RGSA – Revista de Gestão Social e Ambiental
ISSN: 1981-982X
Submission date: 4/11/2025
Acceptance date: 6/13/2025
DOI: https://doi.org/10.24857/rgsa.v19n7-071
Organization: Interinstitutional Scientific Committee
Chief Editor: Ana Carolina Messias de Souza Ferreira da Costa
Assessment: Double Blind Review pelo SEER/OJS

SUSTAINABLE DIET IN THE HOSPITAL: ANALYSIS OF PRO-ENVIRONMENTAL BEHAVIOR OF NUTRITIONISTS

Weruska Davi Barrios[1]
Iara Cecilia Pasqua[2]
Hermes Moretti Ribeiro da Silva[3]
Eduardo Eugenio Spers[4]
Betzabeth Slater[5]

ABSTRACT

Objective: To analyze the level of conscious consumption of nutritionists, their intention to use sustainable diets in hospitals and the main barriers to application.

Theoretical Framework: Health professionals can influence policies and promote sustainable nutrition with knowledge and awareness. Hospitals that adopt sustainable food improve clinical recovery and educate patients.

Method: Descriptive research with a quantitative approach, using the Ecologically Conscious Consumer Behavior (ECCB) scale adapted for the Brazilian context, with a websurvey applied to public and private hospitals in Brazil.

Results and Discussion: Of the 535 questionnaires sent out, 226 were answered. Most of the participants (40%) were between 31 and 40 years old, and 49% worked in large hospitals. The hypotheses confirmed positive relationships between the constructs, indicating knowledge and concern about food and its impact on health and the environment. However, there was little concern about the non-recyclable materials used in products and packaging.

Research Implications: A profile was identified with the intention of sustainable consumption, motivated by the topic, but which still prioritizes price, availability and accessibility of suppliers. Although there is interest in sustainable diets for patients, the main obstacle is cost.

Originality/Value: Understanding the relationship between conscious consumption and the intention to adopt sustainable practices in hospital nutrition helps to understand whether nutritionists apply sustainable diets in their routine.

Keywords: Pro-environmental Behavior, Hospitals, Consumer Behavior, Diet Therapy.

DIETA SUSTENTÁVEL NO HOSPITAL: ANÁLISE DE COMPORTAMENTO PRÓ AMBIENTAL DE NUTRICIONISTAS

RESUMO

Objetivo: Analisar o nível do consumo consciente de nutricionistas, sua intenção de usar dietas sustentáveis em hospitais e as principais barreiras para aplicação.

[1] Faculdade de Saúde Pública da Universidade De São Paulo (USP), São Paulo, São Paulo, Brasil.
E-mail: weruskadb@usp.br
[2] Arkansas State University, Jonesboro, Arkansas, United States.
E-mail: iarapasqua@hotmail.com
[3] Faculdade de Engenharia da Universidade do Estado de São Paulo (UNESP), Bauru, São Paulo, Brasil.
E-mail: hermes.silva@unesp.br
[4] Universidade de São Paulo – USP – Escola de Agricultura Luiz de Queiroz (ESALQ), Piracicaba, São Paulo, Brasil. E-mail: edespers@usp.br
[5] Faculdade de Saúde Pública da Universidade de São Paulo (USP), São Paulo, São Paulo, Brasil.
E-mail: bslater@usp.br

Referencial Teórico: Profissionais de saúde podem influenciar políticas e promover nutrição sustentável com conhecimento e conscientização. Hospitais que adotam alimentos sustentáveis melhoram a recuperação clínica e educam pacientes.

Método: Pesquisa descritiva com abordagem quantitativa, utilizando escala Ecologically Conscious Consumer Behavior (ECCB) adaptada para contexto brasileiro, com levantamento do tipo websurvey aplicado em hospitais públicos e privados do Brasil.

Resultados e Discussão: Dos 535 questionários enviados, 226 foram respondidos. A maioria dos participantes (40%) tinha entre 31 e 40 anos, e 49% trabalhavam em hospitais de grande porte. As hipóteses confirmaram relações positivas entre os construtos, indicando conhecimento e preocupação com alimentação e seus impactos na saúde e no meio ambiente. No entanto, observou-se baixa preocupação com os materiais não recicláveis utilizados nos produtos e embalagens.

Implicações da Pesquisa: Identificou-se um perfil com intenção de consumo sustentável, motivado pelo tema, mas que ainda prioriza preço, disponibilidade e acessibilidade dos fornecedores. Embora haja interesse em dietas sustentáveis para pacientes, o principal obstáculo é o custo.

Originalidade/Valor: Compreender a relação entre consumo consciente e a intenção de adotar práticas sustentáveis em nutrição hospitalar ajuda a entender se os nutricionistas aplicam dietas sustentáveis em sua rotina.

Palavras-chave: Comportamento pró-ambiental, Hospitais, Comportamento do Consumidor, Dietoterapia

DIETA SOSTENIBLE EN EL HOSPITAL: ANÁLISIS DEL COMPORTAMIENTO PROAMBIENTAL DE LOS NUTRICIONISTAS

RESUMEN

Objetivo: Analizar el nivel de consumo consciente de los nutricionistas, su intención de utilizar dietas sostenibles en los hospitales y las principales barreras para su aplicación.

Marco Teórico: Los profesionales sanitarios pueden influir en las políticas y fomentar la alimentación sostenible con conocimientos y concienciación. Los hospitales que adoptan una alimentación sostenible mejoran la recuperación clínica y educan a los pacientes.

Método: Investigación descriptiva con enfoque cuantitativo, utilizando la escala Ecologically Conscious Consumer Behaviour (ECCB) adaptada al contexto brasileño, con encuesta web aplicada a hospitales públicos y privados de Brasil.

Resultados y Discusión: De los 535 cuestionarios enviados, 226 recibieron respuesta. La mayoría de los participantes (40%) tenía entre 31 y 40 años, y el 49% trabajaba en grandes hospitales. Las hipótesis confirmaron relaciones positivas entre los constructos, lo que indica conocimiento y preocupación por los alimentos y su impacto en la salud y el medio ambiente. Sin embargo, había poca preocupación por los materiales no reciclables utilizados en productos y envases.

Implicaciones de la investigación: Se identificó un perfil con intención de consumo sostenible, motivado por el tema, pero que sigue priorizando el precio, la disponibilidad y la accesibilidad de los proveedores. Aunque existe interés por las dietas sostenibles para los pacientes, el principal obstáculo es el coste.

Originalidad/Valor: Comprender la relación entre el consumo consciente y la intención de adoptar prácticas sostenibles en la nutrición hospitalaria ayuda a entender si los nutricionistas aplican dietas sostenibles en su rutina.

Palabras clave: Comportamiento Proambiental, Hospitales, Comportamiento del Consumidor, Dietoterapia.

1 INTRODUCTION

The nutritional status of the hospitalised patient directly influences the evolution of his clinical condition and the success of the chosen therapy. (Waitzberg *et al*., 2001; Logan, 2003). Both malnutrition and the severity of the disease impair the outcome independently, but in combination they create a vicious circle that can only be broken by nutritional support. There is a number of evidence showing that nutritional support improves outcome when used appropriately (Allison, 2000; Banks *et al*., 2007; Allard *et al*., 2016; Borges Dock-Nascimento *et al*., 2022).

Abstract: The Food and Nutrition Units (FNU) in hospitals in Brazil have a simple administrative structure, but complex operations. In hospital foodservices, meals are prepared and distributed to patients, employees and caregivers, following the guidelines of the proper preparation of diets and menus pre-established by the unit itself, with the direction and supervision of a professional Nutritionist as technical responsible (Biscontini *et al.*, 2001; Mezomo, 2002; Moura, 2009).

In recent years, increasing attention has been paid to sustainable nutrition worldwide, following the reports of the Intergovernmental Panel on Climate Change, Global Warming (IPCC 2018) and the recommendations of the EAT-Lancet Commission on Food Planet Health for sustainable diets (Willet *et al*, 2019). In the same vein, the Lancet Obesity Commission coined the phrase "Global Syndemic" to demonstrate that climate change, malnutrition, and obesity pandemics co-occur in time and space, interacting negatively with each other and sharing common systemic diseases, including an unsustainable global food system (Swinburn *et al*. 2019).

It is known that the quality of the diet is influenced by purchasing power and the way in which monetary resources are spent is influenced by food environments. Beliefs, attitudes, and level of confidence can influence the intention to buy sustainably produced food. It is also known that nutritional educators can increase consumers' awareness of sustainably produced foods by understanding their beliefs, attitudes and confidence levels (Robinson & Smith, 2002).

Understanding the relationship between conscious consumption behaviour and intention to adopt sustainable practices in hospital foodservices by nutritionists, brings *conditions to understand whether or not professionals integrate sustainable diets in their practice.* Professionals working in health-related institutions can influence nutrition policies and implement interventions if they present knowledge and awareness of sustainable nutrition. Hospitals that work with sustainable food can provide clinical recovery and provide

environmental education to patients through group discussion, provision of printed or online information, and cooking and gardening classes (Veldheer *et al.,* 2020; Thibault *et al.,* 2021).

This research was the first part of a doctoral project in the implementation of sustainable diets in hospitals in the city of São Caetano do Sul, state of São Paulo, Brazil. Identifying the level of knowledge and awareness of nutrition professionals about sustainable diets can guide the methodology of the main research since people ecologically engaged in their homes tend to favour professional projects that have the same objective. In addition, the results of this research can address the investments of agroecological entrepreneurs who seek to expand the sustainable food market.

This study aimed to verify the level of conscious consumption behaviour of nutritionists who work with diet therapy in hospitals, as well as to identify the intention to adopt sustainable diets in hospital diet therapy and to classify the main barriers to practical applicability faced by the studied sample.

2 THEORETICAL FRAMEWORK

2.1. MOTIVATION AND ECOLOGICALLY CONSCIOUS BEHAVIOUR

Before any decision-making it is necessary to understand what motivated the consumer to search and decide for the purchase, normally a human being will not consume anything if he is not motivated to meet some need

Motivation can be positive or negative, attracting or alienating the individual from a particular choice of product or condition. Positive forces can be desires, needs, desires, while negative forces can be aversions and fears (Kanuk & Schiffman, 2009; Solomon, 2016).

The ecologically conscious consumer buys products that he considers to have a low negative impact, or a favourable impact on the environment. In the "Ecologically Conscious Consumer Behaviour" (ECCB) scale, Roberts (1996) proposes, from a literature review, variables that affect socially responsible behaviour during the consumer's purchase decision process, a scale that associates environmental awareness with consumer behaviour intentions (Roberts, 1996).

The discussion about sustainable development from the perspective of consumption began to emerge at the United Nations Conference in 1972 in the city of Stockholm. At the World Summit on Sustainable Development held in 2002 (Rio+10) in Johannesburg, one of its three main objectives was to promote responsible consumption and production patterns, to

reduce waste production and excessive dependence on natural resources. The +20 Conference reinforced the term sustainable development as a model of development "... that meets the needs of the present without compromising the ability of future generations to meet their own needs." This definition is closely related to the concept of sustainable consumption itself (Brundtland, 1987; Evans, 2011; Melo, 2013).

2.2. SUSTAINABLE DIET

The food challenge for the 21st century is quite complex and goes beyond just thinking about the healthiness of diets. Food has been taking on a dimension that affects our own existence on the planet. The expectations are that by 2050 we will be more than 9 billion inhabitants and that the food system if reproduced in the current way will not account for this increase, considering the plundering of natural resources such as water, soil and fossil energy.

The first published work to use the term sustainable diets was written by Gussow and Clancy (1986), with the title 'Dietary Guidelines for Sustainability'. The authors argued that it was no longer enough for nutrition education to provide information about the relationship between human health and food choices, as educated consumers needed to make food choices that not only improved their own health, but also contributed to the protection of natural resources. In this sense, they suggested the term 'sustainable diets', relating it to 'sustainable agriculture', considering that sustainability would be associated with anything capable of remaining within natural systems in the foreseeable future.

The 2030 Agenda listed 17 interrelated Sustainable Development Goals (SDGs) that address key challenges to improving the quality of life of all people and sustainable development and consumption (UN, 2015). They share these ideals, especially the 2nd SDG, whose goal is to end hunger, achieve Food and Nutrition Security (SAN) and promote sustainable agriculture. However, successfully achieving the SDGs depends on the development of sustainable and nutrition-sensitive food systems (Willet *et al*., 2019; Marchioni *et al*., 2021; Rahman *et al.,* 2024).

Within this approach, dietary guidelines from several countries have increasingly considered the importance of sustainability, emerging, for about three decades, the concept of sustainable diets, which adhere to these guidelines because they lead to food sovereignty and security simultaneously with the reduction of degradation and use of natural resources (Barbara *et al.*, 2012; Paschoal *et al.,* 2019).

In this context, sustainability emerges as a concept that must be inserted in all spheres that suffer actions of human activity, because in any activity, for the development of a product or service, environmental impacts can be generated (Strasburg & Jahno, 2017). But how to put this concept into practice in the hospital UAN?

3 METHODOLOGY

Descriptive research with a quantitative approach (Malhotra, 2008). The sample consisted of nutritionists who work in hospital nutrition services in Brazil. These specialists are part of the Study Group on Enteral and Lactarius Nutrition (GENELAC), which has been in existence since 2009 and in which hospitals in Brazil actively participate. Within this group of specialists are included professionals nutritionists supervisors, coordinators and / or managers of the hospital nutrition area, who work both in Assistential Nutrition (also known as clinical nutrition) and in Nutrition Production (who work directly in the Food and Nutrition Unit - Kitchen). It was submitted to ethical appreciation in the Research Ethics Committee and approved without ethical obstacles.

3.1 METHOD OF COLLECTION

Abstract: Conscious consumption has become the agenda of scientific discussions and research, for which scales such as ECCB (Ecologically Conscious Consumer Behaviour) (Roberts, 1996) were created to measure the level of conscious consumption among consumers. Grohmann *et al.* (2012) through reapplication, validation, statistical tests and changes, were able to adapt the ECCB scale proposed by Roberts (1996) making it more appropriate for the Brazilian context. This scale includes three important factors to assess the level of awareness about conscious consumption: health, recycling and habit change.

Data collection was performed through questionnaires, type websurvey, composed of 24 closed questions, 15 questions regarding the adapted ECBB scale that use a seven-point Likert scale (1 = totally disagree; 7 = totally agree) and 9 questions that relate to filter question, sociodemographic and professional characteristics of the respondents, divided as follows represented in Table 1:

Table 1

Classification of questionnaire components and description

Components	Description
Cover Letter	With information about the research, objectives, rights of the participant and contact with the research team
Filter question	"How long have you been working in the area of Hospital Nutrition?"
Question Group 1	Question 2 to 8 on the scale of Grohmann *et al.* (2012) – "Recycling Factor"
Question Group 2	Question 9 to 14 on the scale of Grohmann *et al.* (2012) – "Habit Change Factor"
Question Group 3	Question 15 to 17 on the scale of Grohmann *et al.* (2012) – "Health Factor"
Characterisation Questions	Gender, age, number of hospital beds, presence of institutional sustainability actions and the Federative Unit of Brazil.

Source: Adapted from Grohmann, M. Z., Battistella, L. F., Velter, A. N., & Casasola, F. (2012). Ecologically conscious consumer behaviour: adaptation of the eccb scale to the Brazilian context. *Journal of Social and Environmental Management*, *6*(1), 102–116. https://doi.org/10.24857/rgsa.v6i1.321

The filter question aims to exclude respondents who do not have the inclusion criteria proposed by the research. All respondents who checked the option "I have never worked in this area" were considered "silent".

Thus, considering the quantitative approach with a survey of the type websurvey defined in this study, the questionnaire was selected as the data collection instrument. The websurvey research is characterised by the direct interrogation of people whose behaviour one wants to know, so information is requested from a significant group of people about the problem in question and, after this collection, the data are analysed quantitatively (Gil, 2008).

The questionnaire was applied between May 25 and December 21, 2023 using as a sharing tool e-mail, whatsapp® and Telegram®.

The questionnaire é é a "structured technique for data collection that consists of a é of questions, written or oral, that an interviewee must answer" (Malhotra, 2008). Through the questionnaire it is possible to reach a greater number of people, implies lower personnel expenses, allows the anonymity of the answers and does not expose the respondents to the influences of the researchers (Gil, 2008).

A questionnaire was sent in a virtual way, through the "Google Forms" platform (Google® Forms), with access through the link: <https://forms.gle/zT3kQRXZV1go3TZJ7>, in which the presentation letter and structured questionnaire, proposed by Grohmann *et al.* (2012), were included, and the Ecologically Conscious Behaviour Scale (ECCB) adapted to the Brazilian context.

3.2 INCLUSION CRITERIA AND SAMPLING TECHNIQUE

The key characteristics of the sample that were used as inclusion criteria to answer the study question were (1) having a degree in nutrition and (2) having practical experience in the area of hospital nutrition - in any hierarchical position and in any period.

The sampling technique to be used was non-probabilistic for convenience and judgement, which seeks to obtain a sample of convenient elements, with greater ease and possibility of access for the researcher, which the researcher judges to be more fit and answer the survey (Malhotra, 2008).

3.3 RESEARCH HYPOTHESES

Based on the literature review, three hypotheses were formulated and are presented in Figure 1. The group of hypotheses is related to the relationship between conscious consumption and health (CES), the concern with the attitude of recycling (CER), and the attitude of changing behaviour (CEM):

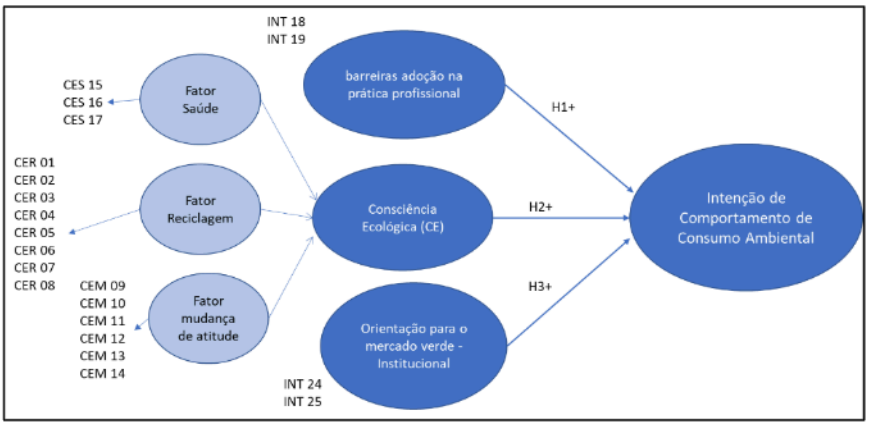
H1: The concern with health is directly related to the attitude of recycling

H2: The concern with recycling is directly related to the attitude to change

H3: The concern with health is directly related to the attitude to change.

Figure 1

Hypothesis model



4 RESULTSS AND DISCUSSÕES

535 questionnaires were sent with recall every 7 days for non-respondents. 231 questionnaires were answered in the proposed period and a total of 226 respondents were included in the study. The 5 respondents were characterised as missing data according to the filter question, therefore excluded from the database (excluded from table 2), 3 female and 2 male.

Of these, 98% are female and the predominant age range is 31-40 years for females and up to 30 years for males, as shown in Table 2.

Table 2

Number and percentage of respondents by gender

Age Group	**Gender**				
	Female	%	Male	%	TOTAL
Up to 30 years	33	15%	4	80%	37
31 to 40 years	90	41%	1	20%	91
41 to 50 years	65	29%	0	0%	65
51 to 60 years	28	13%	0	0%	28
61 to 70 years	5	2%	0	0%	5
	221	98%	5	2%	226

Table 3 shows all the federative units (FU) represented by the respondents, showing that 79.6% are from the state of São Paulo followed by 8.0% from Santa Catarina, that is, the largest representativeness of the sample is respectively from the Southeast and South regions. The respondents come from the 5 regions of Brazil and 84.1% are allocated in the Southeast, followed by 9.3% allocated in the South.

The categories of hospital size used in this study were according to the criteria of CNES - National Register of Health Facilities considering: small (up to 30 and 31 to 50 beds), medium (51 to 150 beds), large (151 to 500 beds) or extra capacity hospital (over 500 beds). Table 3 also shows the size categories that respondents act on. Most respondents work in large hospitals (150 to 500 beds).

Table 3

Number of respondents according to Region, Federative Unit (UF) and Hospital Size

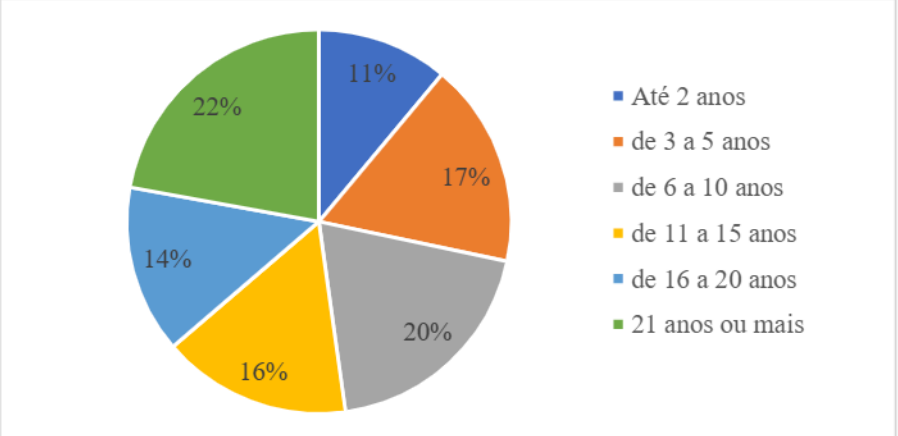
Region	UF	Hospital Size (N)					
		Up to 50 beds	51-150 beds	151-500 beds	Above 500 beds	TOTAL	%
Midwest	Goiás	0	0	0	1	1	0.4%
Northeast	Bahia	0	0	1	0	1	5.3%
	Ceará	0	1	1	0	2	
	Paraiba	0	1	0	0	1	
	Pernambuco State	0	1	1	6	8	
North	Pará	2	0	0	0	2	0.9%
Southeast	Minas Gerais	1	1	0	0	2	84.1%
	Rio de Janeiro	1	3	4	0	8	
	Sao Paulo	13	47	90	30	180	
South	Parana	0	0	2	0	2	9.3%
	Rio Grande do Sul	0	0	0	1	1	
	Santa Catarina	2	5	11	0	18	
		19	59	110	38	226	100%

N= number of individuals; FU= Federative Unit of Brazil

The length of time working in the area of Hospital Nutrition is shown Figure 2. The variation in the time of performance is from 2 years to 21 years or more. Of the 226 respondents, 23% have worked in the area for 21 years or more.

Figure 2

Percentage of time working in Hospital Nutrition



For the analysis of the ECCB scale, the means, median, mode and standard deviations of each response were presented. In the health factor, questions number 15, 16 and 17, all averages were above 4, showing greater knowledge and concern when it comes to food and consequences for their own health and environment. The claims of many health benefits that come from the consumption of organic foods (or those produced in a sustainable food system, also called *agroecological production) is the main motivation for the consumer to actually*

complete the purchase (Curvelo & Watanabe, 2019; Singh & Glińska-Neweś, 2022; Akter et al., 2023; Rahman *et al*. 2024). Many reports corroborate that consumers with greater knowledge and concern for health and the environment are also concerned with the appreciation of the local market. (Hamzaoui Essoussi & Zahaf 2009; Boobalan & Nachimuthu 2020; Gundala & Singh 2021). *H1: The concern with health is directly related to the attitude of recycling*

The recycling factor was evaluated through the questions of numbers 2, 3, 4, 5, 6 and 7. Questions number 2, 4 and 5 were averaged below 5, and showed little concern about the material used in the product and packaging and its impossibility of recycling, and a difficulty to give up certain products that harm the environment. The question number 3 was with the average (very close average is an expression little used in statistics 5.42 showing an intention to buy products made with recycled material, but little offer or difficulty of access. When it comes to choosing products that cause less environmental impact, reducing the use of products made with scarce resources, seen in questions 6 and 7, the results show an average above. A study by Battistella *et al*. (2012) showed that there is a strong relationship, greater than 70%, attributed by consumers between the importance of ecologically conscious behaviour of companies and the propensity to reward by the consumer. *H2: The concern with recycling is directly related to the attitude to change.*

In the factor change of habit, it was evaluated with the questions of numbers 09, 10, 11, 12, 13 and 14). Question 10, which was about convincing others not to consume certain products, averaged 4.41, unique below 5.Questions 9, 11, 12 and 13 that focused on sustainable choices when analysing similar products avoiding products that cause known damage to the environment, plants and animals, all averaged above 5, in the case of question 14 that dealt with stopping consuming certain companies that harm or disrespect the environment, respondents were in agreement and the average was 5.33. Mainardes *et al.* (2017), in a research carried out in Brazil, investigated the relationship between personal values and attitudes and the intention to buy organic food, and found a positive influence of values related to conservatism, self-promotion and openness to change in the buying behaviour of this type of food. *H3: The concern with health is directly related to the attitude to change.*

The results applicable to the analysis of the structural model show that the hypotheses tested were supported at a significance level of $p \leq 0.01$, as shown in Table 4. It can be noted that all the significant relationships between the constructs proposed in the hypotheses were positive, as expected.

Table 4

Evaluation of the structural model

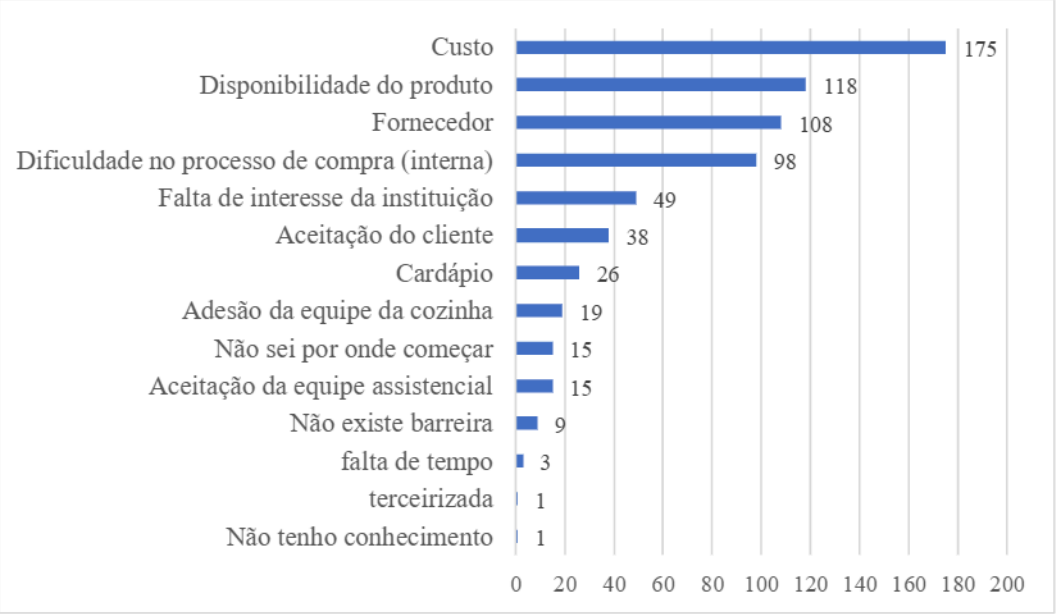
	Original Sample	Sample Average	Standard Deviation	*T statistics*	*P values*
H1: CES -> CER	0.602	0.607	0.047	12,860	0,000
H2: CER -> CEM	0,421	0.419	0.075	5,623	0,000
H3: CES -> ONE HUNDRED	0.398	0.401	0.073	5,439	0,000

Mean significance level at p<0.01.

When asked about the intention to adopt sustainable foods in the hospital diet, 83% of the respondents demonstrated positive results, however there are still some barriers to the use of sustainable foods as shown in figure 3. The biggest barriers listed by the respondents are related to the acquisition of food, including cost, product availability, supplier and difficulty in the purchase process (internal).

Figure 3

Main barriers in including sustainable foods in the hospital diet



Crossing the information of the ECCB and the main barriers identified by the researched group, a consumer profile with sustainable intention was verified, who feels motivated by the subject. However, participants still rely on price, product availability and difficulty in finding a supplier of sustainable food. This lack of accessibility to suppliers can be explained by the low investment in campaigns / disclosures focused on transparency of their products and sustainable practices. These findings were also evidenced in a study by Sage & Spears (2022)

that demonstrated that consumers need to be encouraged and communicated about the transparency of alternative food networks, since being involved with sustainability was not enough to generate the expectation of transparency.

Another research conducted by Savarese *et al.* (2020) explored the consumer-farmer relationship in Community Supported Agriculture (a type of alternative food network) and found that consumers felt really engaged whenever they had a strong and direct relationship with farmers including, for example, sharing production rates or participating in educational activities. These authors concluded that engagement is a key element in creating an environment for consumer education and behaviour change towards sustainable consumption practices

5 CONCLUSION

The level of conscious consumption behaviour of the researched group was evidenced by the proposed scale, with level of intention for change mediated by health and recycling factors. The inclusion of the environmental variable (Health / Recycling) is fundamental to awaken the change for the conscious consumption of this group.

The standard deviation was, on average, 1.65, a high standard deviation for a scale from 1 to 7, demonstrating that there are two groups of consumers very different from each other, those who are highly conscious and those who have much more utilitarian motivations. The reason why Food and Nutrition Education should be increasingly promoted with a focus on sustainability in this group of professionals is their responsibility to educate and disseminate the importance of healthy and sustainable eating for the general population.

The theme chosen for this study was to relate nutritionist consumer behaviour with socio-environmental awareness and the intention to use sustainable foods in their professional practice, that is, in hospital diet therapy. The results can address education programmes aimed at these professionals, helping them to understand the importance of sustainable diets in the hospital environment and mainly giving them support in coping with the barriers faced such as cost and lack of accessibility to suppliers. Thus, we agree with the statement of Roberts (1996) that environmental concern is a theme that moves current generations and is often related to consumer behaviour.

Thus, it was identified that most respondents are likely to adopt sustainable diets for patients in hospitals, from the insertion of food with agroecological production.

REFERENCES

Akter, S., Ali, S., Fekete-Farkas, M., Fogarassy, C., & Lakner, Z. (2023). Why Organic Food? Factors Influence the Organic Food Purchase Intension in an Emerging Country (Study from Northern Part of Bangladesh). *Resources*, *12*(1), 5. https://doi.org/10.3390/resources12010005

Allard, J. P., Keller, H., Jeejeebhoy, K. N., Laporte, M., Duerksen, D. R., Gramlich, L., Payette, H., Bernier, P., Vesnaver, E., Davidson, B., Teterina, A., & Lou, W. (2015). Malnutrition at Hospital Admission—Contributors and Effect on Length of Stay. *Journal of Parenteral and Enteral Nutrition*, *40*(4), 487–497. https://doi.org/10.1177/0148607114567902

Allison, S. P. (2000). Malnutrition, disease, and outcome. *Nutrition*, *16*(7-8), 590–593. https://doi.org/10.1016/s0899-9007(00)00368-3

Banks, M., Ash, S., Bauer, J., & Gaskill, D. (2007). Prevalence of malnutrition in adults in Queensland public hospitals and residential aged care facilities. *Nutrition & Dietetics*, *64*(3), 172–178. https://doi.org/10.1111/j.1747-0080.2007.00179.x

Battistella, L. F., Velter, A. N., Grohmann, M. Z., & Costa, V. M. F. (2012). Avaliação da importância percebida e da recompensa atribuída pelos consumidores a empresas com responsabilidade socioambiental. Revista Alcance, 19(1), 35-51.

Biscontini, T. M., Carvalho, J., Milet, Z., & teixeira, S. (2001). *Administração Aplicada: Unidades de Alimentação e Nutrição* (Atheneu, Ed.; p. 230) [Review of *Administração Aplicada: Unidades de Alimentação e Nutrição*].

Boobalan, K., & Nachimuthu, G. S. (2020). Organic consumerism: A comparison between India and the USA. *Journal of Retailing and Consumer Services*, *53*, 101988. https://doi.org/10.1016/j.jretconser.2019.101988

Borges Dock-Nascimento, D., Campos, L., Carolina, M., Dias, Emília, M., Fabre, S., Lúcia, N., Lopes, A., Antônio De Oliveira Junior, P., Orlandi, S., Maria, S., Piovacari, F., Toso, T., Philomene, D., & Van Aanholt, J. (2022). *Dieta oral no ambiente hospitalar: posicionamento da BRASPEN Oral diet in the hospital environment: BRASPEN's position*. *37*(3), 207–234. https://doi.org/10.37111/braspenj.2022.BRASPEN_dietaoral

Brundtland, G. H., Khalid, M., Agnelli, S., Al-Athel, S. A., Chidzero, B., Fadika, L. M., *et al.* (1987). Our common future ; by world commission on environment and development. Oxford: Oxford University Press.

Curvelo, I. C. G., Watanabe, E. A. de M., & Alfinito, S. (2019). Purchase intention of organic food under the influence of attributes, consumer trust and perceived value. *Revista de Gestão*, *26*(3), 198–211. https://doi.org/10.1108/rege-01-2018-0010

Evans, D. (2011). Consuming conventions: sustainable consumption, ecological citizenship and the worlds of worth. Journal of Rural Estudies,27,109–115.

Gil, A. C. (2008). *Métodos E Técnicas De Pesquisa Social* (6th ed.). Atlas.

Gundala, R. R., & Singh, A. (2021). What Motivates Consumers to Buy Organic foods? Results of an Empirical Study in the United States. *PLoS One*, *16*(9). https://doi.org/10.1371/journal.pone.0257288

Grohmann, M. Z., Battistella, L. F., Velter, A. N., & Casasola, F. (2012). COMPORTAMENTO ECOLOGICAMENTE CONSCIENTE DO CONSUMIDOR: ADAPTAÇÃO DA ESCALA ECCB PARA O CONTEXTO BRASILEIRO. *Revista de Gestão Social E Ambiental*, *6*(1), 102–116. https://doi.org/10.24857/rgsa.v6i1.321

Gussow, J. D., & Clancy, K. L. (1986). Dietary guidelines for sustainability. *Journal of Nutrition Education*, *18*(1), 1–5. https://doi.org/10.1016/s0022-3182(86)80255-2

Hamzaoui Essoussi, L., & Zahaf, M. (2009). Exploring the decision-making process of Canadian organic food consumers. *Qualitative Market Research: An International Journal*, *12*(4), 443–459. https://doi.org/10.1108/13522750910993347

Logan, S., & Hildebrandt, L. A. (2003). The Use of Prealbumin to Enhance Nutrition-Intervention Screening and Monitoring of the Malnourished Patient. *Nutrition Today*, *38*(4), 134–138. https://doi.org/10.1097/00017285-200307000-00008

Kanuk, L. L., & Schiffman, L. G. (2009). *Comportamento do Consumidor* (E. LTC, 9th ed., p. 466).

Mainardes, E. W., Araujo, D. V. B. de, Lasso, S., & Andrade, D. M. (2017). Influences on the intention to buy organic food in an emerging market. *Marketing Intelligence & Planning*, *35*(7), 858–876. https://doi.org/10.1108/mip-04-2017-0067

Malhotra, N. K. (2008). *Review of Marketing Research*. Emerald Group Publishing.

Marchioni, D. M., Carvalho, A. M. de, & Villar, B. S. (2021). Dietas sustentáveis e sistemas alimentares: novos desafios da nutrição em saúde pública. *Revista USP*, *128*, 61–76. https://doi.org/10.11606/issn.2316-9036.i128p61-76

Melo, P. (2013). Indicadores da dimensão institucional do desenvolvimento sustentável e os objetivos da Rio +20. Desenvolvimento em Questão, 11 (23),74-117.

Mezomo, I.B. (2002). *Os serviços de alimentação: planejamento e adminstração* (E. Manole, Ed.; 6th ed., p. 413).

Moura, P. N. de, Honaiser, A., & Bolognini, M. C. M. (2009). Avaliação do índice de resto-ingesta e sobras em unidade de alimentação e nutrição (U.A.N.) DO COLÉGIO AGRÍCOLA DE GUARAPUAVA/PR. *Revista Salus*, *3*(1), 71–77.

ONU. (2015). *Objetivos de Desenvolvimento Sustentável | As Nações Unidas no Brasil*. Brasil.un.org. https://brasil.un.org/pt-br/sdgs

Paschoal, V., Baptistela, A. B., & Souza, N. dos S. (2019). *Nutrição funcional e sustentabilidade & Agroecologia - Alimentando um mundo saudável* (VP, Ed.; 2nd ed., p. 368) [Review of *Nutrição funcional e sustentabilidade & Agroecologia - Alimentando um mundo saudável*].

Rahman, A., Baharlouei, P., Koh, E. H. Y., Pirvu, D. G., Rehmani, R., Arcos, M., & Puri, S. (2024). A Comprehensive Analysis of Organic Food: Evaluating Nutritional Value and Impact on Human Health. *Foods*, *13*(2), 208. https://doi.org/10.3390/foods13020208

Rbara Burlingame, & Ndro Dernini. (2012). *Sustainable diets and biodiversity: directions and solutions for policy, research and action: proceedings of the intenational scientific symposium Biodiversity and sustainable diets united against hunger, 3-5 november 2010, FAO headquarters, Rome*. Fao.

Roberts, J. A. (1996). Green Consumers in the 1990s: Profile and Implications for Advertising. *Journal of Business Research*, *36*(3), 217–231.

Robinson, R., & Smith, C. (2002). Psychosocial and Demographic Variables Associated with Consumer Intention to Purchase Sustainably Produced Foods as Defined by the Midwest Food Alliance. *Journal of Nutrition Education and Behavior*, *34*(6), 316–325. https://doi.org/10.1016/s1499-4046(06)60114-0

Sabio, R. P., & Spers, E. E. (2022). Consumers' Expectations on Transparency of Sustainable Food Chains. *Frontiers in Sustainable Food Systems*, *6*. https://doi.org/10.3389/fsufs.2022.853692

Savarese, M., Chamberlain, K., & Graffigna, G. (2020). Co-Creating Value in Sustainable and Alternative Food Networks: The Case of Community Supported Agriculture in New Zealand. *Sustainability*, *12*(3), 1252. https://doi.org/10.3390/su12031252

Singh, A., & Glińska-Neweś, A. (2022). Modeling the public attitude towards organic foods: a big data and text mining approach. *Journal of Big Data*, *9*(1). https://doi.org/10.1186/s40537-021-00551-6

Strasburg, V. J., & Jahno, V. D. (2017). Paradigmas das práticas de gestão ambiental no segmento de produção de refeições no Brasil. *Engenharia Sanitaria E Ambiental*, *22*(1), 3–12. https://doi.org/10.1590/s1413-41522017155538

Solomon, M. R. (2016). *O Comportamento do Consumidor* (Bookman, Ed.; 12th ed., p. 608).

Swinburn, B. A., Kraak, V. I., Allender, S., Atkins, V. J., Baker, P. I., Bogard, J. R., Brinsden, H., Calvillo, A., De Schutter, O., Devarajan, R., Ezzati, M., Friel, S., Goenka, S., Hammond, R. A., Hastings, G., Hawkes, C., Herrero, M., Hovmand, P. S., Howden, M., & Jaacks, L. M. (2019). The Global Syndemic of Obesity, Undernutrition, and Climate Change: The Lancet Commission report. *The Lancet*, *393*(10173), 791–846.

Thibault, R., Abbasoglu, O., Ioannou, E., Meija, L., Ottens-Oussoren, K., Pichard, C., Rothenberg, E., Rubin, D., Siljamäki-Ojansuu, U., Vaillant, M.-F., & Bischoff, S. C. (2021). ESPEN guideline on hospital nutrition. *Clinical Nutrition*, *40*(12). https://doi.org/10.1016/j.clnu.2021.09.039

Veldheer, S., Winkels, R. M., Cooper, J., Groff, C., Lepley, J., Bordner, C., Wagner, A., George, D. R., & Sciamanna, C. (2020). Growing Healthy Hearts: Gardening Program Feasibility in a Hospital-Based Community Garden. *Journal of Nutrition Education and Behavior*, *52*(10), 958–963. https://doi.org/10.1016/j.jneb.2020.07.006

Waitzberg, D. L., Caiaffa, W. T., & Correia, M. Isabel. T. D. (2001). Hospital malnutrition: the Brazilian national survey (IBRANUTRI): a study of 4000 patients. *Nutrition*, *17*(7-8), 573–580. https://doi.org/10.1016/s0899-9007(01)00573-1

Willett, W., Rockström, J., Loken, B., Springmann, M., Lang, T., Vermeulen, S., Garnett, T., Tilman, D., DeClerck, F., Wood, A., Jonell, M., Clark, M., Gordon, L. J., Fanzo, J., Hawkes, C., Zurayk, R., Rivera, J. A., De Vries, W., Majele Sibanda, L., & Afshin, A. (2019). Food in the Anthropocene: the EAT–Lancet Commission on Healthy Diets from Sustainable Food Systems. *The Lancet*, *393*(10170), 447–492.