

Healthy Canteen Certification Seal: a proposal for the promotion of appropriate and healthy diets in school canteens

Selo de Certificação Cantina Saudável: uma proposta para a promoção da alimentação adequada e saudável em cantinas escolares

Angelina Cruz RODRIGUES<sup>1</sup> D 0000-0001-6004-5276 Andhressa FAGUNDES<sup>1</sup> D 0000-0003-4085-3270 Cristine Garcia GABRIEL<sup>2</sup> O 0000-0002-5413-0826 Gabriela Brito de Lima SILVA<sup>3</sup> O 0000-0002-0195-8179 Philipe Cachoeira MARCOLINO<sup>2</sup> O 0000-0003-4473-0446 Elisabetta RECINE<sup>3</sup> O 0000-0002-5953-7094

# ABSTRACT

## Objective

Although school is considered a suitable space for health promotion, there have been difficulties adopting healthy eating practices due to many ultra-processed foods offered in school canteens and irregularities in Food and Nutrition

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<sup>&</sup>lt;sup>1</sup> Universidade Federal de Sergipe, Departamento de Nutrição, Programa de Pós-Graduação em Ciências da Nutrição. Av. Marechal Rondon, s/n., Jardim Roza Elze, 49100-000, São Cristovão, SE, Brasil. Correspondence to: A FAGUNDES. E-mail: <andhressa@ academico.ufs.br>.

<sup>&</sup>lt;sup>2</sup> Universidade Federal de Santa Catarina, Centro de Ciências da Saúde, Programa de Pós-Graduação em Nutrição. Florianópolis, SC, Brasil.

<sup>&</sup>lt;sup>3</sup> Universidade de Brasília, Faculdade de Ciências da Saúde, Programa de Pós-Graduação em Nutrição Humana. Brasília, DF, Brasil. Support: Fundação de Apoio à Pesquisa e a Inovação Tecnológica do Estado de Sergipe (Fapitec/SE) (Process nº 88887.209713/2018-00); Coordenação de Aperfeiçoamento de Pessoal de Nível Superior (Capes).

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Education actions. This study aimed to propose a certification seal to encourage school canteens' managers in Brazil to adopt actions for the Promotion of Appropriate and Healthy Diets.

#### Method

It is a methodological study in which the "Healthy Canteen Certification Seal" was developed, containing ten guidelines based on the Dietary Guidelines for the Brazilian Population. The instrument was built based on national and international documents and later was consensually agreed upon by experts using the Delphi method.

#### Results

Ten guidelines for the Seal were developed around the following topics: the creation of a Council, availability of written and accessible standards; stimulation of water intake; offer of natural foods, limitation of processed and ultra-processed foods, promotion of educational actions, prohibition of abusive food advertisements, structural changes, and staff training. The overall evaluation of the proposal by the experts was positive concerning its relevance, and more than 70% of positive results were attained for all guidelines. The participants agreed that the Seal would contribute to expanding and enhancing healthy eating practices in schools.

#### Conclusion

We believe that this proposal will encourage educational institutions to adopt and implement actions for the Promotion of Appropriate and Healthy Diets, thus contributing to ensuring Food and Nutrition Safety for students.

Keywords: School feeding. Diet, healthy. Evaluation study. Nutrition programs and policies.

## RESUMO

#### Objetivo

Embora a escola seja considerada um espaço adequado para a promoção da saúde, dificuldades na adoção de práticas alimentares saudáveis têm sido observadas devido à oferta de uma grande quantidade de alimentos ultraprocessados em cantinas escolares e irregularidades nas ações de Educação Alimentar e Nutricional. Este estudo teve por objetivo propor um selo de certificação para estimular cantinas escolares do Brasil a adotarem ações de Promoção da Alimentação Adequada e Saudável.

#### Método

Trata-se de um estudo de natureza metodológica no qual se desenvolveu o instrumento "Selo de Certificação Cantina Saudável", contendo dez orientações coerentes com as diretrizes do Guia Alimentar da População Brasileira. O instrumento foi elaborado com base em documentos nacionais e internacionais e posteriormente pactuado via consenso com especialistas por meio da metodologia Delphi.

#### Resultado

As dez orientações foram elaboradas em torno das seguintes questões: criação de um Conselho, presença de normas escritas e acessíveis, incentivo à ingestão de água, oferta de alimentos in natura e limitação de processados e ultraprocessados, estímulo a ações educativas, proibição de propagandas abusivas sobre alimentos, mudanças estruturais e treinamento de funcionários. A avaliação global da proposta pelos especialistas foi positiva quanto à sua relevância, sendo obtidos resultados superiores a 70% para todas as orientações. Os participantes concordaram que o Selo contribuirá para ampliar e aprimorar a alimentação saudável nas escolas.

#### Conclusão

Acredita-se que essa proposta incentivará as instituições educativas a aderirem e implementarem ações de Promoção da Alimentação Adequada e Saudável, devendo contribuir para a garantia da segurança alimentar e nutricional dos escolares.

Palavras-chave: Alimentação escolar. Dieta saudável. Estudo de avaliação. Programas e políticas de nutrição e alimentação.

## INTRODUCTION

It is known that the agro-industrial food systems are interfering directly in the Promotion of Appropriate and Healthy Diets. These systems provide resources, products, and environments that contribute to increased

Non-Communicable Diseases [1]. The food environment, a fundamental component of food systems, is considered the physical, economic, political, and socio-cultural context that mediates interactions between the food production, acquisition and consumption processes. Therefore, balanced food environments are expected to ensure healthy choices [2,3].

In schools, the food environment comprises the availability, cost, acquisition, consumption, and composition of the foods offered and information on food and nutrition. Thus, the school environment has a great potential to promote healthy eating as it is associated with daily practices that contribute to the student's physical, psychic and cognitive development [4,5].

In this sense, the sale of food in school canteens can be considered an essential analysis point. These places are often associated with the supply of ultra-processed foods rich in sugars, salt, and fats in the form of meals or snacks. Moreover, outsourced services (catering) are present in great numbers and with less possibility of interference from the school community in the choice of the foods offered [6-8].

In private schools, one can see difficulties implementing strategies that would help develop healthy eating practices. Such challenges, among other aspects, are due to potential conflicts of goals: on the one hand, a canteen is viewed as a mere commercial establishment designed to meet students' demands and preferences, and, on the other hand, a canteen is viewed as a pedagogical opportunity to promote health [7].

In Brazil's subnational government administrations, some sporadic initiatives regulate and supervise foods sold by canteens, corroborating national procedures to promote healthy diets. However, most canteens in private education institutions in the country run wildly in the sale of foods, ignoring the potential for promoting healthy habits in these establishments [9-13].

Regulation of school canteens in Brazil needs to advance to contribute to the Promotion of Appropriate and Healthy Diets effectively. This requires the involvement of different stakeholders as well as effective monitoring, guidance, inspection, and assessment processes [6,7,10]. In this sense, a certification seal would stimulate the qualification of the services and increase the visibility of the work and actions provided by the establishment. It is expected that this Seal would guarantee the sale of healthier foods, improve the facilities structure and, at the same time, encourage more diversity of Food and Nutrition Education actions and effectively contribute to the Food and Nutrition Safety of the community that utilizes these services.

The Brazilian experience with the certification seal Baby-Friendly Hospital Initiative (BBHI) is considered positive and may inspire other health areas. It is a quality seal that the Ministry of Health has awarded since 1992 to hospitals that fully comply with the ten steps proposed by United Nations Children's Fund (Unicef) and the World Health Organization (WHO) for the success of breastfeeding [14]. More than 20,000 maternity hospitals in 150 countries received the Baby-Friendly certification [15]. In Brazil, 324 hospitals were certified in 2017 [14]. So, this experience can be extended and disseminated to other areas of public health policies, such as food policies.

Strategies for supporting and improving the quality of foods sold in schools have been adopted in other countries, such as Australia, the United States, and Holland, with positive results. Besides fostering the sale of more appropriate foods in the school canteens and favoring healthier eating options, some programs boost adherence by awarding medals and gratifications [16-19].

Given the above, this study proposes the creation of a certification seal to guide and encourage Brazilian school canteens to adopt actions to promote appropriate and healthy options in the offering and marketing of foods in schools.

## METHODS

It is a methodological study focused on building the instrument (certification seal), and then, based on the qualitative approach, an evaluation is carried out by experts using the Delphi method [20-22]. The proposal aims to award the "Healthy Canteen" certification seal to public and private school canteens that sell/resell foods and decide to comply with the proposals contained in the instrument.

Firstly, an integrative literature survey was conducted on strategies and regulations that promote the sale of healthy foods in schools, especially in school canteens, to support the proposal's preparation. The initial search was carried out using the following words: "school canteens" and "school canteen" between 2017 and 2018 on the scientific databases of Scientific Electronic Library Online, Literature Analyses and Retrieval System Online, National Library of Medicine at the National Institutes of Health, and Latin-American and Caribbean Systems on Health Sciences Literature. Laws, regulations, and official documents issued by WHO, Brazil's Ministry of Health and Ministry of Education were examined. The articles and documents found served as the basis for exploring issues related to school canteens and collecting information to develop the Seal.

In addition to the reading of the documents found, the following documents were also used as references for the construction of the instrument: "*Dez Passos para a Promoção da Alimentação Saudável nas Escolas*" (Ten Steps to Promote Healthy Diets in Schools) from the *Manual Operacional para Profissionais de Saúde e Educação* (Operational Manual for Health and Education Professionals) [23]; the "Steps to a Healthy School Canteen" published by the Nutrition Center, Holland [24]; the "*Manual das Cantinas Escolares Saudáveis*" (Manual for Healthy School Canteens) [10], of the Ministry of Health. The "*Dez Passos para Cantinas Escolares Saudáveis*" (Ten Steps to Healthy School Canteens) [25] and "*Dez Passos para uma Alimentação Adequada e Saudávei*" (Ten Steps to Appropriate and Healthy Diets) from the Dietary Guidelines for the Brazilian Population [26], the Inter-ministerial Ordinance nº 1010 of May 6, 2006 [9] were also used as a support to this work. The materials were read, arranged in groups, and synthetized to find converging points that would help build the seal guidelines.

Subsequently, ten guidelines were suggested as propositions for the Seal, submitted to analysis by specialists in the area, as follows.

The constructed instrument was submitted to experts' analysis using the Delphi approach. The participants were selected based on a curriculum search on the Lattes Platform of the *Conselho Nacional de Desenvolvimento Científico e Tecnológico* (CNPq, National Council for Scientific and Technological Development). The words: "School Canteens", "School Canteen", "School Food", and "National School Food Program" were used in the search. The criteria for eligibility were: being a researcher nutritionist/ dietitian in the field of school food and nutrition with one or more publications in scientific journals and/or books in the last five years; and/or having experience in school food programs; or having authorship in any of the essential documents for the development of the Seal.

Curricula of 177 experts from all country regions were identified, and e-mails of invitation were sent to all experts selected.

To include participants from all regions of the country and complete the survey with at least 18 experts, the highest sample loss rate (35.7%) reported in three studies that used the Delphi technique was accepted as a parameter to compose a sample universe of 50 participants [27-29].

Two rounds of 20 days each were carried out for the experts' analysis, and deadline reminders were sent to the panelists. For the first round, a proposal for the "Healthy Canteen Certification Seal" was sent to each participant, and a questionnaire and instructions for evaluation of the guidelines and the Informed

Consent form. In this process, the software Survey Monkey was used. The resulting data were grouped according to similarity to produce a feedback report to each participant [30,31].

The instrument (questionnaire) contains 24 questions, subdivided into three blocks, as follows: 1) characterization of participants; 2) – Overall evaluation of the proposal; and 3) Evaluation of the instrument.

The panelists' assessment of the overall evaluation of the proposal was made using dichotomous questions, and the results were examined by frequency distribution [32]. Likert scales were used to allow the respondents to express their degree of agreement or disagreement about the items evaluated to evaluate the guidelines [33].

The scale with four categories was used in order to achieve consensus. The participants should select one of the following options: "totally agree", "mostly agree", "mostly disagree", "totally disagree" with the guidelines. If the participant chose the latter options, a justification was requested. It was pointed out that their cooperation would be even more effective with justifications and recommendations properly referenced, considering that new proposals or modifications would be forwarded to the experts [31,33].

After completing the questionnaire with the required justifications, when necessary, the participant at his or her discretion could include any note or comment considered important about each of the guidelines or topics listed. For the participants' assessment, ten guidelines with their respective justifications for the propositions, and 'Verification' of each one in practice, were submitted to the panelists to provide the Healthy Canteen Seal.

Feedback comments about the first round and a new questionnaire were sent to the participants in the second round. The guidelines that had changes, comments, or suggestions were sent back for analysis. The results received at this second round were examined and, then, the final report of the process was sent to the participants.

It is worth mentioning that the study was approved by the Research Ethics Committee of the Federal University of *Sergipe*, Process n° 2.484.974. The participants remained anonymous throughout the research process.

Data were analyzed using the Excel software (2010) and the Statistical Package for the Social Sciences (SPSS), version 20.0. The participants' suggestions and comments about the seal guidelines were analyzed and arranged in groups according to similarity. The data relating to the overall relevance of the proposal were analyzed through the frequency distribution of dichotomous responses [32].

To determine if consensus was reached about the instrument guidelines, the following criteria were used:

1) Mean score value of the Likert scale: 1 to 1.99 points = Negative evaluation of the item assessed, which would require changes and adjustments; 2 to 2.99 points = Positive overall evaluation, with some adjustments needed; and 3 to 4 points = Positive evaluation of the item assessed, with no need for adjustments [28,30,33,34].

2) Frequency distribution of responses: at least 50% of panelists with frequency distribution of responses between: "totally agree", "mostly agree" [20,30,33,34].

3) Interquartile difference: <1.0 [20,30].

4) Standard deviation: <1.5 [30,34].

If one or more of the above criteria were not met, the guideline was reformulated according to the participants' notes [30,34].

The results related to the development process of the Seal proposal and experts' consensus are described below.

6 AC RODRIGUES et al.

# RESULTS

# Preparation of the Seal Proposal

Six documents to serve as the basis for the development of the Seal were selected. Such documents contained recommendations for promoting appropriate and healthy eating and are primarily official documents and previous initiatives in Brazil with a focus on school food services.

The contents emphasize the importance of school as an environment to build healthy eating habits, consumption of fresh, *natural* foods, and control of ultra-processed foods. Strategies to encourage the participation of the actors in practices aimed at raising critical awareness of healthy eating habits, actions of Food and Nutrition Education that involve the school community, and/or structural modifications to support appropriate eating choices are recommended [10,23-26].

Thus, ten guidelines aimed at the Promotion of Appropriate and Healthy Eating in School Canteens were drawn up to provide information and recommendations to those in charge of the institutions to encourage the consumption and sale of healthy foods in their foodservice. Chart 1 presents the guidelines initially proposed for the "Healthy Canteen Certification Seal", and the modified guidelines after Delphi rounds. The modifications included after the experts' consensus are indicated in italic.

Guidelines before consensus	Guidelines after consensus		
1 <sup>st</sup> guideline – To create a Healthy School Canteen Council with the purpose of defining strategies to favor healthy food choices by children and adolescents and monitoring the actions related to the Promotion of Appropriate and Healthy Eating	1 <sup>st</sup> guideline – no changes		
$2^{nd}$ guideline – To use educational and positive communication for the Promotion of Appropriate and Healthy Eating in schools using educational advertisement (banners, posters, boards)	2 <sup>nd</sup> guideline – To use educational and positive communication for the Promotion of Appropriate and Healthy Eating in schools.		
$3^{\mathrm{rd}}$ guideline – To increase the offer of in natural foods or minimally processed foods	3 <sup>rd</sup> guideline – No changes		
$4^{\rm th}$ guideline – To restrict the sale of processed foods, which should not exceed 50% of the foods offered by the school canteen.	4 <sup>th</sup> guideline – To restrict <i>progressively</i> the sale of process foods <i>by the school canteen</i>		
$5^{\rm th}$ guideline – Not to allow the sale of ultra-processed foods in the school canteen.	5 <sup>th</sup> guideline – To restrict progressively the sale of ultra-processed foods by the School Canteen.		
$6^{\rm th}$ guideline – To organize the place where the school canteen is installed. Present the foods attractively.	6 <sup>th</sup> guideline – To organize the place where the school canteen is installed. Present the <i>healthy</i> foods attractively.		
$7^{\rm th}$ guideline – To train the canteen's manager and staff on strategies for the Promotion of Appropriate and Healthy Eating and Best Food Handling Practices in foodservices.	7 <sup>th</sup> guideline – No changes.		
$8^{\rm th}$ guideline – To prohibit the use of advertisements (posters or any other means) of processed and overprocessed foods.	8 <sup>th</sup> guideline – To prohibit the use of advertisements (posters or any other means) of processed and overprocessed foods <i>in</i> <i>these establishments</i> .		
$9^{\rm th}$ guideline – To encourage the students and other members of the school community to drink water.	9 <sup>th</sup> guideline – No changes.		
10 <sup>th</sup> guideline – To provide a norm in writing for the implementation of "Healthy Canteen", which must be routinely transmitted to all staff members.	10 <sup>th</sup> guideline – No changes.		

Chart 1 – Proposed guidelines for the "Healthy Canteen Certification Seal" before and after the experts' consensus. Brazil, 2019.

Note: Highlights in italics refer to changes in guidelines after analysis and consensus of experts using the Delphi technique.

## **Consensus Analysis**

Of 177 experts invited, 54 (30.5%) accepted the invitation, of whom 37 (20.9%) completed the first round and, of these, 30 (16.9%) continued to participate in the second round of the evaluation/validation stage.

70% of the guidelines reached consensus (Table 1) in the first round. The 1<sup>st</sup>, 2<sup>nd</sup>, and 4th guidelines did not meet the sufficient requirements to build consensus and were included in the second round. The 5<sup>th</sup> and 9<sup>th</sup> guidelines, despite achieving the necessary conditions for a consensus, had comments and suggestions that changed their meanings. Given the importance of collective participation in building the instrument and defining a better approach, these guidelines were also included in the second round. The five guidelines reached an agreement in the second round.

In both rounds, most of the experts' suggestions were related to the justifications of each guideline. Thus, the texts of the guidelines did not require significant changes after the last round, and the suggestions were added to the justifications of each guideline.

The overall assessment of the proposal exhibited significant results about its relevance, with results of more than 70% (Table 2). All participants (100%) agreed that the Seal would expand and improve healthy eating practices in schools. After knowing the guidelines for the "Healthy Canteen Certification Seal", 34 (91.9%) participants agreed on the viability of the proposal to be implemented in schools.

Proposed guidelines	Μ	SD	Agreement (%)	Q1	Q3	Inter. Diff.
1 <sup>st</sup> : Creation of a Council	3.5	0.6	91.9	3	4	1
2 <sup>nd</sup> : Promotion of educational actions	3.6	0.7	89.2	3	4	1
3 <sup>rd</sup> : More offer of fresh, <i>in natural</i> foods	4.0	0.2	100.0	4	4	0
4 <sup>th</sup> : Restricted offer of processed foods	3.4	0.7	100.0	4	4	1
5 <sup>th</sup> : Restricted offer of ultra-processed foods	3.7	0.5	94.6	4	4	0
5 <sup>th</sup> : Improvement of the school canteen environment	3.8	0.2	100.0	4	4	0
<sup>7th</sup> : Staff training	3.8	0.7	91.9	4	4	0
8 <sup>th</sup> : Banning abusive advertisements of foods	4.0	0.2	100.0	4	4	0
9 <sup>th</sup> : Sale of drinking water	3.7	0.2	91.2	4	4	0
10 <sup>th</sup> : Having a norm for Healthy School Canteen	3.8	0.6	94.6	4	4	0

Table 1 – Results of the first round of assessment of the proposal for the "Healthy Canteen Certification Seal". Brazil, 2019 (n=37).

M: Mean; SD: Standard Deviation; Inter. Diff.: Interquartile difference.

Table 2 - Overall assessment of the proposal for a "Healthy Canteen Certification Seal". Brazil, 2019 (n=37).

Question Will the seal help increase and improve healthy eating by children and adolescents?	
Free adherence will ensure self-accountability?	30 (81.1)
Do you agree with the title proposed for the Seal?	32 (86.5)
Support to the Seal by a public or international body will provide better visibility to the school?	36 (97.3)
Should the school comply with 100% of the ten guidelines?	33 (89.2)
After knowing the proposal, do you still think that the school canteen should comply with 100% of the guidelines?	
Is the proposal viable to be implemented in school canteens?	34 (91.9)

### DISCUSSION

The survey carried out did not identify initiatives for implementing a certification seal for school canteens in the country or other actions that would promote mobilization of the school community toward

a common goal, with recognition of achievements. Thus, the relevance of this study consists of its potential to help improve dietary practices in schools, especially in canteens, to offer appropriate and healthier foods to the students.

It is known that the political, economic, socio-cultural, and physical components of a food environment result in factors such as availability, accessibility, proximity, publicity, information, and educational actions. These factors may interfere in the formation and expression of eating habits and can also directly or indirectly influence institutional and organizational food environments (schools), community environments, and consumers [2,3].

Thus, creating a Council or Commission with representatives of the school community may provide an opportunity for interaction between the actors, guide and supervise actions to improve the food and nutrition profile of children and the food environment, and the development of educational actions, among others [7,23,35].

Although discussions about the relationship between Food and Nutrition Education and school curriculum are not directly specified in the Seal guidelines, the panelists' suggestions considered this aspect and its importance in building healthy eating habits, as set forth by Law n° 13.666, of May 16, 2018 [35]. Therefore, the inclusion of this matter in the schools' Political and Pedagogical Projects strengthens the educational component of the school food environment [7,13,35]. Therefore, strengthening discussions and the relationship between the educational actions promoted by the canteens and those carried out during the formal pedagogical process can promote healthy and suitable food consumption.

Of great importance is the Best Practices in Food Handling manual, a tool that is an excellent example of a policy and standard that can be used and adapted in school foodservices to ensure the delivery of safe and healthy foods to the students, showing the importance of encouraging its use in school canteens [23,36].

Healthy eating in school settings is restricted to offering healthy foods or preparations. So, it is necessary to consider the hygienic and sanitary safety of what is offered to avoid improper food preparation and handling and consequent outbreaks of foodborne diseases in the students. For this purpose, the "Healthy Canteen Certification Seal" encourages the qualification of the canteen's employees so that they can employ the best practices when handling foods. The promotion of food sanitary quality is a fundamental right of everyone and leads to improving the country's population health and, consequently, adds quality to school canteens and the welfare of the students served [7,36].

The Dietary Guidelines for the Brazilian Population was one of the primary references for developing the instrument presented here [26]. The Healthy Canteen Certification Seal aims to foster more offerings of fresh, *natural* foods, with restrictions on ultra-processed or processed foods. To establish healthy food service, the physical availability and accessibility to such healthier foods are crucial and should be encouraged in school canteens [2,3].

Efforts to reduce the supply and marketing of ultra-processed foods are crucial, especially in private school canteens, where there is a greater prevalence of obesity-related outcomes, compared to public schools, considering that these foods are associated with non-communicable diseases [12,13].

The consensus indicated a gradual reduction in the supply of ultra-processed foods based on the agreement with the proposal, with a clear goal of total restriction, considering that it would be difficult for canteen owners to remove all ultra-processed foods from the shelves once. This is because the characteristics of the foods announced by the industry of ultra-processed foods, of being quick and easy to prepare, and having a longer shelf life [26], attract owners and consumers of commercial foodservices.

The proposal is based on the premise that the restriction of these foods in school canteens will promote a more appropriate and healthier food environment, favoring the Human Right to Appropriate and Healthy Food and the Food and Nutrition Safety of students, consistent with the National Policy of Food and Nutrition Safety and the National Food and Nutrition Policy [3,37-39].

It should also be noted that to achieve the goals cited, it is essential to regulate the strategies of commercial promotion of the products in school foodservices [39]. Therefore, the "Healthy Canteen Certification Seal" suggests that advertisements that can contribute to inadequate eating habits in schools should be banned.

In Brazil, there are already several regulations that restrict children-targeted food advertising. Even with these measures, there are still some barriers, especially of political-economic nature, because regulatory mechanisms are directly associated with risks of profit loss by the food industries and commercial foodservices [40,41]. Even though it is a complex issue, it is fundamental that regulations involving the advertising of foods aimed at children be effectively disseminated and expanded, because the resources currently spent with advertising for attraction and induction to consumption can lead the public to disregard the nutritional aspects and values of foods [8,41].

Incentivizing students to drink water, an essential element for the body's good functioning was also considered in the guidelines instrument for adherence to the Seal [24]. The canteen can also offer naturally flavored water to stimulate water consumption and the usual water offered. Access to drinking water and fostering its consumption using projects and implementation strategies, assessment of needs, and tools for water supply is part of a healthy school eating place [39].

This study aims to follow the successful BBHI. Therefore, it is recommended that the responsible body, for example, the Ministry of Health and/or Ministry of Education and/or Unicef, provide roadmaps or guidelines with instructions for canteen managers or owners willing to adhere to the Seal. Self-evaluation of the school canteen must be carried out according to the instructions contained in said guidelines. After full compliance with the standards for the Promotion of Appropriate and Healthy Diets, external assessments can be carried out by qualified or certified professionals [13,42-45].

The BBHI model can be an inspiration for this proposal. The evaluators are professionals from states and municipalities, such as dietitians, nutritionists, and Health Surveillance agents, qualified to carry out the inspection. The creation of a work team of "Healthy School Canteens", linked to the responsible body, is suggested, intended to provide support, quality, supervision, and adequate coordination of the activities [42,43].

The limitations of this study are related to the panelist sampling since the selection criteria did not include some areas of study, especially Food and Nutrition Education and education in general. Also considered a limitation for implementing the proposed Seal is the lack of more consistent incentive processes aiming at regulating the foods sold in school canteens, combined with insufficient inspection routines at subnational levels. It is worth noting that the potential of the Delphi method and the possibility of interaction of individuals from various regions of the country contributed positively to the construction of the instrument.

## CONCLUSION

The "Healthy Canteen Certification Seal" is a potentially positive instrument for promoting healthy eating in school foodservices. It is proposed as a guiding tool for the diverse actors involved in selling

foods in school canteens. We believe that this initiative would benefit the canteen's directors, managers, employees, parents, students, and teachers, by strengthening health-promoting settings. Adherence to the Seal will express the commitment to measures for the Promotion of Appropriate and Healthy Diets.

The certification strategy is expected to stimulate all stakeholders involved to adopt the ten guidelines to obtain the Seal in their canteen, thus encouraging schools to implement actions to foster the Promotion of Appropriate and Healthy Diets in school canteens.

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### CONTRIBUTORS

AC RODRIGUES and A FAGUNDES participated in the conception, design, data analysis, and interpretation, in writing the manuscript and final revision. CG GABRIEL participated in the conception, writing the paper and final revision. GBL SILVA and PC MARCOLINO participated in writing the paper and final revision. E RECINE participated in the conception, writing the manuscript and final revision.

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