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REVIEW ARTICLE

Infant feeding: beyond the nutritional aspects☆

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KEYWORDS
Responsive feeding;
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Abstract
Objective: To draw attention to the importance of interaction between caregiver and child during feeding and the influence of parenting style on dietary habit formation.
Source of data: A search was performed in the PubMed and Scopus databases for articles addressing responsive feeding; the articles considered most relevant by the authors were selected.
Synthesis of data: The way children are fed is decisive for the formation of their eating habits, especially the strategies that parents/caregivers use to stimulate feeding. In this context, responsive feeding has been emphasized, with the key principles: feed the infant directly and assist older children when they already eat on their own; feed them slowly and patiently, and encourage children to eat but do not force them; if the child refuses many types of foods, experiment with different food combinations, tastes, textures, and methods of encouragement; minimize distractions during meals; and make the meals an opportunity for learning and love, talking to the child during feeding and maintaining eye contact. It is the caregiver's responsibility to be sensitive to the child's signs and alleviate tensions during feeding, and make feeding time pleasurable; whereas it is the child's role to clearly express signs of hunger and satiety and be receptive to the caregiver.
Conclusion: Responsive feeding is very important in dietary habit formation and should be encouraged by health professionals in their advice to families.

PALAVRAS-CHAVE
Alimentação responsiva;
Práticas alimentares parentais;

Alimentação infantil: além dos aspectos nutricionais

Resumo
Objetivo: Chamar a atenção para a importância da interação entre cuidador e criança durante a alimentação e a influência do estilo de parentalidade na formação do hábito alimentar.

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Estilos parentais;
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Fontes dos dados: Foi realizada busca na base de dados PubMed e Scopus de artigos abordando a alimentação responsiva, tendo sido selecionados aqueles julgados mais relevantes pelos autores.
Síntese dos dados: O modo de alimentar as crianças é decisivo na formação do hábito alimentar, sobretudo as estratégias que os pais/cuidadores utilizam para estimular a alimentação. Nesse contexto, a alimentação responsiva tem merecido destaque, tendo como princípios-chave: alimentar a criança pequena diretamente e assistir as mais velhas quando elas já comem sozinhas; alimentar lenta e pacientemente, e encorajar a criança a comer, mas não forçá-la; se a criança recusar muitos alimentos, experimentar diferentes combinações de alimentos, de gostos, texturas e métodos de encorajamento; minimizar distrações durante as refeições; e fazer das refeições oportunidades de aprendizado e amor, falando com a criança durante a alimentação e mantendo contato olho a olho. Cabe ao cuidador a responsabilidade de ser sensível aos sinais da criança e aliviar tensões durante a alimentação, além de torná-la prazerosa; enquanto é papel da criança expressar os sinais de fome e saciedade com clareza e ser receptiva ao cuidador.
Conclusão: A alimentação responsiva é muito importante na formação dos hábitos alimentares e deve ser incentivada pelos profissionais de saúde, orientando as famílias como praticá-la.

Introduction

Infant feeding is a subject that has aroused great interest in recent years in several fields of knowledge, as it involves different aspects beyond nutrition. Knowledge of the immediate and long-term impact of poor nutrition has contributed to the search for better understanding of how eating habits are formed and drawn attention to the importance of eating habits early in life.[1,2]

Eating habits are influenced by numerous genetic, socioeconomic, cultural, ethnic, and religious factors, among others. Starting as early as the pregnancy period, through contact of the fetus with the amniotic fluid,[3] the formation of eating habits continues during childhood, especially in the first 2–3 years of life, and will be influenced by different factors throughout life, such as family, friends, school, and media.[4–7]

Infants, due to their biological immaturity, are totally dependent on others to feed them. These individuals, especially mothers because they are the primary caregivers of children, play a fundamental role in the construction of children's eating habits. In addition to deciding what the child will eat, they determine how the child will be fed.[4,6]

The interaction between the mother/caregiver and child during the act of feeding/being fed has been the focus of research interest in recent years, because the caregiver's characteristics and how he/she relates to the child has a direct impact on the way a child will approach food. From this perspective, the parents' life habits, parenting style, and how they interact with their children are important for the formation of children's eating habits.[4,8,9]

In the context of infant feeding, interaction during the meal can show two aspects: positive and negative. The positive one corresponds to the responsive feeding type, in which, for Black & Aboud,[10] ''there must be attention and interest in the child's feeding; attention to their internal signs of hunger and satiety; their ability to communicate their needs through distinct and significant signs, and the successful progression to independent feeding.'' The negative aspect, in turn, can be called non-responsive feeding, characterized by a lack of reciprocity between the caregiver and the child, because during each instance, one of the two actors involved becomes dominant in the feeding situation, *i.e.*, sometimes the caregiver commands and dominates and sometimes the child controls the situation; or, the caregiver ignores the child.

The aim of this review is to show how the interaction between caregiver and child during feeding time and parenting style influence the formation of dietary habits.

Complementary feeding: beyond the nutritional aspects

Dietary habits early in life will have different effects throughout the life of individuals. In the first 6 months of life, it is recommended that the child be exclusively breastfed, as breast milk is the only food that can meet all nutritional and emotional needs of the infant during this period and provide an intense mother–child bond. Additionally, the existence of a positive association between duration of exclusive breastfeeding and healthier diet in later childhood has been postulated.[11]

After 6 months of age, the exclusive use of breast milk is not enough, considering that the nutritional needs of the child are no longer met, thus requiring the gradual introduction of other food sources, by means of complementary foods.[11,12] The duration of breastfeeding, which is recommended for two years or more, also seems to influence future eating habits.[11]

Recently, worldwide, a greater incentive has been placed on the adequate practice of introducing complementary foods; however, progress toward this objective is still incipient when compared, for instance, with breastfeeding promotion.[13] This finding is supported by studies showing the high prevalence of inadequate complementary feeding, such as, according to the European Society for Pediatric Gastroenterology, Hepatology, and Nutrition Committee on Nutrition[14]: early introduction of foods such as whole cow's milk; foods with inappropriate consistency and low caloric density; low bioavailability of micronutrients; insufficient supply of fruits and vegetables; contamination during the

preparation and storage of food; adding simple carbohydrates to milk; and supply of processed foods high in simple carbohydrates, lipids, and salt, often consumed by the family.

There is no doubt that a healthy diet is vital for child health promotion. Thus, there is a need to analyze the different aspects involved in infant feeding, which will determine the eating habits, which in turn are a reflection of social and cultural practices.[7,15]

Infant feeding practice, characterized primarily by breastfeeding and the introduction of new foods, suffers strong influence from the family background. In this context, the mother has a predominant role, representing the main caregiver of the child. The manner in which she cares for her child is crucial for the child's health, and is related to her educational level, the information about health received from health professionals and/or the media, social support, and her availability to fulfill the role of caregiver.[2,15–18]

Another factor to be considered is the adequacy of food – variety, consistency, texture, and the use of a cup and spoon, respecting the child's development. It is important to stimulate the child, after a certain age, to feed with their own hands.[19]

From the point of view of the nutritional composition, the introduction of food with high levels of salt and refined sugar and excess saturated fats is not recommended, in addition to industrialized food, especially ultra-processed food, and those considered superfluous, including candies and sweets. It is a consensus that the introduction of fruit and vegetables in the first year of life contributes to the implementation of healthy eating habits.[20,21]

As children grow, their food preferences will be defined; hence the importance of encouraging them from beginning to eat a varied and adequate diet, one that reflects their regional food culture.[7,19,20]

The family plays a decisive role in how the child will learn to feed, especially through the strategies that parents/caregivers use to stimulate feeding. Recognizing the signs of hunger and satiety and understanding the self-capacity of the small child in relation to food intake contribute to the formation of adequate eating behavior.[2,15] This process, as mentioned, starts early and is established during the first years of life.

The World Health Organization (WHO)[22] has adopted the following principles for healthy complementary feeding of breastfed children:

1. Practice exclusive breastfeeding from birth to 6 months of age; after that, introduce complementary foods while maintaining breastfeeding.
2. Continue breastfeeding on demand, often until 2 years of age or older.
3. Practice responsive feeding, applying the principle of psychosocial care.
4. Practice good hygiene and adequate food handling.
5. Start at 6 months of age with small amounts of food and increase the amount as the child gets older, while maintaining frequent breastfeeding.
6. Gradually increase food consistency and variety as the child gets older, adapting to the child's requirements and abilities.
7. Increase the number of times the child is fed complementary foods as they grow.
8. Feed the child a variety of nutritious foods to ensure that all nutritional needs are met.
9. Use fortified complementary foods and vitamin supplements for the child, if necessary.
10. Increase fluid intake during illness, including more frequent breastfeeding and encourage children to eat their favorite soft foods. After illness, offer food more often than usual and encourage the child to eat more.

It can be observed that the third principle is dedicated to how to feed the child, such is the importance attributed to this aspect. The interaction between the mother/caregiver and the child will determine whether or not the feeding is responsive and will influence the child's eating habits and relationship with food.

Interaction between parents (caregivers) and children: the act of feeding and being fed

The interaction between parents/caregivers and children early in life has a positive or negative effect on nutrition and growth, as well as on the child's cognitive and social development.[1,4,10,23,24]

The behavior and interaction that occurs during mealtime between mother–child/caregiver–child has been characterized as responsive, authoritarian, or passive. The last two characterize the non-responsive feeding type. The responsive style is more often associated with the formation of adequate feeding practices, as well as the development of appetite self-regulation by the child.[25,26]

The current literature on sensitive and responsive care differentiates responsiveness, in which the mother/caregiver interprets and responds to signs from the child, and active behavior, in which the mother/caregiver focuses on, stimulates, and encourages the child to act.[26] In the context of feeding, when the caregiver has the capacity for responsiveness and active behavior, it is said that feeding constitutes the responsive or sensitive type, defined by Black & Aboud[10] as ''reciprocity between the child and the caregiver.'' In this type of feeding, the child signals through movements, facial expressions, and vocalizations; the caregiver recognizes the signs and responds promptly in the form of support; the child realizes that this was a response to their signs, establishing a communication mediated by verbal and non-verbal language.

Some of the components of responsive feeding that are effective and stimulate food intake include: responding positively to children by smiling, making eye contact and using words of encouragement; feeding the child slowly and patiently, with good disposition; waiting for the child to stop eating and watching carefully if the child expresses signs of satiety; providing food so the child can feed themselves.[27]

It is important to consider the context in which the child's feeding occurs, in order to provide a pleasant environment. Thus, it is necessary to create conditions for children to develop an interest in food, such as: the child is feeling

comfortable; no distractions; meal served in an appropriate place; caregiver fully involved in the act and, preferably, face-to-face with the child; healthy food and good presentation, to allow the child to distinguish between different flavors and textures; healthy food for everyone when the meal is shared.[28]

Therefore, the feeding interaction is complete when the individuals involved can express their signs and the other recognizes them. For caregivers, it occurs when they successfully perform the task of feeding the child; for the child, when they are able to demonstrate feeding independence by making signs that reflect their wishes clearly, allowing them to regulate the care they receive, thus constituting a highly interactive relationship.[29] Mentro et al.[30] described the essential attributes of an optimal responsive feeding from the child. They are: eye contact with the caregiver, as indicated by eye opening and watching the caregiver; pleasant expression of affection toward the caregiver, as demonstrated by smiles; expression of pleasant vocalizations directed to the caregiver, as demonstrated by the absence of crying or irritation; motor response to attempted feeding, as demonstrated by relaxed position, calm movements, and molding into the caregiver's body. These characteristics contribute to a positive interaction between mother/caregiver and child during feeding.

Another aspect that should be considered is the sharing of meals. Currently, it is a challenge to encourage children so that, at the end of their first year of life, they will have their meals together with other family members and share the family food, when this is appropriate. The family meal is a habit that has become rare in today's world. Another fact of concern is that children and adults frequently have their attention diverted during mealtime, eating while watching television or using electronic devices. This contributes to neglect of the child's satiety signaling. Furthermore, it is known that stimulation from advertisements related to unhealthy foods has greater impact when experienced during meals.[2,20,31,32]

The WHO[22] produced four key points to characterize the principles of responsive feeding and emphasize that the child's food should be served in a separate dish, so that the mother/caregiver can observe how much food the child is eating. They are:

1. Feed the infant directly and assist older children when they already eat on the own; feed them slowly and patiently and encourage children to eat, but do not force them.
2. If the child refuses many types of foods, experiment with different food combinations, tastes, textures, and methods of encouragement.
3. Minimize distractions during meals if the child quickly loses interest in food.
4. Remember that mealtime should be an opportunity for learning and love, talking to the child during feeding and maintaining eye contact.

Some studies have addressed the consequences of non-responsive feeding, in which caregivers are less sensitive and responsive to the child's signals, generating lack of stimulus for feeding. This occurs when caregivers take control of feeding, not recognizing or appreciating the signals emitted by the child in relation to hunger and satiety. Conversely, the caregiver may become careless or allow the child to dominate the situation, due to not understanding or appreciating the child's expectations.[4,8,15,33]

When the child's refusal to eat is understood as a rejection and she is forced to consume the food, there may be tension and frustration, both for the mother/caregiver and the child. In this situation, each expresses a desire that is not understood by the other; the child loses his/her autonomy and parents are frustrated by *not finishing* the task of feeding their child. As a result, the child may fail to appreciate their internal satiety signals and lose interest in communicating with the parents. This may also contribute to the often-observed behavior characterized by a negative reaction when trying new flavors, called neophobia.[7,15]

Another aspect worth mentioning is that non-responsive feeding contributes both to rapid weight gain and hence, overweight, either in childhood or adulthood, as well as to nutritional deficits, if the caregiver is not attentive to the signs of hunger and satiety issued by the child. It has been reported that caregivers of children younger than 2 years are more responsive to signs of hunger than of satiety.[5,8,26,29,30]

A critical moment in relation to feeding behavior in the first year of life is associated with the introduction of foods of greater consistency, especially solid foods. Often, children initially refuse the food and parents/caregivers interpret the signs as an expression of ''they do not like the food.'' This kind of interpretation can induce the caregiver to offer the type of food the child prefers, not always adequate from a nutritional point of view.[1] Thus, the health professional's support is important to clarify and inform of the reactions expected at this time and help parents/caregivers to overcome difficulties.[34] On average, it takes at least eight exposures to an initially rejected food for it to be accepted by the child.[35]

Parenting styles on childcare and nutrition

Parenting is understood as a set of behaviors that aim to ensure the child's survival and full development, providing them greater safety and autonomy. It does not depend only on individual factors, as it is directly influenced by the sociocultural environment.[10,29,36]

Becoming a parent can be one of the most demanding and challenging social roles that individuals face during their lives, a fact that leads to a set of behavioral, cognitive, and emotional responses, which require adaptation to a new standard of living.[36]

In 1961, Recamier proposed, based on the term motherhood, the neologism ''parenting.'' However, for over 20 years this term was in disuse, reappearing in 1985 when René Clement defined it as ''the study of family ties and the psychological processes that develop from there [emphasizing that parenting] requires a preparation process until its learning.''[37] Based on this definition, one can understand that parenting is not only the biological creation of a child and the social representations of being a parent, but rather it is a complex, dynamic integration process, conscious and sometimes unconscious. It requires changes and adjustments that require emotional investment, because parents should know how and want to care for their children.[38]

The need to understand the parents' behavior issues in relation to children, whether regarding feeding or in general, has stimulated new approaches to this matter.[6,9,10,17,31,36]

The concept of parenting styles was introduced in the literature decades ago.[4] From this perspective, Gomide[39] describes parenting styles as a ''set of educational attitudes that caregivers will use with the child in order to educate, socialize, and control them.'' Seven educational practices comprise the parenting style: five are related to antisocial behavior (neglect, physical and psychological violence, lax discipline, inconsistent punishment, and negative monitoring) and two to the development of prosocial behavior (positive monitoring and moral behavior).

The first positive practice is related to the attention to where the child is and what activities they are performing, as well as the support and affection given by parents. The second includes the attitudes of parents that transmit justice, responsibility, and culturally accepted values that help in discerning right from wrong.

The negative practice of neglect involves lack of attention and affection, as well as lack of parental attention to the needs of children, thus exempting themselves from the responsibility. Violence includes the use of threats, blackmail, and punishment, whether physical or moral. The third antisocial practice (lax discipline) implies non-compliance with pre-established rules. Parents threaten, but at the time of enforcement of the rules, they give in to their children. The fourth practice occurs when the parents' mood affects their behavior when punishing or reinforcing the attitudes of children; thus, it is the parents' emotional state that determines the educational actions, and not the child's actions. The practice of negative monitoring, in turn, comprises an excess of rules and supervision by parents, and their disregard by the children, creating a climate of hostility and lack of dialog.

Thus, it can be observed that the responsive or non-responsive type of feeding adopted by parents is directly related to the type of parental care. It is observed that the parenting styles that appear to be more associated with children's feeding difficulties are those related to controlling and/or neglectful styles. On the other hand, the supportive parenting style appears to be positive, as it aims to understand the child's internal signs and wishes, and encourages their integration with the social environment in which the child lives.[7,31,36,40–43]

Analyzing together the socialization practices, maternal responsiveness, and educational level and income, it is clear that education and the general maternal health status are essential for the care process. Studies show that the higher their educational level, the greater their perception of child development and the less conflictual relations with their children, which leads to fewer punitive, coercive, and neglect practices. Low income, low educational level, and domestic violence explain the increased family vulnerability to the lack of more responsive and attentive care.[6,8,18,41,42]

Final considerations

Not only what children eats is important, but also how, when, where, and who feeds them. Due importance has been increasingly given to the interaction between the mother/caregiver and the child who is being fed. This interaction should result in the so-called responsive feeding, and it is the caregiver's responsibility to be sensitive to the child's signs and ease tensions during feeding, in addition to making the meal a pleasant moment; while it is the role of the child to express the signs of hunger and satiety clearly and to be responsive to feeding attempts.

Responsive feeding should be more appreciated by families, health professionals, and health policymakers. Health professionals should advise families on how to practice it, which requires them to go beyond the more general issues in relation to food consumption and try to understand the social and cultural integration of the family, as well as the psychosocial aspects of the caregiver, in order to provide individualized guidance. Policymakers should give more importance to the issue of how to feed children.

Conflicts of interest

The authors declare no conflicts of interest.

References

1. Hart CN, Raynor HA, Jelalian E, Drotar D. The association of maternal food intake and infants' and toddlers' food intake. Child Care Health Dev. 2010;36:396–403.
2. Thompson AL, Bentley ME. The critical period of infant feeding for the development of early disparities in obesity. Soc Sci Med. 2013;97:288–96.
3. Beauchamp GK, Mennella JA. Flavor perception in human infants: development and functional significance. Digestion. 2011;83:1–6.
4. Chaidez V, Townsend M, Kaiser LL. Toddler-feeding practices among Mexican American mothers. A qualitative study. Appetite. 2011;56:629–32.
5. Hodges EA, Johnson SL, Hugues SO, Hopkinson JM, Butte NF, Fisher JO. Development of the responsiveness to Child Feeding Cues Scale. Appetite. 2013;65:210–9.
6. McPhie S, Skouteris H, Daniels L, Jansen E. Maternal correlates of maternal child feeding practices: a systematic review. Matern Child Nutr. 2014;10:18–43.
7. Savage JS, Fisher JO, Birch LL. Parental influence on eating behavior: conception to adolescence. J Law Med Ethics. 2007;35:22–34.
8. Bentley ME, Wasser HM, Creed-Kanashiro HM. Responsive feeding and child undernutrition in low- and middle-income countries. J Nutr. 2011;141:502–7.
9. Khandpur N, Blaine RE, Fisher JO, Davison KK. Fathers' child feeding practices: a review of the evidence. Appetite. 2014;78:110–21.
10. Black MM, Aboud FE. Responsive feeding is embedded in a theoretical framework of responsive parenting. J Nutr. 2011;141:490–4.
11. Perrine CG, Galuska DA, Thompson FE, Scanlon KS. Breastfeeding duration is associated with child diet at 6 years. Pediatrics. 2014;134:S50–6.
12. Przyrembel H. Timing of introduction of complementary food: short- and long-term health consequences. Ann Nutr Metab. 2012;60:8–20.
13. Andrew N, Harvey K. Infant feeding choices: experience, self-identity and lifestyle. Matern Child Nutr. 2011;7:48–60.
14. Agostoni C, Braegger C, Decsi T, Kolacek S, Koletzko B, Michaelsen K. Breast-feeding: a commentary by the ESPGHAN

Committee on Nutrition. J Pediatr Gastroenterol Nutr. 2009; 49:112–25.
15. Sherry B, Mcdivitt J, Birch LL, Cook FH, Sanders S, Prish JL, et al. Attitudes, practices, and concerns about child feeding and child weight status among socioeconomically diverse white, Hispanic, and African-American mothers. J Am Diet Assoc. 2004;104:215–21.
16. Broilo MC, Louzada MLC, Drachler ML, Stenzel LM, Vitolo MR. Maternal perception and attitudes regarding healthcare professionals' guidelines on feeding practices in the child's first year of life. J Pediatr (Rio J). 2013;89:485–91.
17. Kavanagh KF, Habibi M, Anderson K, Spence M. Caregiver- vs infant-oriented feeding: a model of infant-feeding strategies among special supplemental nutrition program for women, infants, and children participants in rural east Tennessee. J Am Diet Assoc. 2010;110:1485–91.
18. Saxton J, Carnell S, Van Jaarsveld CHM, Wardle J. Maternal education is associated with feeding style. J Am Diet Assoc. 2009;109:894–8.
19. Dwyer JT, Butte NF, Deming DM, Siega-Riz AM, Rayde KC. Feeding Infants and Toddlers Study 2008: progress, continuing concerns, and implications. J Am Diet Assoc. 2010;10:S60–7.
20. Fox MK, Pac S, Devaney B, Jankowski L. Feeding Infants and Toddlers Study: what foods are infants and toddlers eating? J Am Diet Assoc. 2004;104:S22–30.
21. Sparrenberger K, Friedrich RR, Schiffner MD, Schuch I, Wagner MB. Ultra-processed food consumption in children from a basic health unit. J Pediatr (Rio J.). 2015;91:535–42.
22. World Health Organization. Complementary feeding. Infant and young child feeding. Model chapter for textbooks for medical students and allied health professionals. Geneva: WHO; 2009. p. 19–28.
23. Cerezo MA, Trenado RM, Pons-Salvado RG. Mother–infant interaction and quality of child's attachment: a nonlinear dynamical systems approach. Nonlinear Dynamics Psychol Life Sci. 2012;16:243–67.
24. Fraley RC, Roisman GI, Haltigan JD. The legacy of early experiences in development: formalizing alternative models of how early experiences are carried forward over time. Dev Psychol. 2013;49:109–26.
25. Brown A, Lee M. Maternal child-feeding style during the weaning period: association with infant weight and maternal eating style. Eating Behav. 2011;12:108–11.
26. Hodges EA, Hughes SO, Hopkinson J, Fisher JO. Maternal decisions about the initiation and termination of infant feeding. Appetite. 2008;50:333–9.
27. Aboud FE, Shafique S, Akhter S. A responsive feeding intervention increases children's self-feeding and maternal responsiveness but not weight gain. J Nutr. 2009;139: 1738–43.
28. Engle PL, Bentley M, Pelto G. The role of care in nutrition programmes: current research and a research agenda. Proc Nutr Soc. 2000;59:25–35.
29. Rhee KE, Lumeng JC, Appugliese DP, Kaciroti N, Bradley RH. Parenting styles and overweight status in first grade. Pediatrics. 2006;117:2047–54.
30. Mentro AM, Steward DK, Garvin BJ. Infant feeding responsiveness: a conceptual analysis. J Adv Nurs. 2002;37:208–16.
31. Peters J, Dollman J, Petkov J, Parletta N. Associations between parenting styles and nutrition knowledge and 2–5-year-old children's fruit, vegetable and non-core food consumption. Public Health Nutr. 2013;16:1979–87.
32. Fiates GM, Amboni RD, Teixeira E. Television use and food choices of children: qualitative approach. Appetite. 2008;50:12–8.
33. Gross RS, Fierman AH, Mendelshon AL, Chiasson MA, Scheinmann R, Messito MJ. Maternal perceptions of infant hunger, satiety, and pressuring feeding styles in an urban Latina WIC population. Acad Pediatr. 2010;10:29–35.
34. Van Djika M, Hunnins S, van Geert P. Variability in eating behavior throughout the weaning period. Appetite. 2009;52:766–70.
35. Maier A, Chabanet C, Schaal B, Leathwood P, Issanchou S. Food-related sensory experience from birth through weaning. Contracted patterns in two nearby European regions. Appetite. 2007;18:429–40.
36. Hubbs-Tait L, Kennedy TS, Page MC, Topham GL, Harrist AW. Parental feeding practices predict authoritative, authoritarian, and permissive parentings. J Am Diet Assoc. 2008;108:1154–61.
37. Houzel D. As implicações da parentalidade. In: Solis-Ponton L, Silva MCP. (Orgs.). Ser pai, ser mãe. Parentalidade: um desafio para o terceiro milênio. São Paulo: Casa do Psicólogo; 2004. p. 47–52.
38. Martins CA. Transição no exercício da parentalidade durante o primeiro ano de vida da criança: uma teoria explicativa de enfermagem. Lisboa: Universidade de Lisboa; 2013 [Thesis].
39. Gomide PIC. Inventários de estilos parentais (IEP): Modelo teórico, manual de aplicação, apuração e interpretação. Rio de Janeiro: Vozes; 2006.
40. Carnell S, Cooke L, Cheng R, Robbins A, Wardle J. Parental feeding behaviours and motivations. A qualitative study in mothers of UK pre-schoolers. Appetite. 2011;57:665–73.
41. Hughes SO, Power TG, Fisher JO, Mueller S, Nicklas TA. Revisiting a neglected construct: parenting styles in a child-feeding context. Appetite. 2005;44:83–92.
42. Mitchell S, Brennan L, Hayes L, Miles CL. Maternal psychosocial predictors of controlling parental feeding styles and practices. Appetite. 2009;53:384–9.
43. Sleddens EF, Gerards SM, Thijs C, De Vries NK, Kremers SP. General parenting, childhood overweight and obesity-inducing behaviors: a review. Int J Pediatr Obes. 2011;6:e12–27.