

#### 04 - PET HEALTH EACOL: KNOWLEDGE ON INTRODUCTION OF HEALTHY COMPLEMENTARY FEEDING FOR PREGNANT WOMEN AND MOTHERS ATTENDED AT THE MUNICIPAL PROGRAM TO FIGHT MALNUTRITIONAL, CATAN - MACAÉ, RJ

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##### INTRODUCTION

Promoting healthy diet includes a set of actions that include the development of healthy eating habits from childhood, starting through the practice of exclusive breastfeeding, and later with the introduction of complementary feeding (SF), respecting cultural identities and foods (or cultural identity and food) of various regions (BRASIL, 2005).

In the first year of life, adequate and timely introduction of SF, from 06 months of life is extremely important since it is able to reduce infant mortality and to bring numerous benefits to the child (BRASIL, 2009a). Its function is to complement the intake of energy and necessary micronutrients for healthy and complete growth of children, it should be initiated from the 6 months of life in infants with the introduction of new foods in addition to breast milk which should be offered from the first day of life (BRASIL, 2005).

The success of SF depends on many factors, among them the guidance to mothers and families of infants, for proper introduction of new foods in infant feeding. Thus, recurring problems related to the supply of SF improperly, such as anemia, overweight and malnutrition could be avoided (BRASIL, 2009a).

Health professionals of Primary Care and other professionals, with the support of the community, the Health Councils and linkages with other sectors of society can support and stimulate public policies that will ensure access to healthy food (BRASIL, 2006).

Thus, it becomes important that the health professional has a careful and close look at the issues surrounding infant feeding within the family, since they are responsible for stimulating healthy eating practices and therefore play an important role in the proper introduction and maintenance of supplementary feeding, to ensure the health of the child. I. e, the knowledge of professionals on infant feeding, and their role in society as a multiplier, allow families, parents and caregivers to have adequate information and apply it in their daily lives.

This study aimed to describe the knowledge about the introduction of SF healthy pregnant women and mothers of infants <3 years enrolled in the Municipal Program to Fight Malnutrition - Pregnant women, at the Coordination of the Technical Area of Food and Nutrition - Catan/Macaé-RJ.

##### SUBJECTS AND METHODS

A descriptive study was conducted in Catan, in April/2013, with pregnant women and mothers of infants <3 months enrolled in the Municipal Program to Fight Malnutrition - Pregnant women in Catan - Macaé/RJ, who agreed to participate in the study and signed a consent form.

The Municipal Program to Fight Malnutrition for pregnant women, developed in Catan aims to reduce nutritional deficiencies in pregnant women in the city of Macaé through the distribution of a basic food basket for those who are at nutritional risk for malnutrition. At the end of the pregnancy, women who are practicing exclusive breastfeeding remain in the program until their child reaches the age of 6 months, as a way to encourage and support such practice, favoring prevention of early weaning.

Scholarship holders trained at PET Health (period 2012-2014) conducted interviews using a structured questionnaire, adapted from the pre-test tutor book, National Strategy for Promotion of Supplementary Healthy Eating - Enpacs (BRASIL, 2010), on the day of the delivery of the benefit. The form had the following variables: gender and age, family income (in minimum wages), education, number of children, marital status. Knowledge on supplementary feeding: The beginning of the introduction of complementary foods, understanding of supplementary feeding, times between meals, method of preparation of supplementary foods.

Data were entered, consolidated, cleaned and analyzed using the statistical package SPSS version 20.0. We conducted a descriptive analysis using absolute and relative frequency, Spearman correlations and association  $\chi^2$  tests.

The project was submitted to the Ethics Committee in Research of the Faculty of Medicine of Campos dos Goytacazes.

##### RESULTS AND DISCUSSION

The total of 21 volunteers, representing 53% of clients attended by the program were interviewed. Almost half (47.6%) presented age between 20-30 years.

Table 1 shows the percentage distribution of socioeconomic and demographic variables of pregnant women and mothers of infants <3 months enrolled in the Municipal Program to Fight Malnutrition - Pregnant women, at the Coordination of the Technical Area of Food and Nutrition - Catan, Macaé/RJ. Regarding marital status 47.7% reported they were married or cohabiting, regarding the family income, 57.1% received <1 minimum wage (MW) and 42.9% received 2-3 MW. As for schooling, 47.6% had incomplete primary education and 52.4% had not completed high school; and 38.1% of respondents had more than 3 children (Table 1).

**Tables 1.** Characterization of pregnant women and mothers of infants under 3 years old enrolled in the Municipal Program to Fight Malnutrition - Pregnant women in Catan-Macaé/RJ. April, 2013. (n=21)

Variables	%
<b>Age Group (years old)</b>	
< 20	23,8
20 – 30	47,6
30 – 40	28,6

<b>Marital Status</b>	
Single	42,9
Living with partner	19,1
Married	28,6
Others	9,4
<b>Family Income (in minimum wages – MW)</b>	
< 1 MW	57,1
2 - 3 MW	42,9
<b>Education</b>	
Incomplete primary education	47,6
Incomplete High School	52,4
<b>Number of Children</b>	
1	33,3
2	23,8
> 3	38,1

Regarding the knowledge about the early introduction of SF, 81% of the respondents answered correctly, i.e. that it must be from the sixth month of life, and 61.9% reported that they should be offered two baby foods of fruit and 1 salty, while maintaining breastfeeding. For the preparation, 76.1% reported mistakenly that the soup of the infant should be liquid for easy ingestion and 86% reported that fresh or salt baby food could be liquefied or sieved.

The family income was moderately and negatively associated with early SF ( $r_s = -0.56$ ,  $p < 0.01$ ). As for maternal age, younger mothers believe that infant feeding needs fixed and rigid schedules between meals ( $r_s = 0.43$ ,  $p < 0.05$ ), contrary to the recommendation.

Studies show that among the factors associated with early discontinuation of breastfeeding and supplementary feeding, is the lack of maternal knowledge on this issue. The cross-sectional study by Giugliani et al. (1995), with 100 mothers of first-born from 06 to 12 months, with a birth weight above 2500g and able to be breastfed, the services of pediatric care at the Clinical Hospital of Porto Alegre, aimed to assess the knowledge of mothers on breastfeeding and their relationship with the guidance received in the pre and post-natal care and the prevalence of breastfeeding at 3 months. The authors found that most mothers (62%) had lower hit rate than 50%. It was also detected that mothers' knowledge on aspects of breastfeeding was small. The authors reported that the lack of knowledge about breastfeeding contributed to the early cessation of breastfeeding and, consequently, the early introduction of supplementary feeding. They also observed that 63% of mothers had at most completed primary school and 32% did not live with the child's father (GIUGLIANI et al., 1995). These results are better than those found in our study, where 42.9% were not living with the child's father and 47.8% had not finished primary school.

In the study by Barros & Seyffarth (2008), where 121 questionnaires were completed by mothers (82%) and caregivers of children (18%) around 6 months of age, it was aimed to meet prior information on supplementary feeding and assess the effectiveness of an educational activity on the introduction or modification of concepts on the subject. The authors identified in this study that 38% of the respondents had completed high school and 17.4% had incomplete high school, unlike what was observed in our study, where more than half of participants (52.4%) had incomplete high school.

As for early introduction of food, data found in the second Survey of the Prevalence of Breastfeeding held in state capitals and the Federal District showed approximately ¼ of infants aged between 3 and 6 months ate salty food and fruits; in the age group between 6 and 9 months, 69.8% had eaten fruits and 70.9%, greens/vegetables. The survey also revealed that children between 9 and 12 months consumed coffee (8.7%), soft drinks (11.6%) and cookies and/or salties (71.7%), these foods are considered unhealthy (BRASIL, 2009). It was concluded that the introduction of supplementary foods was not opportune and possibly inappropriate in relation to energy and nutritional adequacy (BRASIL, 2009b).

The term supplementary feeding can lead to different definitions and understandings, which explains errors commonly found in the period when only breast milk is no longer sufficient to meet the nutritional needs of the infant, and the introduction of new types of food into the routine feeding of infants is needed to meet the nutritional demands of the child. The SF is defined as feeding in the period in which other foods or liquids are offered to the child, in addition to breast milk. These foods can be prepared especially for the child or can be the same food normally consumed by the family, however, modified to meet the child's needs, therefore, the nutritional adequacy of supplementary foods is the key in preventing morbidity and mortality in childhood, including both malnutrition and overweight. The growth deficit acquired before the child reaches two years of age is difficult to be reversed after this age (MONTE & GIUGLIANI, 2004).

To guarantee success of supplementary feeding, tools are developed to guide pregnant women, puerperae, nursing mothers and mothers as the "Ten steps to healthy eating in children under two years old." In a complete, simple and clear form the Ministry of Health, Department of Health Care, Department of Primary Care, developed this document in order that children go through this phase without major problems, preparing them for good eating habits (BRASIL, 2009; BRASIL, 2005).

Among the observed guidelines are: (1) Step 3: At 6 months, giving supplementary food (cereals, tubers, meat, leguminous, fruits and vegetables) three times a day. (2) Step 4: Supplementary food should be offered in accordance with the family meal schedules at regular intervals and in order to respect the child's appetite. (3) Step 5: Supplementary feeding should be thick from the start and with a spoon; start with a pasty consistency (porridge / mashed) and gradually increase the consistency until it reaches to the family diet. (4) Step 6: Give the child different food daily. A varied diet is a colorful diet. (5) Step 7: To encourage the daily consumption of fruits and vegetables in meals. (6) Step 8: Avoid sugar, coffee, canned, fried foods, soft drinks, candy, snacks and other goodies. Use salt sparingly in the first years of life (BRASIL, 2010).

With the information provided by the Ministry of Health for health professionals that are multipliers of this knowledge to society in general, more specifically to mothers and caregivers about appropriate infant feeding, timely and secure, you can nurture the food and nutritional security of the child group.

**CONCLUSION**

We conclude that the higher the family income is, the earlier the SF starts. Some responses indicated unknowns about the foods and preparations that must be offered on complementary feeding. It is necessary to invest in conducting courses on the subject focused on the population studied. It is also understood the importance of further studies to be developed to detect yet unknown information on infant feeding, by pregnant women and mothers of children under 3 months registered at Municipal Program to Fight Malnutrition infants - Pregnant women, to develop new strategies that promote the spread of the issue to them and society in general.

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**REFERENCES**

- Barros, RMM; Seyffarth, AS. Conhecimentos maternos sobre alimentação complementar – impacto de uma atividade educativa. *Com. Ciências Saúde*. 2008;19(3):225-231.
- Brasil. Ministério da Saúde. ENPACS: Estratégia Nacional Para Alimentação Complementar Saudável: Caderno Do Tutor/Ministério da Saúde, Rede Internacional em Defesa do Direito de Amamentar – IBFAN Brasil. – Brasília: Ministério da Saúde, 2010a.
- \_\_\_\_\_. Ministério da Saúde. Secretaria de Atenção à Saúde. Departamento de Atenção Básica. Dez passos para uma alimentação saudável: guia alimentar para crianças menores de dois anos: um guia para o profissional da saúde na atenção básica/Ministério da Saúde, Secretaria de Atenção à Saúde, Departamento de Atenção Básica. – 2. ed. – Brasília: Ministério da Saúde, 2010b. 72 p.: il. – (Série A. Normas e Manuais Técnicos).
- \_\_\_\_\_. Ministério da Saúde. Secretaria de Atenção à Saúde. Departamento de Atenção Básica. Saúde da criança: nutrição infantil: aleitamento materno e alimentação complementar/Ministério da Saúde, Secretaria de Atenção à Saúde, Departamento de Atenção Básica. – Brasília: Editora do Ministério da Saúde, 2009a.
- \_\_\_\_\_. Ministério da Saúde. Secretaria de Atenção a Saúde. Departamento de Ações Programáticas e Estratégicas. II Pesquisa de Prevalência de Aleitamento Materno nas Capitais Brasileiras e Distrito Federal/Ministério da Saúde, Secretaria de Atenção a Saúde, Departamento de Ações Programáticas e Estratégicas. – Brasília Editora do Ministério da Saúde, 2009b.
- \_\_\_\_\_. Ministério da Saúde. Política Nacional de Promoção da Saúde. Brasília, 2006.
- \_\_\_\_\_. Ministério da Saúde. Guia alimentar para crianças menores de 2 anos/Ministério da Saúde, Organização Pan-Americana da Saúde. – Brasília: Editora do Ministério da Saúde, 2005. 152 p.: il. – (Série A. Normas e Manuais Técnicos).
- Giugliani, ERJ; Rocha, VLL; Neves, JM; Polanczyk, CA; Seffrin, CF; Susin, LO. Conhecimentos maternos em amamentação e fatores associados. *J. Pediatr (Rio J)*, 1995;71(2):77-81.
- Monte, CMG; Giugliani, ERJ. Recomendações para alimentação complementar da criança em aleitamento materno. *J Pediatr (Rio J)*. 2004;80(5 Supl):S131-S141.

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**ABSTRACT**

Complementary feeding (CF) should be started from 6 months of the infant's life, which is, along with breastfeeding, reducing child mortality. This study aimed to describe the knowledge about the introduction of healthy CF of pregnant women and mothers of infants <3 months enrolled in the Municipal Program to Fight Malnutrition - Pregnant women, at the Coordination of the Technical Area of Food and Nutrition - Catan/Macaé-RJ. A descriptive study of primary basis, conducted in April/2013, with pregnant women and mothers of infants <3 months enrolled in the Municipal Program to Fight Malnutrition - Pregnant women who agreed to participate and signed an informed consent. Health PET scholarship holders, on the day of delivery of the benefit, conducted interviews using a structured form. We interviewed 21 pregnant women, representing 53% of the clientele. About 50% were 20-30 years old; 57.1% had <1 minimum wage (MW); 47.6% had incomplete primary education. Regarding knowledge about the beginning of the introduction of CF, 81% answered correctly that it must be from the sixth month of life, and 61.9% reported that they should be offered two baby foods of fruit and 1 salty, while maintaining breastfeeding. The family income was moderately and negatively associated with early CF ( $r_s = -0.56$ ,  $p < 0.01$ ). Younger mothers believe that infant feeding needs fixed and rigid schedules between the meals ( $r_s = 0.43$ ,  $p < 0.05$ ), contrary to the recommendation. We conclude that some responses indicated unknowns about the foods and preparations that must be offered on complementary feeding.

**KEYWORDS:** Infants, Pregnant Women, Complementary Feeding.

**PET SANTÉ EACOL: CONNAISSANCES SUR INTRODUCTION DE SANTÉ ALIMENTATION COMPLÉMENTAIRE POUR LES FEMMES ET LES MÈRES ATTENDÉ AU PROGRAMME MUNICIPAL DE LUTTE CONTRE MALNUTRITIONAL, CATAN - MACAÉ, RJ.**

**RÉSUMÉ**

L'alimentation complémentaire (AC) doit être lancée à partir de 6 mois de la vie de l'enfant, qui est, avec l'allaitement, réduire la mortalité infantile. Cette étude visait à décrire les connaissances sur l'introduction de la AC des femmes enceintes et des mères d'enfants <3 mois inscrits dans le programme municipal de lutte contre la malnutrition - Les femmes enceintes, à la coordination de la zone technique de l'alimentation et la nutrition - Catan/Macaé -RJ. Une étude descriptive de la base primaire, menée en Avril/2013, les femmes enceintes et les mères de nourrissons <3 mois inscrits dans le programme municipal de lutte contre la malnutrition - Les femmes enceintes qui ont accepté de participer et ont signé un consentement éclairé. Boursiers santé PET, le jour de la livraison de la prestation, mené des entrevues en utilisant une forme structurée. Nous avons interviewé 21 femmes enceintes, ce qui représente 53% de la clientèle. Environ 50% étaient âgés de 20-30 ans; 57,1% avaient <1 salaire minimum (SM); 47,6% avaient terminé le cycle primaire. En ce qui concerne les connaissances sur le début de l'introduction de la AC, 81% ont répondu correctement que ce doit être du sixième mois de la vie, et 61,9% ont déclaré qu'ils devraient être offerts deux aliments pour bébés de fruits et 1 salée, tout en maintenant l'allaitement maternel. Le revenu familial a été modérée et

négative associée à début AC ( $rs = -0,56, p < 0,01$ ). Les jeunes mères croient que les besoins d'alimentation du nourrisson fixes et des horaires rigides entre les repas ( $rs = 0,43, p < 0,05$ ), contrairement à la recommandation. Nous concluons que certaines réponses indiquées inconnues sur les aliments et préparations qui doivent être offerts sur l'alimentation complémentaire.

**MOTS-CLÉS:** Nourrissons, Les Femmes Enceintes, L'alimentation Complémentaire.

**PET EACOL SALUD: EL CONOCIMIENTO SOBRE INTRODUCCIÓN DE SANA ALIMENTACIÓN COMPLEMENTARIA PARA MUJERES Y MADRES ATTENDED EN EL PROGRAMA MUNICIPAL PARA LUCHAR MALNUTRITIONAL, CATAN EMBARAZADAS - MACAÉ, RJ.**

**RESUMEN**

La alimentación complementaria (AC) debe iniciarse desde los 6 meses de vida del recién nacido, que es, junto con la lactancia materna, reducir la mortalidad infantil. Este estudio tuvo como objetivo describir el conocimiento acerca de la introducción de la AC saludable de las mujeres embarazadas y madres de niños <3 meses inscritos en el Programa Municipal de Lucha contra la Malnutrición - las mujeres embarazadas, en la Coordinación del Área Técnica de Alimentación y Nutrición - Catan/Macaé-RJ. Un estudio descriptivo de base primaria, realizada en abril/2013, con las mujeres embarazadas ya las madres de lactantes <3 meses inscritos en el Programa Municipal de Lucha contra la Malnutrición - Las mujeres embarazadas que aceptaron participar y firmaron un consentimiento informado. Becarios de la Salud (PET plazo 2012-2014), en el día de la entrega de la prestación, realizaron entrevistas mediante un formulario estructurado, que fue adaptado a partir de la prueba previa del libro tutor/Enpacs (BRASIL, 2010). El análisis se realizó con el paquete estadístico SPSS, versión 20.0. Entrevistamos a 21 mujeres embarazadas, lo que representa el 53% de la clientela. Alrededor del 50% eran de 20-30 años de edad; 57.1% tenían <1 salario mínimo (SM); 47.6% tenían educación primaria incompleta. En cuanto a los conocimientos sobre el comienzo de la introducción de la AC, el 81% respondió correctamente que debe ser a partir del sexto mes de vida, y el 61,9% informó que se les debe ofrecer dos alimentos infantiles de frutas y 1 salado, mientras se mantiene la lactancia materna. El ingreso familiar fue moderadamente y negativamente asociado con AC tempranas ( $rs = -0.56, p < 0.01$ ). Las madres más jóvenes creen que las necesidades de alimentación del lactante y horarios fijos rígidas entre las comidas ( $rs = 0,43, p < 0,05$ ), en contra de la recomendación. Llegamos a la conclusión de que algunas de las respuestas indicaron incógnitas acerca de los alimentos y preparaciones que deben ser ofrecidos en la alimentación complementaria.

**PALABRAS CLAVE:** Bebés, Mujeres Embarazadas, La Alimentación Complementaria.

**PET SAÚDE EACOL: CONHECIMENTOS SOBRE INTRODUÇÃO DA ALIMENTAÇÃO COMPLEMENTAR SAUDÁVEL DE GESTANTES E MÃES ASSITIDAS PELO PROGRAMA MUNICIPAL DE COMBATE ÀS CARÊNCIAS NUTRICIONAIS DA CATAN – MACAÉ, RJ.**

**RESUMO**

A alimentação complementar (AC) deve ser iniciada a partir dos 6 meses de vida do lactente, sendo capaz, juntamente com o aleitamento materno, de reduzir a mortalidade infantil. Objetivou-se descrever os conhecimentos sobre a introdução da AC saudável de gestantes e mães de lactentes menores de 3 meses cadastradas no Programa Municipal de Combate às Carências Nutricionais – Gestantes, na Coordenadoria da Área Técnica de Alimentação e Nutrição - Catan/Macaé-RJ. Estudo descritivo, quantitativo, de base primária, conduzido em abril/2013, com gestantes e mães de lactentes menores de 3 meses cadastradas no Programa Municipal de Combate às Carências Nutricionais – Gestantes. Bolsistas, no dia da entrega do benefício, realizaram entrevistas utilizando um formulário estruturado. Entrevistaram-se 21 gestantes, representando 53% da clientela. Cerca de 50% apresentava idade entre 20-30 anos; 57,1% recebiam menos do que 1 salário mínimo (SM); 47,6% tinham ensino fundamental incompleto. Em relação aos conhecimentos sobre o início da introdução da AC, 81% responderam corretamente; e 61,9% relataram que devem ser oferecidas 2 papas de fruta e 1 salgada, mantendo sempre a amamentação. A renda familiar esteve moderada e negativamente associada ao início da AC ( $rs = -0,56, p < 0,01$ ). As mães mais jovens acreditam que a alimentação do lactente necessita de horários fixos e intervalos rígidos entre as refeições ( $rs=0,43, p < 0,05$ ), contrariando a recomendação. Conclui-se que algumas respostas indicaram desconhecimentos sobre os alimentos e preparações que devem ser oferecidos na alimentação complementar.

**PALAVRAS-CHAVE:** Lactentes, Gestantes, Alimentação Complementar.