## 39 - FOOD PRACTICES OF SCHOOL TEENS ATTENDED IN A PHILANTHROPIC INSTITUTION WITH REFERENCE TO HEARING IMPAIRED IN MACAÉ. RIO DE JANEIRO.

PAULA SILVA FIGUEIREDO
ANTONIO RODRIGO SERRA SANTARÉM
CAMILLA MEDEIROS MACEDO DA ROCHA
EUGENIO JOSÉ ESTEVES CAMPOS
MARIA FERNANDA LARCHER DE ALMEIDA
UNIVERSIDADE FEDERAL DO RIO DE JANEIRO - CAMPUS UFRJ – MACAÉ, RJ, BRASIL
paulinhafigueiredo 92@hotmail.com/

#### INTRODUCTION

The practice of healthy diet has been promoted over the years in all phases of the course of life, particularly in children, since, together with physical exercise, is associated with better quality of life and reduced risk of not transmitted chronic diseases (Olinto, 2007). It is understood, therefore, that diet and nutrition are key requirements for the promotion and protection of health, since they are strongly linked to human growth and development (Brazil, 2012).

Brazil has experienced since the end of the twentieth century, intense social changes resulting in changes in the pattern of food consumption and health, impacting on the reduction of poverty and social exclusion. Studies have shown the increase of diseases in Brazilian society, especially in the field of nutrition, for example, overweight and obesity in all age groups of the population, among which we can highlight the juvenile group (Brazil, 2012). In students, this is characterized in biological terms, as individuals between 7 and 9 years 11 months and 29 days. At school, this classification covers a wider age range, between 7 and 14 years 11 months and 29 days since adolescents form the group comprising the age group between 10 and 19 years (Vitolo, 2008).

Data from the Family Budget Survey (POF) 2008-2009 revealed that overweight and obesity in male children between 5 and 9 years reached 34.8%, and 16.6%, respectively. In women, excess weight and obesity appeared in 32% and 11.8% of the population, respectively. Among adolescents, the POF showed that overweight and obesity in males was 21.7% and 5.9%, respectively, and among females, 19.4% and 4%, respectively (IBGE, 2010.)

According to the 2008-2009 POF, excess weight in school children (5-9 years) increased rapidly compared with other age groups, as well as over 35 years, evidenced in population-based surveys: ENDEF, 1974-75; PNSN, 1989; and POF, 2002-2003. Malnutrition has already decreased in all age groups, however, still persists in lower grades - compared to the prevalence observed in previous research - among children in the North and in families of lower incomes (IBGE, 2010).

This situation has negatively affected the nutritional profile of these groups, and is reflected in changes in feeding behavior in Brazil, particularly in the juvenile group, which has reported frequent consumption and high amounts of processed foods, high in sugar, fat and salt, coming from fast food such as burgers, fries and soft drinks (Brazil, 2012).

In the field of hearing health, there are just a few publications that show the food intake of Brazilian children and adolescents, it is therefore necessary to have a careful look regarding dietary practices of hearing impaired children and adolescents. In this perspective, the present study aimed to analyze dietary habits of deaf children and adolescents assisted in an institution in the Lakes Region and North Fluminense, Rio de Janeiro.

### **SUBJECTS AND METHODS**

It is a cross-sectional, descriptive, quantitative study, primary basis in Associação Macaense do Deficiente Auditivo (AMADA), with deaf children and hearing impaired (ADs) assisted in AMADA, between April 2010 and April 2012.

The study is part of an extension project developed in AMADA, which aims to identify the needs of health and nutrition in the juvenile group served by this institution, running since April 2010. The association is located in Macaé, which has a total area of 1,219.8 km2, corresponding to 12.5% of the total area of the North Fluminense to which it belongs. The population is approximately 200 000 inhabitants (169 513 fixed and 50 000 floating) and a density of 103.11 inhabitants per Km2 (Municipality of Macaé, 2011). For the study, undergraduate students from courses in Nursing, Midwifery and Nutrition, Federal University of Rio de Janeiro (UFRJ), Campus UFRJ - Macaé Teacher Aloísio Teixeira, fellows PIBEX-UFRJ, properly trained, did a survey of the records of all schoolchildren and adolescents registered in AMADA and subsequently the selection of those with ages between 7 and 19 years because the institution serves infants, preschool children, adults and seniors.

After selection, telephone contact was made with the family a few days before to schedule the interview. A meeting with parents was also scheduled for presentation of the proposed project. Subsequently, the scholars interviewed in the waiting room of AMADA, with the help from a sign language interpreter and / or family, all children and adolescents who had a Term of Free and Informed Consent Form (ICF) signed by their parents or guardians. The consent form contained information about the objectives of the study and the procedures to be performed on the day of interview. It is noted that all the rules and guidelines for research were observed involving human subjects contained in Resolution 196/96, the National Council of Health / Ministry of Health. The project was submitted to the Ethics Committee in Research of the Faculty of Medicine of Campos of Goytacazes, under number 65/2011.

The undergraduate students used for the interview, a structured form, previously tested, developed for the study, containing the following variables: gender, age, number of meals per day, food allergies, food aversions, if they participate in buying food with their the family and if they prepare their own food.

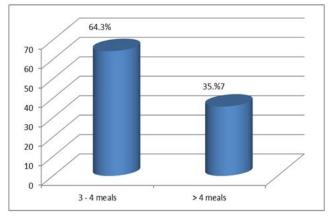
The data were consolidated and analyzed by means of absolute and relative frequencies, and measures of central tendency (mean and standard deviation) of selected variables, using Microsoft Excel 2010.

### RESULTS AND DISCUSSION

Information was analyzed from 28 children and adolescents, 60.9 % male and 39.1 % female, average ( $\pm$  SD) age of  $12.6 \pm 3.08$  years.

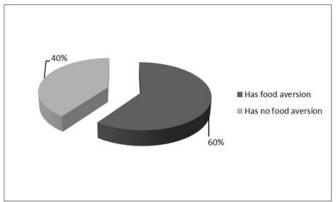
Regarding the number of meals per day, 64.3 % held 3-4 meals and 35.7 % performed above 4 meals daily (Figure 1). However, the recommendation is 5-6 meals a day to obtain all the necessary nutrients to meet the energy demands for body growth (Brazil, 2006; Vitolo, 2008). In addition, the reverse effect on the number of meals which leads to overweight and obesity have been described among adolescents (Ferreira et al. 2007; Dutra et al. 2006). This behavior is also associated with the reduced consumption of fibers and altered production of hormones related to metabolism (leptin, ghrelin and insulin), giving as a

result, changes in the pattern of deposition of adipose tissue (Farshchi et al. 2005; Bellisle at al., 1997; De Castro, 1997). According to Dutra et al. (2006) reduced number of daily meals among adolescents can show the attempt to lose weight by suppressing meals.



**Figure 1.** Percentage of the number of meals a day by a group of children and adolescents seen in *Associação Macaense do Deficiente Auditivo*. Macaé - RJ. April 2010 to 2012.

It turned out that 40% of the reported group having some type of food aversion (Figure 2), however, the aversions were very different, not having a specific food group that calls attention and none of the respondents reported any food allergies present. It is necessary to pay attention, however, to the findings of the 2002-2003 POF, described by Levy-Costa et al. (2005) demonstrated that the consumption of fruits and vegetables in the country remains short to current recommendations, requiring public sector efforts to promote proper nutrition and healthy lifestyle for the general population of the country, such as PNAN guidelines (2012) and the Global Strategy on Diet, Physical Activity and Health (WHO, 2002).



**Figure 2.** Percentage of food aversion by a group of children and adolescents seen in *Associação Macaense do Deficiente Auditivo*. Macaé - RJ. April 2010 to 2012.

The Food Guide for the Brazilian Population - GAPB - Ministry of Health (2006) is a document containing recommendations and gathers food principles and guidelines designed to improve the quality of life and promote the health of Brazilian families. In its third guideline, the GAPB guides the consumer three servings of varied fruits and three servings of varied vegetables in daily meals. According to the World Health Organization, each year, around 2.7 million deaths could be prevented if the recommended intake of fruits and vegetables (FLV) was followed properly, and it is fundamental in the prevention and control of chronic non-communicable diseases (NCD) and ensuring intake of fiber and micronutrients (WHO, 2003a; WHO, 2003b).

Regarding participation family in food purchases, 32.2 % reported that they participate, 32.1 % did not participate and 35.7 % sometimes accompany the family on purchases of food (Figure 3).

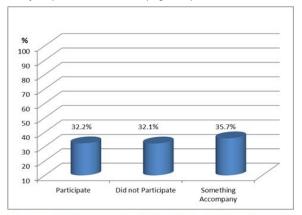


Figure 3. Percentage of participation family in food purchases by a group of children and adolescents seen in *Associação Macaense do Deficiente Auditivo*. Macaé - RJ. April 2010 to 2012.

The study found that 36% of the evaluated group, prepare their own food and 64% did not prepare. All respondents reported that this refers to prepare a snack which can be understood as the intake of liquids, solids or both, independent of time, but which do not characterize a full meal, and is a convenient and fast preparation and therefore this often makes a choice among adolescents (Ruxton et al., 1996; Drummond et al., 1996 Summerbell et al., 1995). As a consequence, there is higher energy consumption, especially from lipids, making preventive measures and corrective of utmost importance in this group (Bismarck-Nasr et al., 2006)

The conduct of the study proved to be essential to monitor the sign language interpreter that attended the evaluated group, since most children and adolescents used the sign language as main language for their communication, and the study team had no knowledge of the language of Brazilian signals. The presence of family in attendance to assist the interviews often interfered with the respondents' answers, since the sign language interpreter described only the information given, thus the information was closer to the reality of the child or adolescent.

#### CONCLUSION

The assessed group had low intake of vegetables, about one third joined the family shopping and preparing snacks, probably due to its practicality. Further studies are being conducted to understand the eating habits of the study group for creating intervention strategies, from health education activities in the institution of study.

#### **ACKNOWLEDGMENTS**

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Universidade Federal do Rio de Janeiro Campus Macaé – Curso de Nutrição Rua Aluísio da Silva Gomes, 50 Granja dos Cavaleiros – Macaé – RJ – CEP: 27930-560

# FOOD PRACTICES OF SCHOOL TEENS ATTENDED IN A PHILANTHROPIC INSTITUTION WITH REFERENCE TO HEARING IMPAIRED IN MACAÉ, RIO DE JANEIRO. ABSTRACT

The study aims to describe the dietary patterns of hearing impaired children and adolescents attended at an institution in the Lakes Region and North Fluminense, Rio de Janeiro. It is a cross-sectional study, conducted at Associação Macaense do Deficiente Auditivo, from April 2010-12. Graduates interviewed children and adolescents between 07 to 19.9 years old, with help from a sign-language interpreter and/or family members. The evaluated variables: gender, age, number of meals per day, food allergies, food aversions, if they joined their family buying food and preparing their own food. Everybody gave their informed consent signed by parents. Information was analyzed from 28 children and adolescents, 60.9% male and 39.1% female, with an average ( $\pm$  SD) age of 12.6  $\pm$  3.08 years old. As for the number of meals per day, 64.3% held 3-4 meals and 35.7% performed above 4. About 40% reported having some type of food aversion. 32% of respondents reported that they accompany the family on purchases of food and 36% reported that they prepare their own food, in particular snacks. It was perceived that the group had low intake of vegetables, about one third accompany the family shopping and prepare their own food, especially snacks, probably due to its practicality.

**KEYWORDS**: Deafness, Hearing Loss, Food Consumption.

### LES PRATIQUES ALIMENTAIRES DES ADOLESCENTS DE L'ÉCOLE FRÉQUENTÉE DANS UNE INSTITUTION PHILANTHROPIQUE À L'AUDITION ALTÉRÉE DANS MACAÉ, RIO DE JANEIRO. RÉSUMÉ

L'étude vise à décrire les habitudes alimentaires des enfants malentendants et les adolescents assisté à une institution dans la région des Grands Lacs et du Nord Fluminense, à Rio de Janeiro. Il s'agit d'une étude transversale, menée à Associação Macaense do Deficiente Auditivo, d'Avril 2010-12. Diplômés interrogés les enfants et les adolescents âgés de 07 à 19,9 ans, avec l'aide d' un interprète en langue des signes et/ou membres de la famille. Les variables évaluées: le sexe , l'âge, le nombre de repas par jour, les allergies alimentaires, les aversions alimentaires, si ils ont rejoint leur famille acheter de la nourriture et de préparer leur propre nourriture. Tout le monde a donné son consentement éclairé signé par les parents. L'information a été analysée à partir de 28 enfants et adolescents, 60,9 % étaient des hommes et 39,1 % de femmes , avec un âge moyen (± écart-type) de 12,6 ± 3,08 années vieux. En ce qui concerne le nombre de repas par jour, 64,3 % occupaient 3-4 repas et 35,7 % un rendement supérieur à 4. Environ 40 % ont déclaré avoir un certain type d' aversion alimentaire. Et 32% des répondants ont indiqué qu'ils accompagnent la famille sur les achats de nourriture et 36% ont déclaré qu'ils préparent leur propre nourriture, en particulier des collations. Il a été perçu que le groupe avait une faible consommation de légumes, environ un tiers accompagner la famille d'achats et de préparer leur propre nourriture, en particulier les collations, probablement en raison de son aspect pratique.

MOTS-CLÉS: Surdité, Perte d'audition, La Consommation Alimentaire.

# PRÁCTICAS DE ALIMENTOS DE ADOLESCENTES ESCOLARES ATENDIDOS EN UNA INSTITUCIÓN FILANTRÓPICA CON REFERENCIA A PERSONAS CON PROBLEMAS AUDITIVOS EN MACAÉ, RIO DE JANEIRO. RESUMEN

El estudio tiene como objetivo describir los patrones dietéticos de los niños con discapacidad auditiva y adolescentes atendidos en una institución en la Región de los Lagos y el Norte Fluminense, Rio de Janeiro. Se trata de un estudio transversal, realizado en Associação Macaense do Deficiente Auditivo, de abril 2010 a 12. Los graduados entrevistados los niños y adolescentes de entre 07 a 19,9 año, con la ayuda de un intérprete de lengua de signos y/o miembros de la familia. Se evaluaron las variables: sexo, edad, número de comidas por día, las alergias alimentarias, aversiones alimentarias, si se unían a sus familias comprar alimentos y preparar sus propios alimentos. Todos dieron su consentimiento informado firmado por los padres. La información se analizó a partir de 28 niños y adolescentes, 60,9 % varones y 39,1 % mujeres, con una edad media (± desviación estándar) de 12,6 ± 3,08 años de edad. En cuanto al número de comidas por día, el 64,3 % mantuvo 3-4 comidas y 35,7 % realizado por encima de 4. Aproximadamente el 40 % reportó tener algún tipo de aversión a la comida. El 32 % de los encuestados informó que acompañan a la familia en la compra de alimentos y 36 % informaron que preparan su propia comida en bocados particulares. Se percibe que el grupo tenía una baja ingesta de verduras, alrededor de un tercio acompañan la familia de compras y preparar sus propios alimentos, especialmente, los alimentos, probablemente debido a su practicidad.

PALABRAS CLAVE: Sordera, Pérdida de la audición, El Consumo de Alimentos.

# PRÁTICAS ALIMENTARES DE ESCOLARES E ADOLESCENTES ASSISTIDOS EM UMA INSTITUIÇÃO FILANTRÓPICA DE REFERÊNCIA AO DEFICIENTE AUDITIVO EM MACAÉ, RIO DE JANEIRO RESUMO

O estudo objetivou descrever as práticas alimentares de crianças e adolescentes deficientes auditivos assistidos em uma instituição de referência na Região dos Lagos e do Norte Fluminense, Rio de Janeiro. Realizou-se um estudo seccional na Associação Macaense do Deficiente Auditivo, entre abril de 2010-12. Graduandos devidamente treinados entrevistaram crianças e adolescentes, entre 07 a 19,9 anos, com ajuda de uma intérprete de LIBRAS e/ou familiares. Avaliaram-se as variáveis: gênero, idade, número de refeições ao dia, alergias alimentares, aversões alimentares, se participa da compra alimentos junto à família, se prepara o seu próprio alimento. Todos entregaram o termo de consentimento livre e esclarecido assinado pelos pais. Foram analisadas informações de 28 crianças e adolescentes, sendo 60,9% do sexo masculino e 39,1% do sexo feminino, com média (±DP) de idade de 12,6±3,08 anos. Quanto ao número de refeições ao dia, 64,3% realizam de 3 a 4 refeições e 35,7% realizam acima de 4. Cerca de 40% informou ter algum tipo de aversão alimentar. Já 32% dos entrevistados referiram acompanhar a família nas compras dos alimentos e 36% informaram preparar o seu próprio alimento, principalmente os lanches. Conclui-se que o grupo apresentou baixa ingestão de hortaliças, cerca de 1/3 acompanha os familiares às compras e prepara, principalmente lanches, provavelmente pela sua praticidade

PALAVRAS CHAVE: Surdez, Perda auditiva, Consumo Alimentar.