# 08 - EATING HABITS OF HIGH SCHOOL TEENAGERS STUDENTS FROM SÃO GABRIEL DA CACHOEIRA / AM

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#### INTRODUCTION

The formation of proper eating habits seeking the incorporation of a healthy lifestyle has been a challenge for nutrition education directed to the public in adolescents (Gabriel, 2008). The culture of poor diet creates risks and concern about the prevalence of overweight and obesity and its comorbidities (Assis et al., 2002). The purpose of this study was analyze the eating habits of high school teenagers of public schools from the town of São Gabriel da Cachoeira, Amazonas.

Recognized in 1833 with the name of São Gabriel. On 09/03/1891 by State Law no. 10, created the municipality of São Gabriel da Cachoeira, but in 1935, it was definitely restored. In 1968, the Federal Law no. 5449, the municipality is framed as National Security Area. The State Secretariat of Health - SUSAM, maintains at the county seat a Mixed Unit (type IV), designed to provide emergency room care, maternity, surgical care, dental and hospital care for the local population and the periphery. It also has the Army Hospital, which often assists in emergency care. The State Secretariat for Education and Quality Teaching - SEDUC keeps at the county seat twelve establishments, teaching elementary and high school. Their agricultural production is based on the cultivation of cassava, which is the raw material for the manufacture of flour, too consumed by the Indians in the region. It is a major producer of palm fiber and vine shit, besides the extraction of wood, rubber, gum and nuts. The livestock is represented mainly by cattle, producing meat and milk for local consume. Fishing is considered subsistence. It can be seen then, that some food products are imported from other regions such as rice and beans, as they are not produced in the town. According to the 2010 Census, the population of São Gabriel da Cachoeira is 37,896 inhabitants. In the studied range 15-19 years, the total population is 4,004 which is equivalent to 10.67 % of the population.

Food and nutrition are basic elements for health promotion and its protection, allowing the human being from his birth to his last vital stage the best quality life style (PNAN, 2011).

All individuals are influenced by feeding to optimize the state of your health, condition your mind and body, as well as offering the ability to study and others (Galisa, et al, 2008). Thus, all feeding care is necessary, as the individual need of each. To keep the comments and feeding definitions is necessary to understand the concept of nutrition, that for Galisa et al. (2008), is the combination of processes through which the body receives and uses the information needed to obtain energy, maintenance its physical, biological, and mental functions and training, development and tissue regeneration. And for the American Medical Association, nutrition is the science of food, nutrients and other related substances, its performance, interaction, and balance in relation to health and disease, and the process by which the organism ingests, digests, absorbs, transports, utilizes and excretes food substances. Besides, the nutrition must be related to social, economic, cultural and psychological, food and nutrition (Linnea et al, 1988). Are different stages, but almost sets procedures perform as nutrition starts after the ingestion of food and is dependent on the quality and quantity of feed components. (Galisa, et al, 2008).

The National Food and Nutrition Policy (2011) highlights nine guidelines, which are essential to ensure the achievement of the proposed objective, able to modify the determinants of health and promote the health of the population, but we derive the following guidelines that meet with production of this work:

Organisation of nutritional care; Promoting adequate and healthy food;

Promoting adequate and realiny

Monitoring food and nutrition;

According to the School Nutrition Program (CFN, 2005), there are major shortages of proper nutritional care in the North and Northeast.

According Galisa et al., (2008), there are eating patterns and common nutrient consume among these students. Eating habits, likes and dislikes are established, many of which form the basis for all life. Also, spend more energy in their sports activities. The students are more independent and, if well targeted, can select their own food, as well as determine how much they will eat.

Also according Galisa et al., (2008), the nutritional status in adolescence deserves attention because it is a critical period for the quality of life of the majority. At this stage it is important to energy consumption and adequate attention to the nutrients that are most associated with the construction of the body tissues: protein, iron, calcium, and vitamin A and C.

Some energy nutrients will be discussed in this work to facilitate research and study. Among the few carbohydrates that you get from animals, we can cite the lactose, which is the milk sugar, and fructose, which is the honey sugar. It is the main energy source because it provides 1g per 4 kcal, when it exhausts the ability to store glucose as glycogen, it turns into adipose tissue, subcutaneous and visceral. Lipids are important constituents of all cells, because they provide energy for the body to produce 1g per 9 kcal, as well as storing energy in the form of triglycerides, lipids, but excess is stored as fat tissue, both visceral and subcutaneous. Proteins are the main substances construction of our organism, the most important for the construction and repair of tissues than lipids and carbohydrates serve to promote the growth of new cells for the formation and maintenance of tissues to allow the replacement of worn-out cells constituting most structures in the body. When the intake of calories or protein is deficient serious disorders occur to the body, causing the Protein-Energetic Malnutrition. The minerals in the body are many, some of them with well-defined functions and other unmarked as to their specific functions. They are found in dairy products, integral grains, eggs, vegetables, and others. Some of its functions are to assist in the formation of bones and teeth and is an essential component of RNA and DNA. Vitamins are a group of substances having some specific features and functions, because they are nutrients that do not provide energy, but help in the processes of energy, regulate the metabolism of macronutrients, are involved in tissues and bones formation.

#### METHODOLOGY

The sample was calculated based on data provided by the Department of Planning, Management Studies, Research and Educational Information of Department of Education and Quality Teaching of the State of Amazonas, in July 2011, with a

population of 769 (seven hundred and sixty nine) students attending high school. We adopted a sampling error of 5% with a confidence interval of 95% and p = 0.5. The minimum size was 257 and 322, the final correction. This study only considered the size eating habits in the consumption of food items with quantitative analysis.

The largest number of students was concentrated in the First series, in the afternoon shift, considering that there was only 2 shifts, due to restricted demand, and the night shift favoured those who work during the day. There were more female students in the 3 series. The average age of these students was 19.9 years (SD = 1.28 years), for females the mean age was 16.79 years (SD = 1.30 years) and for males the average was of 17.04 years (SD = 1.25 years). The majority of both sexes (93.02%) was single and lives with their families (89.62%), is from the urban area (94.96%) and not working (87.69%) (Table 1). The few who work, mostly, work 20 hours per week on their work, and their work included walking sporadically and/or to do undertaking light to moderate intensities tasks. This means that in the work completed prevailed lack of physical exertion. Family income was predominantly found up to 2 minimum wages, followed 3-5 minimum wages and minimum wages 6-10, meaning that there are people in all economic conditions indicated. On maternal education, the highest percentages stood at items "not completed primary education" 35.91%, but there is distribution for all items.

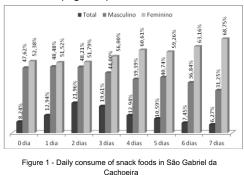
The Ethics Committee of the Federal University of Amazonas adopted at a regular meeting, by unanimous vote, the research project with CAEE No. 0302.0.115.000-11, entitled "Lifestyle and health indicators of students of high school the Amazon".

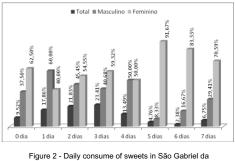
Variant	Total (%)	Male (%)	Female (%)
Grade	(,		
1 <sup>st</sup> Grade	53,73	45,99	54,01
2 <sup>nd</sup> Grade	24,31	38,71	61,29
3rd Grade	21,96	44,64	5536
Total	100,00		
Shift			
Matutinal	-	-	-
Vespertine	79,15	44,39	55,61
Nightly	20,85	40,74	59,26
Total	100,00		
Marital Status			
Single	93,02	45,83	54,17
Married/engaged	5,43	7,14	92,86
Other	1,55	25,00	75,00
Total	100,00		
With who do you live?			
Family	89,62	45,06	54,94
Alone	3,08	62,50	37,50
Others	7,31	21,05	78,95
Total	100,00		
Do you work?			
Notwork Yes, up to 20 hours per	87,69	42,54	57,46
week Yes, more than 20 hours	10,00	53,85	46,15
perweek	2,31	50,00	50,00
Total	100,00		

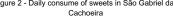
Table 1 - General Characteristics of High School teenagers in São Gabriel da Cachoeira

#### RESULTS

The respondents were asked about their weekly intake of the following foods: snacks (predominance of lipids and carbohydrates), candies (mainly carbohydrates), soft drinks (mainly sodium and carbs), fruits and fruit juice (vitamins, fiber, minerals and sugars), rice and beans (predominance of carbohydrates and beef (mainly protein) and milk (mainly protein). Results indicated that consume every day all food items reported, seeing the peak between 3 and 4 days in general. Considering the chips (generally peak in two days, 21.96%), candy (generally peak in 3 days 23.41%) and soft drinks (generally peak in 3 days 20.70%) the results always point highlighted consumer for females, the consumption for males also showed significant values, but both sexes showed consumption within 7 days (Figures 1, 2 and 3). Referring to the fruit or fruit juices seen in Figure 4, can be noted that in general the highest proportions were 4 and 7 days, with a fair amount in 3 days, females consumed more than males. Beans and rice were shown to peak consumption in 7 days, but notes that there is a fair consumption of beans and rice over all days of the week (Figure 5). Beef consumption peaked in 2 days, but it can be observed that beef is consumed on every day of the week (Figure 6.) The results report that milk consumption is daily and the vast majority of students answered that consumes milk every day of the week (Figure 7).







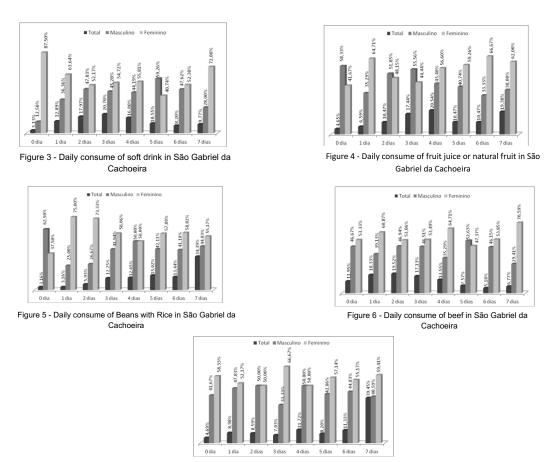


Figure 7 - Daily consume of milk in São Gabriel da Cachoeira

#### DISCUSSION

The eating habits of adolescents from São Gabriel da Cachoeira is properly balanced, but as analysed the statistical data, we noticed that the daily consumption is inappropriate for consecutive 07 days of some foods such as crisps, sweets and soft drinks and the nutritional compositions of these, is the predominance of carbohydrates and lipids, resulting in the accumulation of energy, which in turn is stored as visceral fat and subcutaneous tissue in the body, thus configuring, overweight and obesity in adolescents (Galisa et al, 2008), on the other hand, there is about to consider their growth phase, and the future development of chronic diseases (MES, 2008). However, there are foods with a predominance of builders nutrients that help in the growth of muscle composition, skeletal, ligaments and tendons as meat, milk and beans, considering that these foods are part of a diet rich in proteins and carbohydrates (Galisa et al., 2008). Nutrients regulators have predominance in foods like fruits that weigh positively balanced diet (Galisa et al., 2008). The Energy dominated by carbohydrates such as rice, and vegetable and animal fats, supply the body's physiological need to perform their activities (Galisa et al., 2008), with exceptions including the snacks, sweets and soft drinks that have inadeguate nutritional composition for good nutrition.

#### CONCLUSION

This study provided the expansion of knowledge regarding eating habits of teenagers students in the town of São Gabriel da Cachoeira, Amazonas, contributing directly to point out the necessity of the application of the levels contained in the National Policy for the Promotion of Health (PNPS, 2010) on school.

The students of both genders deserve guidance Nutritional Education to develop healthy eating habits. For as found in the survey, the female had a higher prevalence in the general consume of food, and these are the mothers of the next generation; for the male audience, the greatest care should be directed to the consume of fruits and juices. For both sexes, should be commended for the daily consume of dairy products, as well as beans and rice.

#### REFERENCES

ASSIS, A.M.O.; et al. O Programa Saúde da Família: contribuições para uma reflexão sobre a inserção do nutricionista na equipe multidisciplinar. Rev. Nutr., v.15, nº 3, p. 255-266. 2002.

BRASIL. Ministério da Saúde: Política Nacional de Alimentação e Nutrição, Brasília, DF, 2011.

BRASIL. Ministério da Saúde. Secretaria de Atenção a Saúde. Departamento de Atenção Especializada. Manual de Educação em Saúde / Ministério da Saúde, Secretaria de Atenção a Saúde, Departamento de Atenção Especializada. – Brasília : Editora do Ministério da Saúde, 2008.

BRASIL. Ministério da Saúde. Secretaria de Vigilância em Saúde. Secretaria de Atenção à Saúde. Política Nacional de Promoção da Saúde / Ministério da Saúde, Secretaria de Vigilância em Saúde, Secretaria de Atenção à Saúde. – 3. ed. – Brasília : Ministério da Saúde, 2010.

CHAVES, L.G.. Política de Alimentação Escolar, Brasília: Centro de Educação a Distância – CEAD, Universidade de Brasília, 2006.

GALISSA, M.S.; ESPERANÇA, L.M. B.; SÁ, N.G. Nutrição: conceitos e aplicações.. São Paulo: M. Books do Brasil Editora Ltda, 2008.

IBGE. Instituto Brasileiro de Geografia e Estatística, 2010, Censo 2010. Disponível em <<u>www.ibge.gov.br</u>> acessado em 23 de setembro de 2013.

LINNEA, A.; et al. Nutrição. 17ª Rio de Janeiro : Guanabara, 1988.

NAHAS, M.V. et al. Estilo de vida e Saúde de Escolares do Ensino Médio: Manaus, Presidente Figueiredo, Parintins, São Gabriel da Cachoeira, Itacoatiara, Manaus: Edua, 2012.

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# EATING HABITS OF HIGH SCHOOL TEENAGERS STUDENTS FROM SÃO GABRIEL DA CACHOEIRA/AM ABSTRACT

The purpose of this study was verify the eating habits of high school teenagers students of public schools from the town of São Gabriel da Cachoeira, Amazonas, regarding to the food's consume. The sample, calculated based on records of SEDUC, was comprised for 334 individuals of both sexes, who answered the COMPAC II questionnaire of NuPAF-CDS-UFSC 2011. It was observed the component items of the scale eating habits through percentage, during 7 days of a week, overall and by sex. The eating habits of students from São Gabriel da Cachoeira were considered adequately balanced with daily frequency peaks 3-4 days. By sex, the higher proportions were for females, including soft drinks, candies and savoury, commendable for both sexes in a 7-day consume of beans, rice, milk and dairy products. The male could improve the consume of fruits and juices. The results suggest, in any way, an indication of nutritional education to give meaning to what is good and correct with consciousness what needs to be understood and developed eating habits at this stage of growth, which will make a difference in the course of decades forward, concerning to population health.

**KEYWORDS:** Eating Habits, Students, Food's Consume.

#### HABITUDES ALIMENTAIRES DES TEEN L'ÉCOLE DU COMTÉ DE SÃO GABRIEL DA CACHOEIRA/AM RÉSUMÉ

Le but de cette étude était de déterminer les habitudes alimentaires de l'école écoliers des écoles publiques dans la municipalité de São Gabriel da Cachoeira , l'État d'Amazonas , au sujet de la consommation de nourriture . L'échantillon a été calculée sur la base des dossiers de SEDUC , comprenant 334 sujets des deux sexes. Qui a répondu au questionnaire NuPAF COMPAC II - CDS / UFSC 2011. Nous avons observé les éléments constitutifs des habitudes alimentaires échelle à travers pourcentage pendant 7 jours de la semaine , globalement et par sexe. Les habitudes alimentaires des écoliers de São Gabriel da Cachoeira ont été considérés comme suffisamment équilibrée avec des pics de fréquence quotidienne 3-4 jours . Le sex-ratio était plus élevé pour les femmes , y compris les boissons gazeuses, sucrées et salées , louables pour les deux sexes au cours des 7 jours de consommation de haricots et de riz, lait et produits laitiers . Le mâle peut améliorer la consommation de fruits et jus de fruits. Les résultats suggèrent en aucune manière une indication de l'éducation nutritionnelle à donner un sens à ce qui est bon et correct avec la conscience, qui doit être compris et développé des habitudes alimentaires , à ce stade de croissance , ce qui fera la différence au cours de décennies avant par rapport santé de la population .

MOTS-CLÉS: habitudes alimentaires, les écoliers, la consommation de nourriture.

## HÁBITOS ALIMENTICIOS DE ADOLESCENTES ESCOLARES DE ENSEÑO MEDIO DEL MUNICIPIO DE SÃO GABRIEL DA CACHOEIRA/AM

RESUMEN

El objetivo de este estudio fue verificar los hábitos alimenticios de los escolares adolescentes del enseño medio de las escuelas públicas del municipio de San Gabriel da Cachoeira, Estado del Amazonas, cuanto al consumo de los alimentos. La muestra fue calculada con base en los registros de la SEDUC, fue compuesta por 334 sujetos de ambos sexos. Los cuales respondieron el cuestionario COMPAC II del NuPAF – CDS/UFSC 2011. Fueron observados los ítems componentes de la dimensión hábitos alimenticios, a través de porcentajes durante 7 días de la semana, general y por sexo. Los hábitos alimenticios de los escolares de San Gabriel da Cachoeira fueron considerados adecuadamente equilibrados con picos de frecuencia diaria de 3 a 4 días. Por sexo las proporciones mayores fueron para el femenino, inclusive gaseosas, dulces y pasa bocas, elogiable para ambos sexos en el consumo de 7 días de frijoles y arroz, leche y derivados. El masculino podría mejorar el consumo de frutas y jugos. Los resultados sugieren de cualquier forma indicar la educación nutricional para darle significado al que está bien y corregir con consciencia, al que necesita ser entendido y a su vez formando un habito alimenticio en esta fase de crecimiento, lo que hará diferencia con el transcurrir de las décadas futuras en relación a la salud poblacional.

PALABRAS CLAVES: Hábitos alimenticios; adolescentes escolares; consumo de alimentos.

# HÁBITOS ALIMENTARES DE ESCOLARES ADOLESCENTES DO ENSINO MÉDIO DO MUNICÍPIO DE SÃO GABRIEL DA CACHOEIRA/AM

### RESUMO

O objetivo deste estudo foi verificar os hábitos alimentares dos escolares adolescentes do ensino médio das escolas públicas do município de São Gabriel da Cachoeira, Estado do Amazonas, quanto ao consumo de alimentos. A amostra foi calculada com base nos registros da SEDUC, foi composta por 334 sujeitos de ambos os sexos. Os quais responderam o questionário COMPAC II do NuPAF-CDS-UFSC 2011. Foram observados os itens componentes da dimensão hábitos alimentares, através de percentual durante 7 dias da semana, geral e por sexo. Os hábitos alimentares dos escolares de São Gabriel da Cachoeira foram considerados adequadamente equilibrados com picos de frequência diária de 3 a 4 dias. Por sexo as proporções maiores foram para o feminino, inclusive refrigerantes, doces e salgados, elogiável para ambos os sexos no consumo de 7 dias de feijão e arroz, leite e derivados. O masculino poderia melhorar o consumo de frutas e sucos. Os resultados sugerem de qualquer forma a indicação da educação nutricional para dar significado ao que está bom e corrigir com consciência, o que precisa ser entendido e tornado habito alimentar nesta fase de crescimento, o que fará diferença com o correr de décadas a frente em relação a saúde populacional.

PALAVRAS-CHAVE: Hábitos alimentares; escolares; consumo de alimentos.