CONSTRUCTION OF EDUCATIONAL MATERIAL FOR CHILD OVERWEIGHT PREVENTION IN PRIMARY HEALTH CARE

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ABSTRACT

Objective: To describe the process of constructing educational material for the prevention of child overweight in primary care. Method: The preparation of the material was based on three workshops with 10 mothers and 14 health professionals, which were recorded, transcribed and submitted to content analysis. The principles of critical-reflexive education were adopted as theoretical reference. Scientific literature, technical documents and images of the website were raised. Evaluation of content and appearance was performed by eight professionals, using percentage of agreement. Results: The workshop analysis pointed out three themes that supported the construction of a Serial Album: Recognition of overweight; Consequences for the child's health; Strategies for prevention and promotion of child health. Entitled "Preventing Childhood Overweight," the final version consisted of 22 booklets. There was a high percentage of concordance regarding clarity/comprehension (96%), images (97%) and importance (89%), but 48% agreement for adjustments. All suggestions were adhered to. Final Considerations: The Serial Album, based on mothers' and health professionals' demands and needs, represents material that can be used in educational activities of primary care as an important additional resource for the prevention of overweight in children.

Keywords: Saúde da criança. Obesidade pediátrica. Nutrição da criança. Tecnologia educacional. Enfermagem em saúde pública.

INTRODUCTION

World Health Organization (WHO) estimates indicate that worldwide more than 41 million children under the age of five are overweight or obese (overweight) defined respectively as children with weight-for-height greater than +2 and +3 z-score of the median WHO growth pattern⁽¹⁾. In Brazil, a secular trend analysis, based on national surveys, revealed that the prevalence of overweight in children under five years-old increased 160% from 1989 to 2006⁽²⁾.

Overweight children are more likely to become obese adults, and are at increased risk for early obesity-related diseases⁽³⁾. In this context, early recognition of overweight by parents is essential so that they can take the initiative to seek help for prevention and control care. However, there is evidence that mothers have difficulty in recognizing the nutritional status of children, especially children who are overweight or obese⁽⁴⁾.

Among the causes of obesity, we highlight

high consumption of ultra-processed, the cheaper and readily available foods, in detriment to healthy foods, together with low level of physical activity (1). National infant feeding data showed that Brazilian children consume considerable proportions of unhealthy foods⁽⁵⁾.

Therefore, it is emphasized the need for actions that are especially directed to the involvement of the mothers, both for the nutritional monitoring of their children, and for the promotion of healthy eating. It has been reported as an emancipatory method of teaching the critical health education, which favors enhances the participation individuals as subjects of their own learning and enriches the knowledge of the professionals involved⁽⁶⁾, mediated through the use of educational technologies⁽⁷⁻⁸⁾. Thus, considering the importance of the development of educational technologies that support the spaces of dialogue between family members and health professionals, this article aims to describe the process of construction of educational material

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for prevention of overweight in primary care. It is hoped to contribute to broaden the knowledge about the prevention of overweight children, as well as to encourage and support health professionals for the execution of educational actions in the routine of health services.

MATERIALS AND METHODS

This is a descriptive study integrating broader research on the effect of nutritional counseling on practices, nutritional status, and child development. It was developed in a small municipality of the state of São Paulo, with a population of approximately 45 thousand inhabitants. The prevalence of overweight (overweight risk, overweight and obesity risk)

among children under three years-old, as well as a high proportion of mothers (45%) who presented perception of the child's nutritional status⁽⁴⁾. This result led the research group to discuss with managers, proposals for improving the health of children.

One of the proposals was the construction of a Serial Album (SA), as an instrument for educational intervention, elaborated based on the needs of mothers and health professionals of the city's primary care. Thus, in 2015, the present study was developed in three stages: 1) Conducting listening workshops with mothers and health professionals; 2) Construction of SA; and 3) Assessment of SA by professionals (Figure 1).

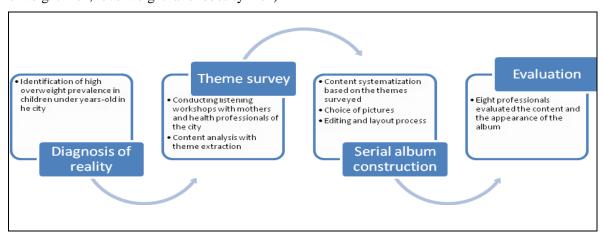


Figure 1. Diagram of the process of construction and evaluation of the Serial Album. São Paulo, 2015. **Source:** It was created by the authors.

Three workshops were held, with duration of approximately 90 minutes each one, two of them with mothers enrolled in a Basic Health Unit (UBS) indicated by the municipality's health directorate. The participants included 10 mothers of children under three years-old, who accepted an invitation from community health agents. The workshop with the professionals of the basic attention of the municipality was realized in the auditorium of the municipal paço. It was attended by 14 professionals: 10 nurses, three community health agents and a speech therapist. It was used as a trigger element of the discussion, a 20-minute edition of the documentary "Far beyond weight" (www.youtube.com/watch?v=8UGe5GiHCT4), which deals with childhood obesity in Brazil, with criticism of production and excessive

consumption of non-nutritive foods. After the film, the guiding question for the group of mothers was "Based on this film, what would you like to be addressed in the educational groups held at UBS about taking care of the child's nutritional status and feeding?"; and for health professionals, the guiding question was "Based on this film, what can we, primary health care practitioners, address in educational groups with mothers for prevention of childhood overweight?" The workshops were recorded, transcribed and submitted to content analysis (9).

For the conduction of the workshops and elaboration of educational material, the principles of critical-reflexive education were adopted as theoretical reference, which uses the problematizing approach to capture and work

reflexively the demands and needs, from reality, world view and practice of subjects⁽⁶⁾.

Based on the themes raised in the listening workshops with mothers and health professionals, literature and technical documents were searched, using information resources from the Virtual Health Library (VHL) and on the Ministry of Health's own website, the following descriptors: 'child health', 'pediatric obesity', 'child nutrition'. All pertinent publications were read reflectively, in order to extract as much information relevant to the construction of the SA, which was elaborated in the PowerPoint program, with leaflets that included illustrations on the front and script-card on the back. Illustrations, figures and drawings were taken from the image bank of the website (free images), with identification of their respective sources. All material was submitted to the process of editing and layout, obeying criteria content, structure/organization, to language, layout and design, cultural sensitivity and adequacy to the target population⁽¹⁰⁾.

Content and appearance of the first version of the SA was evaluated by eight invited professionals, who agreed to participate in a four-hour meeting: five primary care nurses, two municipal education coordinators and a speech therapist. After presenting the material, the participants received a sheet to evaluate each leaflet for clarity/comprehension (yes/no), relation with the theme (yes/no), importance for SA (very important, important, not important) and need adjustment/exclusion (no need, adjustment needed, must be removed).

The data were analyzed according to the calculation of the percentage of agreement, method used to calculate inter-observer agreement (11), which consists of:

$$\begin{array}{ccc} PC = & JF/J & X100 \\ & F & \end{array}$$

PC = percentage of agreement; JF = total number of judges who agreed per leaflet; J = total number of judges; F = total number of leaflets.

The broader research was approved by the Research Ethics Committee (Process number 193.468) and by the Municipal Health Department, according to the provisions of Resolution CNS / MS 466/2012. All participants signed the Informed Consent Term.

RESULTS

The mothers who participated in the listening workshops are, on average, 28 years-old and three children. The majority does not work and they have incomplete elementary education. As for the health professionals, all of them are women, with a complete graduate level (one with master degree), training time from 4 to 35 years and work time in the municipal network from 10 to 30 years.

The themes and subtopics extracted from the listening workshops held with mothers and health professionals were organized in a logical sequence to support the construction of AS, as presented in Table 1.

Table 1. Themes and subtopics extracted from the listening workshops held with mothers and health professionals. São Paulo 2015

Themes	Subtopics
Recognition of overweight	Perception of mothers on children's nutritional status
	Epidemiological aspects of childhood overweight
	Calculation of Body Mass Index (BMI)
	Use of the Child Health Handbook as an instrument to monitor the
	nutritional status
Causes and consequences of being	Overweight Cycle
overweight	Diseases due to overweight
Strategies to prevent overweight and	Adequate and healthy food
promote child health	Physical activity

In addition to the pertinent literature, the following technical documents of the Ministry of Health were based on the construction of the SA: "Child Health Handbook" (12) and "Ten Steps to

Healthy Eating: A Food Guide for Children under Two - health care in basic care" (13).

Entitled "Preventing Childhood Overweight," the final version of SA consisted of 22 booklets.

The topic 'Recognition of overweight', referring to leaflets 1 to 8, is shown in Figure 2. Leaflet 1 refers to the SA cover and leaflet 2 was written with the purpose of starting the conversation wheel with the mothers, with the question: *Is a chubby child synonymous of health or illness?* From the mothers' answers, the professional can guide the group to the perception of the nutritional state of the children (leaflet 3) and to

present succinctly the epidemiological aspects of the excess of infantile weight (leaflet 4). In pamphlets 5 to 8, the professional can show how the Child Health Handbook should be used to identify the child's nutritional status, including the calculation of the Body Mass Index (BMI).

Leaflets 9 and 10 refer to the theme 'Causes and Consequences of Overweight' (Figure 3).

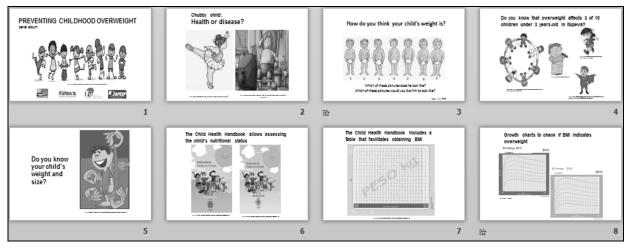


Figure 2. Leaflets of the Album Series: Preventing childhood overweight, on the topic 'Overweight Recognition' Folhetos. São Paulo, 2015.

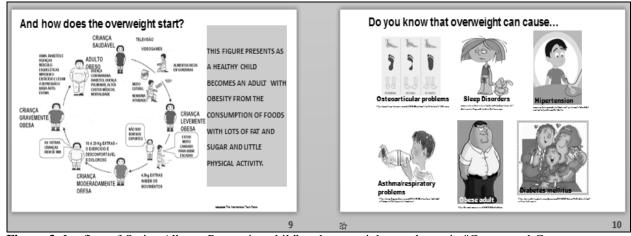


Figure 3. Leaflets of Series Album: Preventing childhood overweight, on the topic "Causes and Consequences of Overweight'. São Paulo, 2015.

In the following, leaflets from 11 to 22 refer to the third theme: 'Overweight Prevention and Health Promotion Actions', which address food care, attention to food packaging labels, and physical activity practice. As a way to guarantee the interactivity of SA with mothers, leaflet 22 presents a picture with inadequate feeding situations, such as: forcing the child to eat, eating very fast, drinking liquids with meals, and others (Figure 4). It is a game to discover the most common mistakes in infant feeding.

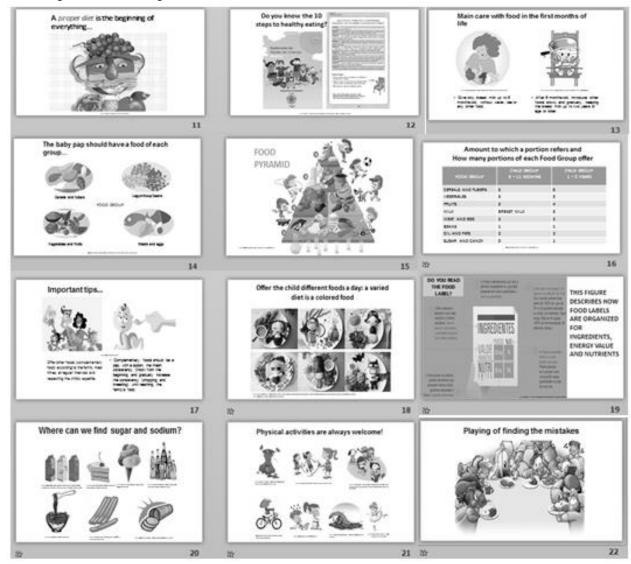


Figure 4. Leaflets of Serial Album: Preventing excess child weight, referring to the theme 'Preventing Overweight and Promoting Child Health'. São Paulo, 2015.

A high percentage of agreement was obtained for most of the items evaluated: clear/comprehensible (96%), related to the theme (99%) and important for the SA (89%), except for the item need adjustment/exclusion, with 47.7% agreement for the need for adjustments. In addition, all the professionals made a positive evaluation of the SA, considering the approach of content of easy understanding and high relevance. The main suggestions of adjustments pointed out by the professionals were: to improve the resolution of the figures; to insert caption in the figures; to change the title of the

leaflet; to add other figures; to change figures and change the position of figures.

DISCUSSION

This study was motivated by a previous diagnosis of the local reality, which identified a high prevalence of overweight among children under three years-old, as well as an inadequate perception of the nutritional status of the children, especially those ones overweight⁽⁴⁾. This reality, which reflects the profile of the nutritional status of Brazilian children⁽²⁾, coexists

with inadequate dietary practices^(5,14), despite well-designed national public policies on healthy diets and excellent manuals^(13, 15).

Thus, in order to contribute to improvement of this framework, it was proposed the construction of a Serial Album (SA), based on the local epidemiological profile and based on the needs of mothers and health professionals of the city's primary health care, under the Paulo Freire's theoretical reference, who understands that there is no education without dialogue, without respect for the knowledge of the other, which must be understood as a social being⁽⁶⁾. In this way, the listening in the workshops happened just hearing the other's speech. The aim was to promote the dialogue to situate the perspective of the subjects' ideas so that the construction of the educational material was in agreement with the need of the group of mothers and health professionals.

To make the workshops more dynamic, the projection of a film was used as the triggering element of the dialogue. In addition to the entertainment function, this is a spontaneous reflection tool that allows the viewer to critically analyze some situations, take ownership of productions and languages, be moved, updated and entertained⁽¹⁶⁾. The film highlights the devastating effects of marketing communication and advertising of food advertisements directed at children, and based on real stories, discusses child overweight in Brazilian macro-regions, with testimonials from professionals involved with health and food children, which warn of this current problem. It draws attention to excessive consumption of ultra-processed foods, defined as stuffed biscuits, 'packaged' snack foods, soft drinks, 'instant' noodles, which are nutritionally unbalanced, since their manufacture involves combining sugar, salt and fat in large quantity(17).

We chose to start SA with the theme 'Recognition of overweight', which stood out as a concern of the mothers. Thus, the first pamphlet sets out an illustration to raise the participants' understanding of overweight: "as health or as a disease?" To contemplate this theme, a scale of silhouettes was presented so that the participants can point out what refers to the figure that most represents the silhouette of their child, since the recognition of excess

weight is the first step in the search for professional help with a view to controlling the problem. However, mothers⁽⁴⁾ and family members ⁽¹⁸⁾ have difficulty recognizing the actual nutritional status of the children and, in general, underestimate the excess weight, which justifies the need to invest in the group's sensitization to this theme.

In order to guide mothers and their families with regard to nutritional status assessment, leaflets were included with a table that allows the BMI to be easily obtained and charts for growth monitoring replicated from the Child Health Handbook (CSC)⁽¹¹⁾. The purpose is that the main uses of the CSC are also addressed in educational activities. since despite importance for the promotion of children's health, its fulfillment is flawed, especially growth charts, with the need for professional awareness and valuation by part mothers/relatives(19).

In the second block, SA addresses the 'Causes and consequences of overweight', reinforcing as consequence the greater chance overweight/obese children becoming obese adults, with a higher risk for chronic noncommunicable diseases(1). Regarding the causes, the most important are the consumption of unhealthy foods and the need for adequate food to avoid overweight, since data from the National Health Survey of 2013 revealed that 61% of Brazilian children under two years-old have consumed biscuits, wafer or cake, indicating a high prevalence of unhealthy eating behaviors in childhood⁽⁵⁾. A study that evaluated the families' perceptions about the eating habits of obese children showed that parents have difficulty teaching their children's eating habits because they also do not have them, as well as the lack of coexistence resulting from long working hours⁽²⁰⁾.

The theme 'Prevention of Overweight and Promotion of Children's Health' was approached with presentation of the Food Groups and recommendations of the 'Ten Steps to Healthy Eating' (12), as well as the incentive to practice physical activity. The latter was one of the aspects addressed for maintaining a healthy weight, as recommended by the Brazilian Society of Pediatrics (15). A review study showed a high proportion of physical inactivity among

Brazilian children aged 5 to 11 years-old ⁽²¹⁾. Increasingly precocious and increasing exposure of children to electronic devices such as television, computer, mobile phones and tablets has contributed to the higher prevalence of physical inactivity and overweight ⁽²²⁾. It is recommended that up to five years-old, physical exercises should be daily, playful and uncompetitive, such as running, jumping rope, doing somersault, practices that besides eliminating the risk of obesity, stimulates motor coordination and helps in development of the child ⁽¹⁵⁾.

The evaluation of the SA by the health and education professionals of the municipality, with experience in the monitoring of child growth and development, was very important and made it possible to adjust the material to the needs and expectations of the professionals, essential for the development of educational materials (23). Thus, content validation was obtained in a consensual way⁽²⁴⁾, resulting in an educational material, with simple, instructive instructions and with all steps to approach the prevention of overweight by primary care professionals. The fact that the proposed material was not applied to the target public is a limitation, but its construction took place through a dialogical process that considered the mothers' demands, the scientific evidences and the public policies for the promotion of growth and prevention of excess of child weight.

The lack of educational material on preventing child overweight reinforces the importance of the construction of this Serial Album, which should be considered as a complementary and facilitating resource for health education, as already verified by other methodologically similar studies (7-8).

CONCLUSIONS

The Serial Album, built based on the demands and needs of mothers and health professionals, represents a material that can be used in educational activities of primary care as an important additional resource for the prevention of overweight in children.

In addition, the need to create legitimate spaces for health education in the routine of primary care services and to make professionals aware of a dialogic approach with the community, in order to make individuals as subjects of their own learning, as well as to invest in the training of professionals for the prevention of overweight in children.

FINANCING

The main project was awarded with regular financial support from the Fundação de Amparo à Pesquisa do Estado de São Paulo (FAPESP) / Maria Cecília Souto Vidigal Foundation (FMCSV) (process number 2011/509309); it was submitted and approved by the Research Ethics Committee of the Nursing School of São Paulo (case number 193.468) and by the Board of Health of the municipality of Itupeva, SP, as determined by Resolution CNS / MS 196/96.

CONSTRUÇÃO DE MATERIAL EDUCATIVO PARA PREVENÇÃO DO EXCESSO DE PESO INFANTIL NA ATENÇÃO BÁSICA

RESUMO

Objetivo: Descrever o processo de construção de material educativo para prevenção do excesso de peso infantil na atenção básica. Método: A elaboração do material teve como base três oficinas realizadas com 10 mães e 14 profissionais de saúde, que foram gravadas, transcritas e submetidas à análise de conteúdo. Adotou-se como referencial teórico os princípios da educação crítico-reflexiva. Levantaram-se literatura científica, documentos técnicos e imagens da website. Avaliação de conteúdo e aparência foi realizada por oito profissionais, utilizando-se porcentagem de concordância. Resultados: Análise das oficinas apontou três temas que fundamentaram a construção de um Álbum Seriado: Reconhecimento do excesso de peso; Consequências para a saúde da criança; Estratégias para prevenção e promoção da saúde infantil. Intitulado "Prevenindo o excesso de peso infantil", a versão final foi composta por 22 folhetos. Houve elevada porcentagem de concordância quanto à clareza/compreensão (96%), imagens (97%) e importância (89%), mas 48% de concordância para necessidade de ajustes. Todas as sugestões foram acatadas. Considerações finais: O Álbum Seriado, construído com base nas demandas e necessidades de mães e profissionais de saúde, representa material que poderá ser utilizado nas atividades educativas da atenção básica como importante recurso adicional para a prevenção do excesso de peso infantil.

Paalvras-chave: Saúde da criança. Obesidade pediátrica. Nutrição da criança. Tecnologia educacional. Enfermagem em saúde pública.

CONSTRUCCIÓN DE MATERIAL EDUCATIVO PARA LA PREVENCIÓN DEL SOBREPESO INFANTIL EN LA ATENCIÓN PRIMARIA

RESUMEN

Objetivo: describir el proceso de construcción de material educativo para prevención del sobrepeso infantil en la atención básica. **Método**: la elaboración del material tuvo como base tres talleres realizados con 10 madres y 14 profesionales de salud, que fueron grabados, transcriptos y sometidos al análisis de contenido. Se adoptó como referencial teórico los principios de la educación crítico-reflexiva. Se recopilaron literatura científica, documentos técnicos e imágenes de la *website*. Evaluación de contenido y apariencia fue realizada por ocho profesionales, utilizándose porcentaje de concordancia. **Resultados**: el análisis de los talleres señaló tres temas que fundamentaron la construcción de un Álbum Seriado: Reconocimiento del sobrepeso; Consecuencias para la salud del niño; Estrategias para la prevención y promoción de la salud infantil. La versión final, intitulada "Previniendo el sobrepeso infantil", fue compuesta por 22 folletos. Hubo un gran porcentaje de concordancia en cuanto a la claridad/comprensión (96%), imágenes (97%) e importancia (89%), pero el 48% de concordancia para la necesidad de ajustes. Todas las sugerencias fueron acatadas. **Consideraciones finales:** el Álbum Seriado, construido con base en las demandas y necesidades de madres y profesionales de salud, representa material que podrá ser utilizado en las actividades educativas de la atención básica como importante recurso adicional para la prevención del sobrepeso infantil.

Palabras clave: Salud del niño. Obesidad pediátrica. Nutrición del niño. Tecnología educacional. Enfermería en salud pública.

REFERENCES

- 1. WHO-World Health Organization. Report of the commission on ending childhood obesity. Geneva: WHO [on-line]; 2015 [citado 2018 out]. Available from:
- http://www.who.int/dietphysicalactivity/childhood/en/.
- 2. Silveira JAC, Colugnati FAB, Cocetti M, Taddei JAAC. Secular trends and factors associated with overweight among Brazilian preschool children: PNSN-1989, PNDS-1996, and 2006/07. J. Pediatr. [on-line]. 2014 [citadoem 2019Maio]; 90(2):258-66. doi: http://dx.doi.org/10.1016/j.jped.2013.09.003.
- 3. CalloG, Gigante DP, Barros FC, Horta BL. Lifetime overweight and obesity and body composition in adulthood: the 1982 Pelotas (Brazil) birth cohort study. Cad. SaúdePública[on-line]. 2016 [citado em 2018 Nov]; 32(4):e00174014. doi: http://dx.doi.org/10.1590/0102-311X00174014.
- 4. Duarte LS, Fujimori E, Toriyama ATM, Palombo CNT, Miranda PPL, Borges ALV. Maternal perception of their child's nutritional status at less than three years old. RevEscEnferm USP [on-line]. 2016 [citado em 2018 Nov]; 50(5):771-8. doi: http://dx.doi.org/10.1590/S0080-623420160000600009.
- 5. Jaime PC, Frias PG, Monteiro HOC, Almeida PVB, Malta DC. Healthcare and unhealthy eating among children aged under two years: data from the National Health Survey, Brazil, 2013.Rev. Bras. Saude Mater. Infant [on-line]. 2016 [citado em 2018 Nov]; 16(2):149-57. doi: http://dx.doi.org/10.1590/1806-93042016000200005.
- 6. Pitano SDC. A educação problematizadora de Paulo Freire, uma pedagogia do sujeito social. Rev Inter Ação [on-line]. 2017 [citado em 2019 Maio]; 42(1):87-104. doi: http://dx.doi.org/10.5216/ia.v42i1.43774.
- 7. Lima AC, Bezerra KC, Sousa DM, Rocha JF, Oriá MO. Development and validation of a booklet for prevention of vertical HIV transmission. Acta Paul.Enferm [on-line]. 2017 [citado em 2018 Nov]; 30(2):181-9. doi: http://dx.doi.org/10.1590/1982-0194201700028.
- 8. Silva IO, Aredes ND, Bicalho MB, Delácio NC, Mazzo LD, Fonseca LM. Booklet on premature infants as educational technology for the family: quasi-experimental study. Acta Paul.Enferm [on-line]. 2018 [citado em 2018 Nov]; 31(4):334-41. doi: http://dx.doi.org/10.1590/1982-0194201800048.
- 9. Minayo MCS. O desafio do conhecimento: pesquisa qualitativa em saúde. 14 ed. São Paulo: Hucitec; 2014.
- 10. Maine Health. A Guide to creating and evaluating patient materials. Guidelines for effective print communication [on-line]. 2010 [citado em 2018 Out]. Available from: http://www.centralwestgippslandpcp.com/wp-content/uploads/2011/12/Module-3b_MH_Print-

- Guidelines_Intranet1.pdf.
- 11. Hulley SB, Cummings SR, Browner WS, Grady D, Hearst N, Newman TB. Delineando a pesquisa clínica. 2ª ed. Porto Alegre: Artmed: 2003.
- 12. Brasil. Ministério da Saúde. Caderneta de Saúde da Criança Passaporte da cidadania. Brasília: Ministério da Saúde [on-line]; 2015 [citado em 2018 Out]. Disponível em:
- http://bvsms.saude.gov.br/bvs/publicacoes/caderneta_saude_crianca_m enino 10ed.pdf.
- 13. Brasil. Ministério da Saúde. Dez passos para uma alimentação saudável: guia alimentar para crianças menores de dois anos: um guia para o profissional da saúde na atenção básica. Brasília: Ministério da Saúde [on-line] 2014 [citado em 2018 Out] Disponível em: http://bvsms.saude.gov.br/bvs/publicacoes/passos_alimentacao_saudav el menores 2anos_1edicao.pdf.
- 14. Carvalho CA, Fonsêca PCA, Priore SE, Franceschini SCC, Novaes JF. Consumo alimentar e adequação nutricional em crianças brasileiras: revisão sistemática. Rev. paul. Pediatr [on-line]. 2015 [citado em 2019 Maio]; 33(2): 211-21. doi: http://dx.doi.org/10.1016/j.rpped.2015.03.002.
- 15. Sociedade Brasileira de Pediatria. Manual de orientação para alimentação do lactente, do pré-escolar, do escolar, do adolescente e na escola. Departamento Científico de Nutrologia [on-line]; 2012 [citado em 2018 Out]. Disponível em:
- www.sbp.com.br/fileadmin/user_upload/2015/02/14617a-pdmanualnutrologia-alimentacao.pdf.
- 16. Xavier JJS, Dewulf NLS, Peres CM, Barros GC, Pfrimer K, Nakao CS et al. Cinema: uma ferramenta pedagógica e humanista para temas em Saúde-Educação. A experiência do CineSocial. Medicina (Ribeirão Preto.on-line). 2011 [citado em 2018 Out]; 44(3):260-6. doi: https://doi.org/10.11606/issn.2176-7262.v44i3p260-266.
- 17. Monteiro CA, Cannon G, Levy RB, Moubarac JC, Jaime PC, Martins APB, Canella D, et al. NOVA. A estrela brilha. [Classificação dos alimentos. Saúde Pública] World Nutrition [on-line] 2016 [citado em 2019 Maio]; 7(1-3):28-40. Disponível em: http://archive.wphna.org/wp-content/uploads/2016/02/WN-2016-7-1-3-28-40-Monteiro-Cannon-Levy-et-al-NOVA-Portuguese.pdf.
- 18. Santos DFB, Strapasson GC, Golin SDP, Gomes EC, Wille GMFC, Barreira SMW. Implicações da pouca preocupação e percepção familiar no sobrepeso infantil no município de Curitiba, PR, Brasil. Ciênc. saúde coletiva [on-line]. 2017 [citado em 2019 Maio]; 22(5): 1717-24. doi: http://dx.doi.org/10.1590/1413-81232017225.13462015.
- 19. Almeida AC, Mendes LC, Sad IR, Ramos EG, Fonseca VM, Peixoto VM. Use of a monitoring tool for growth and development in Brazilian children systematic review. Rev.paul. Pediatr [on-line].

 $2016 \ [citado \ em \ 2018 \ Out], 34(1):122-31. \ doi: \\ http://dx.doi.org/10.1016/j.rppede.2015.12.002.$

- 20. Iervolino AS, Silva AA, Lopes GSSP. Perceptions of families about the eating habits of the child who is obese. Cienc. Cuid. Saude [on-line]. 2017 [citado em 2018 Out]; 16(1). doi: http://dx.doi.org/10.4025/cienccuidsaude.v16i1.34528.
- 21. Aragão D, Lourenço CLM, Sousa TF. Inatividade física em crianças: uma revisão sistemática de estudos realizados no Brasil. Revista de Atenção à Saúde [on-line]. 2015 [citado em 2018 Out]; 13(45):87-93. doi: http://dx.doi.org/10.13037/ras.vol13n45.2873.
- 22. Patraquim C, Ferreira S, Martins H, Mourão H, Gomes P, Martins S. As crianças e a exposição aos media. Nascer e Crescer [online]. 2018 [citado 2019 Maio 14]; 27(1): 11-21. Disponível em:

 $\label{limit} $$ $$ $$ http://www.scielo.mec.pt/scielo.php?script=sci_arttext&pid=S0872-07542018000100002&lng=pt. $$$

23. Leite SS, Afio ACE, Carvalho LV, Silva JM, Almeida PC, Pagliuca LMF. Construction and validation of an Educational Content Validation Instrument in Health. Rev Bras Enferm [on-line]. 2018 [citado em 2018 Out]; 71(Suppl 4):1635-41. [Thematic Issue: Education and teaching in Nursing]. doi: http://dx.doi.org/10.1590/0034-7167-2017-0648.

24. Ribeiro ZMT, Spadella MA. Content validation of educational material on healthy eating for children under two years of age. Rev. paul. Pediatr [on-line]. 2018 [citado em 2019 Maio]; 36(2):155-63. doi: http://dx.doi.org/10.1590/1984-0462/;2018;36;2;00007.

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