



Validation of a permanent health education workshop on nutrition, physical activity and bodily practices

Validação de oficina de educação permanente em alimentação, atividade física e práticas corporais

AUTHOR'S

Julia De Caro Costa¹

Douglas Roque Andrade²

Patricia Constante Jaime³

1 University of São Paulo, Faculty of Public Health, Graduate Program in Nutrition in Public Health, São Paulo, São Paulo, Brasil.

2 University of São Paulo, School of Arts, Science and Humanities, Study Group for Epidemiological Studies and Research in Physical Activity and Health, Graduate Program in Social Change and Political Participation, São Paulo, São Paulo, Brasil.

3 University of São Paulo, Faculty of Public Health, Center for Epidemiological Research in Nutrition and Health, São Paulo, São Paulo, Brasil.

CORRESPONDING

Julia De Caro Costa

julia.caro.costa@usp.br

Faculty of Public Health of the University of São Paulo. NUPENS/USP. 715 Doutor Arnaldo Avenue – Cerqueira César. São Paulo, São Paulo, Brasil.

CEP: 05406-150.

DOI

10.12820/rbafs.27e0245



This work is licensed under a [Creative Commons Attribution 4.0 International License](https://creativecommons.org/licenses/by/4.0/).

ABSTRACT

This study aims to describe the development and validation of a permanent health education workshop protocol for professional qualification in promoting adequate and healthy eating and physical activity and bodily practices for professionals working in Primary Health Care. The protocol development was based on the following theoretical references: Brazilian Dietary Guidelines, Brazilian Physical Activity Guidelines, Interprofessional Collaborative Practice, and Critical-Reflective Methodology (MCR); and it was proposed with 6 modules, totaling 30 hours of qualification. The protocol was evaluated in two panels of experts for content validation, which assessed aspects of clarity, relevance, and representativeness. The Content Validity Index (CVI), considering adequate the activities that scored CVI>0.8; and the proportion of theoretical representativeness in each activity were calculated. All 32 activities in the protocol have been validated for clarity and relevance, and the representativeness obtained results consistent with the objectives of each module. The representativeness of MCR in the protocol as a whole was of 86.25%. The workshop activities protocol was evaluated as adequate for the proposed objective, considering its theoretical framework and its target audience. This is the first validated permanent education workshop to work in combination the Brazilian Dietary Guidelines and the Brazilian Physical Activity Guidelines, and it can be applied to the qualification of professionals in Primary Health Care throughout Brazil.

Keywords: Obesity; Permanent education; Primary health care; Nutrition; Physical activity.

RESUMO

O objetivo deste trabalho é descrever o desenvolvimento e validação de conteúdo de um protocolo de oficina de educação permanente em saúde para a qualificação profissional em promoção da alimentação adequada e saudável e da atividade física e práticas corporais voltado aos profissionais atuantes na Atenção Primária à Saúde. O desenvolvimento do protocolo utilizou como referenciais teóricos o Guia Alimentar para a População Brasileira, o Guia de Atividade Física para a População Brasileira, a Prática Colaborativa Interprofissional e a Metodologia Crítico-Reflexiva (MCR); e foi definido com seis módulos presenciais, totalizando 30 horas de qualificação. O protocolo foi avaliado nos aspectos de clareza, pertinência e representatividade, em dois painéis de juízes para validação de conteúdo. Foram calculados o Índice de Validade de Conteúdo (IVC), considerando adequadas as atividades que pontuaram IVC>0,8; e o percentual de representatividade dos referenciais teóricos em cada atividade. Todas as 32 atividades do protocolo foram validadas para clareza e pertinência; e a representatividade obteve resultados condizentes com os objetivos de cada módulo. A representatividade da MCR no protocolo como um todo foi de 86,25%. As atividades da oficina foram avaliadas como adequadas ao objetivo proposto, considerando seu referencial teórico e seu público-alvo. Esta é a primeira oficina de educação permanente em saúde validada a trabalhar em formação combinada com o Guia Alimentar e o Guia de Atividade Física para a População Brasileira, e pode ser aplicada para a qualificação de profissionais da Atenção Primária à Saúde em todo Brasil.

Palavras-chave: Obesidade; Educação permanente; Atenção primária à saúde; Alimentação; Atividade física.

Introduction

The prevalence of overweight and obesity has increased in economically emerging countries in recent years¹. According to data from the 2019 Brazilian National Health Survey (PNS), the prevalence of overweight (Body Mass Index - BMI \geq 25 kg/m²) in the adult Brazilian population is 60.3%, while obesity (BMI \geq

30 kg/m²) reaches 25.9%¹. Obesity is a condition resulting from a positive energy balance, which favors fat accumulation; characterized as a chronic condition and also a risk factor for other chronic non-communicable diseases (NCDs)². It has a multifactorial character, affected by biological, behavioral, environmental, economic, social and cultural determinants; resulting in a

complex public health problem that requires interdisciplinary efforts³.

Among its proximal determinants, energy expenditure through physical activity and bodily practices, besides dietary pattern, represent the most relevant². According to the 2019 Surveillance System for Risk Factors and Protection for Chronic Diseases by Telephone Survey (VIGITEL), 44.8% of adults did not meet the recommendation for physical activity⁴. The value is more expressive for women (52.2%) than for men (36.1%); and, for both, it decreases with the increase in the level of education⁴. Although levels of physical inactivity are high in the Brazilian population, it is observed that the practice of leisure-time physical activity among adults has been showing an increasing prevalence in recent years⁵.

Regarding eating habits, the 2017-2018 Consumer Expenditure Survey (POF) indicates that the purchase of ultra-processed food (UPF) has been growing in Brazilian households, with a relative share of calories in the diet of 18.4%, while the participation of fresh or minimally processed foods and culinary ingredients decreases⁶. The consumption of UPF was associated with weight gain, increased waist circumference, increased BMI, increased body fat and increased risks of developing overweight and obesity⁷. The promotion of healthy behaviors, both for the prevention and control of obesity, and, in a broader perspective, for health promotion, is supported by two documents within the scope of the Unified Health System (SUS): the Dietary Guidelines for the Brazilian Population (GAPB)⁸, and the Physical Activity Guidelines for the Brazilian Population (GAFPB)⁹. Both were based on current scientific evidence on the relationship amidst diet, physical activity and health¹⁰⁻¹². Diffusion and dissemination actions for such documents are necessary¹³, but they prove to be a challenge, as health professionals indicate that professional qualification and the absence or insufficiency of access to instructional materials are some of the factors that hinder coping with overweight in the context of SUS¹⁴.

The workforce qualification is a strategic action in the context of health promotion to face the risk factors of chronic NCDs¹⁵. In order to transform professional practices, permanent health education (EPS) is a strategic reference, conceptualized as meaningful learning and incorporated into daily work¹⁶. Primary Health Care (PHC) is a privileged space for qualification actions to take place throughout the national territory,

organized in a decentralized manner and being the priority gateway for users in the Healthcare Network (RAS)¹⁷.

This paper aims to describe the process of development and validating the content of a workshop protocol for EPS, aimed at professional qualification in a combined training in adequate and healthy eating and in physical activity and bodily practices for coping with overweight in PHC within the scope of SUS.

Methods

This is a methodological study of content development and validation of the “Workshop for the Promotion of Adequate and Healthy Eating and Physical Activity and Bodily Practices”. The content validation, carried out by experts, assesses whether the workshop sufficiently presents the aspects of the theoretical frameworks used, analyzing if the items represent the theoretical domain of the concepts to be addressed¹⁸. A content validation study provides information about the clarity and relevance of the items, in addition to their representativeness regarding the theoretical framework¹⁸.

The development of the work took place in four stages:

I) Development of the activity protocol

The workshop was proposed as a 30-hour face-to-face qualification aimed at professionals with higher education working in PHC, and was prepared by three nutritionists, a physical education professional and two undergraduate nutrition students, under the supervision and coordination of teachers. It consists of activities dispersed into six modules of four hours each, and six hours of non-face-to-face activities at the end of each module, which aim to consolidate the contents previously worked on and/or prepare participants for the next module. The workshop is presented in writing in a protocol, with each activity consisting of a brief presentation, total duration, necessary material, objectives, description of the activity and expected results. Seeking to make its planning more feasible, the protocol presents all the materials that must be printed by the facilitator, as well as a monitoring chart with the sequence of activities, their objectives, proposed time and a summary of the tasks of the team running the workshop.

The protocol was based on four theoretical references: Dietary Guidelines for the Brazilian Population (GAPB); Global Action Plan for Physical Activity 2018-2030; Interprofessional Collaborative Practice (PCI); and Critical-Reflective Methodology (MCR).

In August 2020, public consultation was opened for the Physical Activity Guidelines for the Brazilian Population (GAFPB)¹⁹, which was adopted as a technical reference in physical activity and bodily practices, replacing the Global Action Plan.

a) Technical guidelines for food and nutrition: Dietary Guidelines for the Brazilian Population (GAPB)

Published in 2014, the GAPB provides information and recommendations on dietary habits with the aim of promoting health⁸. Organized into five chapters, the document addresses the principles underlying the recommendations; general recommendations for food choice, presenting the four food categories according to the level of processing; the combinations of foods from their groups; guidelines on the act of eating and commensality; and the potential obstacles for the recommendations to be followed, with possible ways to overcome them⁸. Each chapter has a summary, providing the information in a concise form; and, at the end, the GAPB presents the information in a summarized way with its Ten steps for an adequate and healthy diet⁸. The GAPB was an innovative publication compared to other national dietary guides in dealing with sustainability and bringing a holistic view of food, removing the emphasis on the amount of recommended servings¹⁰. In addition to considering the context of meals, the document goes beyond the view of food as mere carriers of nutrients, incorporating sociocultural aspects into its recommendations¹⁰. To support its implementation, in 2020 the document 'Implementing the Brazilian Dietary Guidelines for Teams that Work in Primary Health Care' was published, aimed at training health professionals²⁰.

b) Technical guidelines in physical activity and bodily practices:

b.1) Protocol of the first panel of judges: Global Action Plan for Physical Activity 2018-2030

Launched in 2018 by the World Health Organization (WHO) with the mission of ensuring that all people have access to safe environments and diverse opportunities for a physically active life, the document sets out four strategic goals achievable through 20 universally applicable policy actions in all countries²¹. Its preparation came in response to requests from countries for updated guidelines and effective and viable actions to promote increased levels

of physical activity of the population²¹. Its recommendations address the multiple cultural, environmental and individual determinants of physical inactivity, and its general objective is to reduce physical inactivity²¹. The four strategic objectives are: to create active societies; to create active environments; to create active people; and to create active systems²¹. The recommendations consider the positive impacts on achieving the 2030 Sustainable Development Goals, including not only the direct impact on health and well-being from increased levels of physical activity, but also on building more equitable, sustainable and prosperous societies²¹.

b.2) Protocol of the second panel of judges: Physical Activity Guidelines for the Brazilian Population (GAFPB)

Published in 2021, the GAFPB aims to promote health and improve the quality of life⁹. Organized into eight chapters, the publication covers concepts in physical activity, exploring its domains, intensities and physical capacities; followed by recommendations for physical activity for each cycle of life, in addition to specific audiences, such as pregnant women, people with disabilities and physical education at school⁹. The document emphasizes the importance that, even if the practice of physical activity does not reach the full recommendation, individuals should seek to progressively increase their physically active time for better health benefits⁹. In addition to recommendations on the dose of physical activity, the GAFPB explores the main barriers to a physically active life and the options for modalities according to the preferences of the Brazilian population, considering the country's cultural diversity²². Together with the GAFPB, the document "Recommendations for Managers and Health Professionals" was published, which supports the diffusion and dissemination; implementation; and monitoring and evaluation of the GAFPB considering the different points of the RAS that work with programs and actions in which the promotion of physical activity can be exercised²³.

c) Guidelines in healthcare: Interprofessional Collaborative Practice (PCI)

The PCI concept was published by WHO in 2010, and it is the work of health professionals with dif-

ferent backgrounds and experiences together with patients, families, caregivers and communities; with the objective of offering the highest quality assistance²⁴. Carried out in conjunction, the practice of care strengthens the health system and improves its outcomes; achieving better functioning when organized based on the needs of the assisted population²⁴. In addition to better quality care, PCI promotes effective results, more horizontal relationships between the health team and users, and a broader access, proving to be an important tool for comprehensive healthcare²⁵.

d) Pedagogical framework: Critical-Reflective Methodology (MCR)

The MCR is a didactic-pedagogical orientation from the perspective of Paulo Freire²⁶. It is used in the workshop with the objective of bringing the contents closer to the local reality, contextualizing the theoretical references based on professional experiences and practices. The active methodology takes the problem-based and dialogic approach as a teaching-learning strategy, taking the subject to the role of social transformer when seeking original solutions to real problems²⁶.

II) Pilot workshop

A pilot workshop was held at the School of Arts, Sciences and Humanities of the University of São Paulo (USP) in February 2020 with the aim of evaluating the adequacy of the protocol. The workshop was carried out with project members as facilitators in four meetings and health professionals with higher education and experience in PHC took part free of charge. The tested protocol had seven modules of four hours each and two hours of dispersal activities and, after the pilot, it was adapted to six modules, maintaining its content and the 30 hours of qualification. The adaptation allowed for the inclusion of dispersal activities that fixed the contents worked on in the previous module, preparing the participant for the next module and seeking to apply the contents to the reality of the territory in which they work.

III) First content validation and readjustment

The protocol was evaluated by an on-site panel of judges at the Faculty of Public Health at USP (FSP/USP) in March 2020. Aspects of clarity, relevance and representativeness of each activity were analyzed, considering clarity as how clear is the wording of the activity; relevance as how relevant the activity is to the wor-

kshop; and representativeness as the activity's ability to represent the references. For the aspects of clarity and relevance, experts should assign grades from 1 (the activity is not clear/relevant) to 4 (the activity is clear/relevant)¹⁸ considering the activity as a whole; and for representation, they should point out which of the four theoretical references were represented; requesting justification when the activity was not clear, relevant or representative. Experts were invited by intention according to their experience in the themes and, after completing the evaluation form, two rounds of conversation, which were recorded in audio, were held about their impressions on the protocol.

For each activity, the content validity index (CVI) of clarity and relevance was calculated, in which $CVI = \text{No. grades 3 or 4} / \text{total valid grades}$ ¹⁸. Activities with $CVI > 0.8$ were considered adequate, and the CVI protocol corresponds to the average of all activities¹⁸. For representativeness, the percentage of mentions of each reference was calculated. After the panel of judges, the comments and notes from the experts were assessed and the activities underwent modifications to improve the aspects which were pointed out; the GAFPB was included as a theoretical framework, considering the document presented by the Ministry of Health for public consultation in August 2020¹⁹.

IV) Second content validation and readjustment

The modified protocol was analyzed by a new panel of judges in February 2021 in online format as a result of the physical distancing strategy to control the COVID-19 pandemic. The same experts who participated in the first panel were invited, in addition to two experts in the area of physical activity and bodily practices, in order to balance the participants' areas of experience. The experts received a video tutorial with instructions on filling out the evaluation form, created on the Google Forms platform (Google LLC. USA). Subsequently, two rounds of conversation were held via video call through the Google Meet platform (Google LLC. USA) on the impressions about the protocol, which have been recorded. The activities had the same aspects evaluated, and the CVI was calculated based on the grades received¹⁸. After reviewing the comments and grades, the protocol underwent a review from the standpoint of the stigma of obesity by two experts who did not participate in the panel of judges.

Participants in the pilot workshop and in the panels of judges signed the Informed Consent Form. Participants of the judge panels authorized the recording

of the conversation roundtables. This research was approved by the Ethics Committee of the FSP/USP (Opinion No.: 3.366,472), issued on June 4, 2019.

Results

For the first panel of judges, 17 experts were invited, distributed according to their experience in the theoretical frameworks: Promotion of Adequate and Healthy Eating (PAAS) (n = 4); promotion of physical activity and bodily practices (n = 4); MCR (n=4); and PCI (n=5); 14 experts accepted the invitation and participated in the panel (Table 1). For the second panel of judges, 16 experts were invited: PAAS (n = 4); promotion of physical activity and bodily practices (n = 4); MCR (n=3); and PCI (n=5); and 15 experts accepted the invitation (Table 1); of which 13 also participated in the first panel. The specialists' areas of professional activity include teaching, research, management in SUS, internship supervision, EPS and health promotion.

Table 1 – Characteristics of the experts on the first and second panels of judges. São Paulo, São Paulo, Brazil, 2020 and 2021.

Characteristics	Number of experts	
	First panel	Second panel
Professional qualification		
Dentist	1	1
Nurse	2	1
Doctor	2	2
Nutritionist	6	6
Nutritionist and Sociologist	1	1
Physical Education Professional	1	3
Psychologist	1	1
Total	14	15
Experience in the theoretical framework		
Promotion of Adequate and Healthy Eating	4	4
Promotion of Physical Activity and Bodily Practices	2	4
Critical-Reflective Methodology	3	3
Interprofessional Collaborative Practice	5	4
Gender		
Female	12	12
Male	2	3

In both panels of judges, all activities in the protocol were evaluated by all experts, however, 22 activities were not graded for clarity or relevance in the first pan-

el. In the first panel, out of the 36 activities evaluated, only one had a CVI<0.8 for both clarity and relevance. The protocol had an average CVI of 0.95; and the theoretical references GAPB, Global Action Plan, MCR and PCI obtained the following percentages of representation, on average: 38.69; 27.98; 66.47; and 38.10, respectively (Table 2).

In the second panel, all 32 activities had a CVI>0.8, with an average CVI of 0.98. The theoretical references GAPB, GAFFPB, MCR and PCI obtained the following percentages of representation, on average: 56.04; 51.88; 86.25; and 50.63, respectively (Table 3).

The percentage of theoretical representativeness obtained results consistent with the objectives of each module (Chart 1) in both panels of judges, and in the second panel the representativeness averages were higher. The GAPB had the highest percentages in modules 2 and 3. The references in physical activity and bodily practices were better represented in modules 4 and 5. The PCI had the highest number of mentions in modules 1 and 6. The average theoretical representation of MCR in the protocol as a whole was of 66.47% in the first panel and 86.25% in the second one.

The adjustments made to the protocol were carried out based on comments, criticisms and suggestions made by the experts. In the first panel of judges, the main points were the need for greater integration between the workshop themes; the excess of information and long activities in the dispersal activities; and description adjustments to improve the clarity aspect. The field "Team preparation" was added to each activity, indicating fundamental readings for its execution; and the field "To learn more", with indication of materials for deepening the issues discussed in the module. The GAFFPB was included as a theoretical framework¹⁹, having its content explored in the activities, replacing the Global Action Plan.

The changes made to the protocol after the second panel of judges were aimed at specific issues in the protocol, such as changing the order of activities, readjusting the duration of activities and adjustments to the description to improve the clarity aspect. Subsequently, a review was carried out by two specialists from the perspective of the stigma of obesity. 28 suggestions were pointed out, aimed at recommendations for the executing team and inclusion of objectives and results, allowing the workshop protocol not to encourage or reinforce stigmatizing behaviors in relation to obesity, but without changes in the validated content.

Table 2 – Content Validity Index of activities in the first panel of judges. São Paulo, São Paulo, Brazil, 2020.

Activity	Content Validity Index (CVI)					Recognized theoretical reference			
	Clarity		Relevance		CVI	GAPB	Global Action Plan	MCR	PCI
	(min-max)	(min-max)	(min-max)	(min-max)	(average)				
Module 1									
1 Workshop and module 1 schedule and objectives	0.86	(2 - 4)	1	(4 - 4)	0.93	50.00	14.29	57.14	21.43
2 Welcoming the group	1	(4 - 4)	1	(4 - 4)	1	50.00	0	78.57	57.14
3 Work agreement	1	(3 - 4)	1	(3 - 4)	1	0	0	57.14	64.29
4 How is your diet?	0.86	(2 - 4)	1	(3 - 4)	0.93	92.86	0	57.14	14.29
5 Cartography of the nutritional, PA and epidemiological profile of the territory	1	(3 - 4)	1	(3 - 4)	1	78.57	85.71	92.86	85.71
6 Module closing	1	(3 - 4)	1	(3 - 4)	1	35.71	7.14	64.29	28.57
Total (average)	0.95		1		0.98	51.19	17.86	67.86	45.24
Module 2									
7 Module 2 schedule and objectives	0.93	(2 - 4)	1	(3 - 4)	0.96	28.57	0	64.29	57.14
8 Presentation of the healthcare line for overweight and obesity	0.86	(2 - 4)	1	(3 - 4)	0.93	28.57	7.14	64.29	78.57
9 What is healthy eating for you?	1	(4 - 4)	1	(3 - 4)	1	100.00	0	100.00	21.43
10 Sorting foods by level of processing	1	(3 - 4)	1	(3 - 4)	1	100.00	0	71.43	14.29
11 From food to meal	0.92	(2 - 4)	1	(3 - 4)	0.96	85.71	0	71.43	42.86
12 Module closing	0.92	(2 - 4)	1	(3 - 4)	0.96	28.57	0	64.29	21.43
Total (average)	0.94		1		0.97	61.90	1,19	72.62	39.29
Module 3									
13 Module 3 schedule and objectives	1	(3 - 4)	0.93	(2 - 4)	0.96	28.57	0	64.29	28.57
14 The act of eating and commensality	1	(3 - 4)	1	(3 - 4)	1	92.86	0	85.71	35.71
15 Appropriating the GAPB: the act of eating and commensality	0.93	(2 - 4)	0.93	(2 - 4)	0.93	92.86	0	64.29	21.43
16 Understanding and overcoming obstacles to healthy eating	1	(3 - 4)	1	(3 - 4)	1	100.00	0	78.57	57.14
17 Module closing	0.93	(2 - 4)	1	(3 - 4)	0.96	21.43	0	64.29	28.57
Total (average)	0.97		0.97		0.97	67.14	0	71.43	34.29
Module 4									
18 Module 4 schedule and objectives	1	(4 - 4)	0.93	(2 - 4)	0.96	7.14	14.29	57.14	21.43
19 Affective memory - physical activity in childhood	1	(3 - 4)	1	(3 - 4)	1	7.14	50.00	78.57	35.71
20 Concepts in physical activity	1	(3 - 4)	1	(3 - 4)	1	0	71.43	71.43	21.43
21 Scenarios: city, Brazil and the world	1	(3 - 4)	0.86	(2 - 4)	0.93	0	78.57	71.43	21.43
22 Barriers to the practice of physical activity	1	(3 - 4)	0.93	(2 - 4)	0.96	0	64.29	85.71	21.43
23 Associated and determining factors	1	(3 - 4)	0.93	(2 - 4)	0.96	0	85.71	92.86	21.43
24 Module closing	0.93	(2 - 4)	0.93	(2 - 4)	0.93	0	14.29	42.86	21.43
Total (average)	0.99		0.94		0.96	2.04	54.08	71.43	23.47
Module 5									
25 Module 5 schedule and objectives	0.93	(2 - 4)	0.93	(2 - 4)	0.93	0	35.71	50.00	28.57
26 Timeline: physical activity, SUS and collective health	0.79	(2 - 4)	0.79	(1 - 4)	0.79	0	64.29	50.00	35.71
27 The city and health: what we have and what we want	1	(3 - 4)	0.93	(2 - 4)	0.96	0	92.86	57.14	50.00
28 WHO plan and recommendations	0.85	(2 - 4)	0.92	(2 - 4)	0.88	0	78.57	50.00	28.57
29 How good, how bad, how about it?	0.92	(2 - 4)	0.85	(2 - 4)	0.88	0	64.29	57.14	35.71

Continue...

Continuation of Table 2 – Content Validity Index of activities in the first panel of judges. São Paulo, São Paulo, Brazil, 2020.

Activity	Content Validity Index (CVI)			Recognized theoretical reference					
	Clarity		Relevance	CVI	GAPB	Global Action Plan	MCR	PCI	
	(min-max)		(min-max)	(average)					
30 Module closing	0.93	(2 - 4)	0.93	(2 - 4)	0.93	0	28.57	50.00	21.43
Total (average)	0.9		0.89		0.9	0	60.71	52.38	33.33
Module 6									
31 Module 6 schedule and objectives	0.93	(2 - 4)	0.86	(2 - 4)	0.89	14.29	0	42.86	28.57
32 Appropriating the GAPB	1	(4 - 4)	0.85	(1 - 4)	0.92	85.71	7.14	50.00	28.57
33 Using the GAPB in professional practice	1	(3 - 4)	0.93	(2 - 4)	0.96	100.00	0	64.29	64.29
34 Reflecting on PAAS and PA in PHC as a team practice	0.86	(2 - 4)	0.93	(2 - 4)	0.89	85.71	64.29	92.86	100.00
35 Workshop evaluation	0.93	(2 - 4)	0.93	(2 - 4)	0.93	50.00	50.00	64.29	50.00
36 Workshop closing	0.92	(2 - 4)	1	(4 - 4)	0.96	28.57	28.57	64.29	57.14
Total (average)	0.94		0.92		0.93	60.71	25.00	63.10	54.76
Protocol total (average)	0.9483		0.9533		0.95	38.69	27.98	66.47	38.10

CVI = Content Validity Index; GAPB = Food Guidelines for the Brazilian Population; MCR = Critical-Reflective Methodology; PCI = Interprofessional Collaborative Practice; PA = Physical Activity; PHC = Primary Health Care; SUS = Unified Health System; PAAS = Promotion of Adequate and Healthy Eating.

Table 3 – Content Validity Index of activities in the second panel of judges. São Paulo, São Paulo, Brazil, 2021.

Activity	Content Validity Index (CVI)			Recognized theoretical reference					
	Clarity		Relevance	CVI	GAPB	GAF PB	MCR	PCI	
	(min-max)		(min-max)	(average)					
Module 1									
1 Workshop and module 1 schedule and objectives	1	(3 - 4)	0.93	(2 - 4)	0.97	66.67	60.00	73.33	46.67
2 Welcoming the group	1	(3 - 4)	1	(3 - 4)	1	60.00	53.33	73.33	60.00
3 Work agreement	1	(4 - 4)	1	(4 - 4)	1	6.67	6.67	73.33	66.67
4 How is your diet?	1	(3 - 4)	1	(3 - 4)	1	93.33	6.67	60.00	20.00
5 Cartography of the nutritional, PA and epidemiological profile of the territory	1	(3 - 4)	1	(3 - 4)	1	80.00	66.67	86.67	66.67
6 Module closing	1	(3 - 4)	1	(4 - 4)	1	46.67	40.00	86.67	46.67
Total (average)	1		0.99		0.99	58.89	38.89	75.56	51.11
Module 2									
7 Module 2 schedule and objectives	1	(3 - 4)	1	(4 - 4)	1	33.33	13.33	93.33	40.00
8 Presentation of the healthcare line for overweight and obesity	0.8	(2 - 4)	1	(3 - 4)	0.9	46.67	26.67	93.33	100.00
9 What is healthy eating for you?	1	(3 - 4)	1	(4 - 4)	1	93.33	13.33	100.00	33.33
10 Sorting foods by level of processing	1	(3 - 4)	1	(4 - 4)	1	100.00	6.67	80.00	26.67
11 From food to meal	1	(3 - 4)	1	(4 - 4)	1	100.00	6.67	93.33	33.33
12 Module closing	1	(4 - 4)	1	(3 - 4)	1	53.33	13.33	100.00	26.67
Total (average)	0.97		1		0.98	71.11	13.33	93.33	43.33
Module 3									

Continue...

Continuation of Table 3 – Content Validity Index of activities in the second panel of judges. São Paulo, São Paulo, Brazil, 2021.

Activity	Content Validity Index (CVI)					Recognized theoretical reference			
	Clarity		Relevance		CVI	GAPB	GAF PB	MCR	PCI
	(min-max)		(min-max)		(average)				
13 Module 3 schedule and objectives	1	(4 - 4)	1	(4 - 4)	1	60.00	33.33	73.33	33.33
14 The act of eating and commensality	1	(3 - 4)	1	(4 - 4)	1	100.00	13.33	93.33	40.00
15 Understanding and overcoming obstacles to healthy eating	0.93	(2 - 4)	0.87	(2 - 4)	0.9	100.00	86.67	80.00	60.00
16 Module closing	1	(4 - 4)	1	(4 - 4)	1	53.33	46.67	93.33	40.00
Total (average)	0.98		0.97		0.98	78.33	45.00	85.00	43.33
Module closure									
17 Module 4 schedule and objectives	1	(4 - 4)	1	(4 - 4)	1	20.00	60.00	86.67	26.67
18 Barriers to a physically active life	0.93	(2 - 4)	0.93	(2 - 4)	0.93	13.33	80.00	86.67	46.67
19 Concepts in physical activity and bodily practices	0.93	(2 - 4)	1	(3 - 4)	0.97	13.33	93.33	66.67	40.00
20 GAFPB recommendations for the Brazilian population	1	(3 - 4)	1	(3 - 4)	1	13.33	93.33	80.00	60.00
21 Timeline: Health Policies	0.93	(2 - 4)	0.93	(1 - 4)	0.93	80.00	86.67	86.67	73.33
22 Module closing	1	(4 - 4)	1	(4 - 4)	1	33.33	73.33	93.33	46.67
Total (average)	0.97		0.98		0.97	28.89	81.11	83.33	48.89
Module 5									
23 Module 5 schedule and objectives	1	(3 - 4)	1	(4 - 4)	1	33.33	46.67	80.00	33.33
24 GAFPB recommendations: pregnant women, postpartum women and people with disabilities	1	(3 - 4)	1	(3 - 4)	1	26.67	100.00	80.00	73.33
25 City and health: what we have and what we want	1	(3 - 4)	1	(4 - 4)	1	33.33	86.67	93.33	66.67
26 Demystifying food and physical activity issues	0.87	(2 - 4)	1	(3 - 4)	0.94	93.33	93.33	86/67	40.00
27 Module closing	1	(4 - 4)	1	(4 - 4)	1	46.67	53.33	100.00	40.00
Total (average)	0.97		1		0.99	46.67	76.00	88.00	50.67
Module 6									
28 Module 6 schedule and objectives	1	(4 - 4)	1	(4 - 4)	1	46.67	53.33	93.33	40.00
29 Reflecting on PAAS and PA in PHC as a team practice	0.93	(2 - 4)	1	(4 - 4)	0.97	86.67	93.33	100.00	93.33
30 What will I sow on my path?	0.87	(2 - 4)	1	(4 - 4)	0.94	73.33	73.33	100.00	100
31 Workshop evaluation	1	(3 - 4)	1	(3 - 4)	1	60.00	46.67	80.00	46.67
32 Workshop closing	1	(3 - 4)	1	(3 - 4)	1	26.67	33.33	93.33	53.33
Total (average)	0.96		1		0.98	58.67	60.00	93.33	66.67
Protocol total (average)	0.975		0.99		0.98	56.04	51.88	86.25	50.63

CVI = Content Validity Index; GAPB = Food Guidelines for the Brazilian Population; GAFPB = Physical Activity Guidelines for the Brazilian Population; MCR = Critical-Reflective Methodology; PCI = Interprofessional Collaborative Practice; PA = Physical Activity; PHC = Primary Health Care; PAAS = Promotion of Adequate and Healthy Eating.

Chart 1 – Objectives of each module in the first and second protocols, presented respectively in the first and second panels of judges; and in the final version.

Module 1 – Exploring the food and nutrition, physical activity and epidemiological profiles of the territory	
Objectives in the first protocol	- Understand the work proposal of the workshop; - Make a collective pact for group meetings; - Recover the nutritional and physical activity profile of the territory where the PHC teams work.
Objectives in the second protocol	- Understand the work proposal of the workshop; - Make a collective pact for group meetings; - Recover the nutritional and physical activity profile of the territory where the PHC teams work.

Continue...

Continuation of Chart 1 – Objectives of each module in the first and second protocols, presented respectively in the first and second panels of judges; and in the final version.

Objectives in the final version of the protocol	<ul style="list-style-type: none"> - Understand the work proposal of the workshop; - Make a collective pact for group meetings; - Analyze the main public policies that present strategies for the control and prevention of excess weight; - Rescue the food and nutrition profile and physical activity of the territory where the PHC teams work; - Clarify that weight-related stigma is not tolerated in this environment and that this type of construction is iatrogenic for health care protocols for overweight and obese people.
Module 2 – Exploring the Food Guidelines for the Brazilian Population	
Objectives in the first protocol	<ul style="list-style-type: none"> - Understand the new paradigm of healthy eating; - Identify and classify foods commonly present in the menu of families in the territory where the PHC teams work; - Understand the Care Line for Overweight and Obesity.
Objectives in the second protocol	<ul style="list-style-type: none"> - Understand the Care Line for Overweight and Obesity. - Understand the new paradigm of healthy eating; - Identify and classify foods commonly present in the menu of families in the territory where the PHC teams work;
Objectives in the final version of the protocol	<ul style="list-style-type: none"> - Understand the new paradigm of adequate and healthy eating; - Identify and classify foods commonly present in the menu of families in the territory where the PHC teams work;
Module 3 - The act of eating and commensality, and overcoming obstacles to an adequate and healthy diet	
Objectives in the first protocol	<ul style="list-style-type: none"> - Recognize the several aspects that affect the act of eating and commensality; - Identify the obstacles to an adequate and healthy diet present in the territory's food practices; - Propose strategies to overcome obstacles considering the recommendations of the Food Guidelines and the organization of the health service.
Objectives in the second protocol	<ul style="list-style-type: none"> - Recognize the several aspects that affect the act of eating and commensality; - Identify the obstacles present in the territory for an adequate and healthy diet and a physically active life; - Propose strategies to overcome obstacles considering the organization of the health service.
Objectives in the final version of the protocol	<ul style="list-style-type: none"> - Recognize the several aspects that affect the act of eating and commensality; - Identify the obstacles present in the territory for an adequate and healthy diet; - Propose strategies to overcome obstacles considering the organization of the health service.
Module 4 – First Panel: Recognizing key concepts in physical activity and bodily practices. Second panel: Exploring the Physical Activity Guide for the Brazilian Population	
Objectives in the first protocol	<ul style="list-style-type: none"> - Understand the different concepts that involve physical activity and bodily practices; - Understand the national and global scenarios related to physical activity; - Identify the main barriers, associated and determinant factors for the construction of these scenarios.
Objectives in the second protocol	<ul style="list-style-type: none"> - Identify the main barriers to a physically active life; - Understand the different concepts that involve physical activity and bodily practices; - Understand the recommendations of the Physical Activity Guidelines for the Brazilian Population; - Analyze the main public policies that present strategies for the control and prevention of excess weight.
Objectives in the final version of the protocol	<ul style="list-style-type: none"> - Identify the main barriers to a physically active life; - Understand the different concepts that involve physical activity and bodily practices; - Understand and discuss the recommendations of the Physical Activity Guidelines for the Brazilian Population.
Module 5 - What we have and what we want in our city	
Objectives in the first protocol	<ul style="list-style-type: none"> - Understand the main milestones of the insertion of physical activity in the Unified Health System; - Review the Global Action Plan for Physical Activity 2018-2030; - Reflect on the opportunities that cities offer to reduce or prolong sedentary behaviors.
Objectives in the first protocol	<ul style="list-style-type: none"> - Understand the recommendations of the Physical Activity Guidelines for the Brazilian Population; - Reflect on the opportunities that cities offer to reduce or prolong sedentary behaviors and the practice of physical activity; - Discuss myths and truths in health.
Objectives in the final version of the protocol	<ul style="list-style-type: none"> - Reflect on the opportunities that cities offer to reduce or prolong sedentary behaviors and the practice of physical activity; - Discuss issues related to the fields of food and physical activity and bodily practices.
Module 6 - Reflecting on the promotion of adequate and healthy eating and physical activity and bodily practices in professional practice.	
Objectives in the first protocol	<ul style="list-style-type: none"> - Based on the political framework, place food and nutrition actions in the context of the activities of the PHC teams; - Analyze the possibilities of inserting food and nutrition actions in PHC considering the interprofessional practice of teams as a space for promoting adequate and healthy eating; - Evaluate and end the workshop.
Objectives in the second protocol	<ul style="list-style-type: none"> - Analyze the possibilities of inserting food and nutrition actions and physical activity and bodily practices in PHC considering the interprofessional practice of the teams as a space for health promotion; - Reflect on the next steps to apply what was discussed throughout the workshop; - Evaluate and end the workshop.
Objectives in the final version of the protocol	<ul style="list-style-type: none"> - Analyze the possibilities of inserting food and nutrition actions and physical activity and bodily practices in PHC considering the interprofessional practice of the teams as a space for health promotion; - Reflect on the next steps to apply what was discussed throughout the workshop; - Evaluate and end the workshop.

Discussion

In this study, the process of content development and validation of the Workshop for the Promotion of Adequate and Healthy Eating and Physical Activity and Bodily Practices was presented. The validation considered the aspects of clarity, relevance and representativeness, and the workshop activities were evaluated as adequate for the proposed objective, considering its theoretical framework and its target audience. The representativeness of each theoretical framework and the average CVI of the activity protocol increased from the first to the second panel of judges.

The growing prevalence of overweight poses challenges for health professionals, such as professional qualification, the absence of instructional materials and the insufficiency of a multidisciplinary approach¹⁴. Combined education in adequate and healthy eating and physical activity and bodily practices is an innovation in SUS; even though health professionals develop actions focused on the themes, as in the interventions observed in the Academia da Saúde Program²⁷. Such interventions are often coordinated by professionals other than the nutritionist and the physical education professional, demonstrating the importance of qualifying the entire multidisciplinary team²⁷. In order to bring these themes closer to the entire work team, the workshop proposes the joint qualification of health professionals with higher education; strategy observed as uncommon²⁸.

Both the GAPB and the GAFPB have comprehensive approaches in relation to encouraging the adoption of healthy practices, indicating that such habits are shaped in the individual's interaction with the environment^{8,9}; and this perspective is reinforced throughout the workshop. The non-blaming approach is in line with the guidelines of the international consensus to combat the stigma of obesity, which indicates that this form of prejudice impacts in PHC services by alienating users due to disrespect and lack of training of the professionals²⁹.

The objectives of the workshop go beyond the understanding of the GAPB and GAFPB recommendations when dealing with the context of the teams' performance; applying EPS when using the problems faced by professionals at work as a basis for teaching and learning¹⁶. Although Brazil has the National Policy on Permanent Education in Health to support and encourage actions such as the developed workshop, EPS actions face limiting factors, such as the organization and structure of workplaces²⁸; and the scarcity of human resources, including professionals able to conduct

training¹⁷. Among the facilitating factors, the carrying out of educational activities by groups; the use of active methodologies; and the establishment of partnerships, mainly with universities¹⁷ stand out.

The convenience sample of experts on the panels of judges may represent a limitation of the study. The authors sought to mitigate this issue by inviting specialists focused on the four theoretical references used, and with different professional experiences. In order that the electronic format of the second panel of judges did not affect the exchange between experts in the conversation circles, two video call sessions were scheduled, so that everyone could express their opinions in adequate time.

Finally, the development of the workshop considered that professional qualification must be based on technical references based on scientific evidence which consider the PCI; and in a dialogical and problematizing pedagogical framework contextualized to the reality of each territory, which allows the workshop to be applied in different realities. This is the first validated professional qualification workshop to work jointly with the GAPB and the GAFPB, it will be available in the format of an Instructional Manual by the Editora Eletrônica da FSP/USP (in press). The promotion of adequate and healthy eating and physical activity and bodily practices is relevant in the context of Brazil, and it is necessary that health professionals are able and updated to conduct health education processes in a dialogical way with its users.

Conflict of interest

The authors declare that there is no conflict of interest.

Financing

The present work was carried out with the support of the Coordination for the Improvement of Higher Education Personnel - Brazil (CAPES) - Financing Code 001; and the National Council for Scientific and Technological Development (CNPq) through a call for the Management and Control of Obesity within SUS (CNPq Process 421840/2018-8).

Author Contributions

Jaime PC participated in the initial design of the study. All authors participated in data collection and analysis, writing, critical review of the text and approved the final version.

Acknowledgements

The authors appreciate all the experts who dedicated themselves to analyzing the protocol and contributed to its improvement; and to CAPES and CNPq for their support.

References

1. IBGE – Instituto Brasileiro de Geografia e Estatística. Pesquisa Nacional de Saúde 2019 – Atenção Primária à Saúde e Informações Antropométricas. Rio de Janeiro; 2020.
2. Brasil. Ministério da Saúde. Secretaria de Atenção à Saúde. Departamento de Atenção Básica. Estratégias para o cuidado da pessoa com doença crônica: obesidade. Brasília: Ministério da Saúde, (Cadernos de Atenção Básica, n. 38), 2014.
3. Swinburn BA, Sacks G, Hall KD, McPherson K, Finegood DT, Moodie ML, Gortmaker SL. The Global Obesity Pandemic: Shaped by Global Drivers and Local Environments. *Lancet*. 2011;378(9793):804-14.
4. Brasil. Ministério da Saúde. Secretaria de Vigilância em Saúde. Departamento de Análise em Saúde e Vigilância de Doenças Não Transmissíveis. VIGITEL Brasil 2019: vigilância de fatores de risco e proteção para doenças crônicas por inquérito telefônico: estimativas sobre frequência e distribuição sociodemográfica de fatores de risco e proteção para doenças crônicas nas capitais dos 26 estados brasileiros e no Distrito Federal em 2019. Brasília: Ministério da Saúde, 2020.
5. Cruz MS, Bernal RTI, Claro RM. Tendência da prática de atividade física no lazer entre adultos no Brasil (2006-2016). *Cad. Saúde Pública*. 2018; 34(10):e00114817.
6. IBGE – Instituto Brasileiro de Geografia e Estatística. Pesquisa de orçamentos familiares 2017-2018: avaliação nutricional da disponibilidade domiciliar de alimentos no Brasil. Rio de Janeiro; 2020.
7. Rauber F, Chang K, Vamos EP, Louzada MLC, Monteiro CA, Millett C, Levy RB. Ultra-processed food consumption and risk of obesity: a prospective cohort study of UK Biobank. *Eur J Nutr*. 2021;60(4):2169-80.
8. Brasil. Ministério da Saúde. Secretaria de Atenção à Saúde. Departamento de Atenção Básica. Guia Alimentar para a População Brasileira. 2. ed. Brasília: Ministério da Saúde, 2014.
9. Brasil. Ministério da Saúde. Secretaria de Atenção Primária à Saúde. Departamento de Promoção da Saúde. Guia de Atividade Física para a População Brasileira [recurso eletrônico]. Brasília: Ministério da Saúde, 2021.
10. Hallal PC, Umpierre D. Guia de Atividade Física para a População Brasileira. *Rev Bras Ativ Fis Saúde*. 2021;26:e0211.
11. Monteiro CA, Cannon G, Moubarac JC, Martins APB, Martins CA, Garzillo J, et al. Dietary guidelines to nourish humanity and the planet in the twenty-first century. A blueprint from Brazil. *Public Health Nutr*. 2015;18(13):2311-22.
12. Louzada MLC, Canella DS, Jaime PC, Monteiro CA. Alimentação e saúde: a fundamentação científica do guia alimentar para a população brasileira. São Paulo: Faculdade de Saúde Pública da USP, 2019.
13. Gabe KT, Tramontt CR, Jaime PC. Implementation of Food-Based Dietary Guidelines: conceptual framework and analysis of the Brazilian case. *Public Health Nutrition*. Cambridge University Press. 2021:1-13.
14. Lopes MS, Freitas PP, Carvalho MCR, Ferreira NL, Campos SF, Menezes MC, Lopes ACS. Challenges for obesity management in a unified health system: the view of health professionals. *J Fam Pract*. 2021;38(1):4-10.
15. Brasil. Ministério da Saúde. Secretaria de Vigilância em Saúde. Departamento de Análise em Saúde e Vigilância de Doenças Não Transmissíveis. Plano de Ações Estratégicas para o Enfrentamento das Doenças Crônicas e Agravos não Transmissíveis no Brasil, 2021-2030 [recurso eletrônico]. Brasília: Ministério da Saúde, 2021.
16. Brasil. Ministério da Saúde. Secretaria de Gestão do Trabalho e da Educação na Saúde. Departamento de Gestão da Educação em Saúde. Política Nacional de Educação Permanente em Saúde. Brasília: Ministério da Saúde, 2009.
17. Ricardi LM, Sousa MF. Educação permanente em alimentação e nutrição na Estratégia Saúde da Família: encontros e desencontros em municípios brasileiros de grande porte. *Ciênc. Saúde Colet*. 2015;20(1):209-18.
18. Rubio DMG, Berg-Weger M, Tebb SS, Lee ES, Rauch S. Objectifying content validity: Conducting a content validity study in social work research. *Soc Work Res*. 2003;27(2):94-104.
19. Brasil. Ministério da Saúde. Secretaria de Atenção à Saúde. Consulta pública: Guia de Atividade Física para População Brasileira. 2020. Available from: http://189.28.128.100/dab/docs/portaldab/documentos/Guia_Atividade_Fisica_Consulta_Publica.pdf.
20. Brasil. Ministério da Saúde. Manual instrutivo: implementando o guia alimentar para a população brasileira em equipes que atuam na Atenção Primária à Saúde [recurso eletrônico]. Brasília: Ministério da Saúde, 2019.
21. World Health Organization. Global action plan on physical activity 2018–2030: more active people for a healthier world. 2018.
22. Ritti-Dias RM, Trapé AA, Farah BQ, Petreça DR, Lemos EC, Carvalho FFB, et al. Atividade física para adultos: Guia de Atividade Física para a População Brasileira. *Rev Bras Ativ Fis Saúde*. 2021;26:e0215.
23. Brasil. Ministério da Saúde. Secretaria de Atenção Primária à Saúde. Departamento de Promoção da Saúde. Guia de Atividade Física Para a População Brasileira: recomendações para gestores e profissionais de saúde [recurso eletrônico]. Brasília: Ministério da Saúde, 2021.
24. World Health Organization (WHO). Framework for Action on Interprofessional Education & Collaborative Practice. Geneva: World Health Organization; 2010.
25. Matuda CG, Pinto NRS, Martins CL, Frazão P. Colaboração interprofissional na Estratégia Saúde da Família: implicações para a produção do cuidado e a gestão do trabalho. *Ciênc. Saúde Colet*. 2015;20(8):2511-21.
26. Mitre SM, Siqueira-Batista R, Girardi-de-Mendonça JM, Morais-Pinto NM, Meirelles CAB, Pinto-Porto C, et al. Metodologias ativas de ensino-aprendizagem na formação profissional em saúde: debates atuais. *Ciênc. Saúde Colet*. 2008;13(suppl. 2):2133-44.
27. Florindo AA, Reis RS, Farias Junior JC, Siqueira FV, Nakamura PM, Hallal PC. Description of health promotion actions in Brazilian cities that received funds to develop “Academia da Saúde” program. *Rev Bras Cineantropom Desempenho Hum*. 2016; 18(4):483-92.
28. Sá THD, Velardi M, Florindo AA. Limites e potencialidades da educação dos trabalhadores de saúde da família para promoção da atividade física: uma pesquisa participativa. *Rev Bras Educ Fis Esporte*. 2016;30(2):417-26.
29. Rubino F, Puhl RM, Cummings DE, Eckel RH, Ryan DH, Mechanick JI, et al. Joint international consensus statement for ending stigma of obesity. *Nat Med*. 2020;26:485-97.

Received: 30/09/2021
Approved: 22/12/2021

Quote this article as:

Costa JC, Andrade DR, Jaime PC. Validation of a permanent health education workshop on nutrition, physical activity and bodily practices. *Rev Bras Ativ Fis Saúde*. 2022;27:e0245. DOI: 10.12820/rbafs.27e0245