC EVOLUTION AND CLASSIFICATION OF PRE-SCHOLAR AND SCHOLAR STUDENTS FROM PUBLIC EDUCATION: RELATION TO FOOD OF ANIMAL ORIGIN<sup>1</sup>

### CLASSIFICAÇÃO E EVOLUÇÃO ANTROPOMÉTRICA DE PRÉ-ESCOLARES E ESCOLARES DO ENSINO PÚBLICO: RELAÇÃO DIRETA COM CONSUMO DE PRODUTOS DE ORIGEM ANIMAL

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The National Program of Scholar Feeding (Programa Nacional de Alimentação do Escolar- PNAE) attend students from public education, aiming the physical, mental and academic development by a ideal alimentation and nutritional education. In Brazil, as in other countries, infant obesity is increasing and there are low weight students and structural deficit, due to several factors including inadequate alimentation. The adiposity excess observed in children is associated to lipolytic profile, arterial pressure, high glucose and consequently higher risk for cardiovascular diseases, hypertension and diabetes despite chronic diseases non-transmitted (DCNT). Considering the change on the morbid-mortality profile and nutrition of todays population, this study aimed to evaluated and classify the risks of child obesity in students of public education system, from pre-school and elementary school at Nova Odessa (CMEIs, EMEIs e EMEFs) comparing the results from last year evaluation. The methodology used comprehend the measurements of weight/height of 3549 students, classified in 979 students from CMEIs e EMEIs (0 to 6 years old) and 2570 students from EMEF (6 to 12 years old) in comparison to results obtained 2010 and 2011. The evaluators were trained and all used a digital platform-like weight scale and an inelastic metric tape. The Z-score was used to evaluate the indices for weight and height (w/h), height and age relationship (H/A) and the corporal mass indice (CMI), according to OMS classification. Data were analyzed by the *Epiinfo Nutrition* (CDC, 2008). Statistical comparison were done using the *BioEstat* 5.0 program. Results showed for 2011 children from 0 to 6 years old, 2.13% had low stature or risk (H/A); 5.9%, low weight or risk and 7.64% obesity or risk (W/H). For children from 6 to 12 years old, 1.56% with low stature or risk (H/A); 4.44% presented low weight or risk (W/H) and 30.33% with obesity or risk (CMI/A). Data from 2011 in comparison to 2010 showed a decrease on the stature deficit on children from 0 to 6 years old ( $p<0.01$ ) and a decrease on low weight ( $p<0.01$ ), of weight and height of children from 6 to 12 years old ( $p=0.97$ ). Results show an increase on children's weight, especially on children under 6 years old, where there is a need for preventive attitudes, in order to reduce the DCNT. In this context the increase on quality and/or quantity of animal origin products in the children's diet at school must be evaluated and reformulated substituting carbohydrates for animal food from several sources (poultry, fish, bovine meat, eggs, milk, etc). Sustainability of public education has to deal with nutritional factors and the end of the animal food chain to aim better education and better citizens.

Key-words: children nutrition, meat, obesity.