

RESEARCH ARTICLE

PRÁCTICAS NUTRICIONALES EN CUIDADORES INFORMALES DE PERSONAS CON DISCAPACIDAD DE LA REGIONAL PAMPLONA, NORTE DE SANTANDER

NUTRITIONAL PRACTICES IN INFORMAL CAREGIVERS OF PEOPLE WITH DISABILITIES IN THE PAMPLONA REGION, NORTH OF SANTANDER

Mayra Alejandra Barajas Lizarazo¹, Christian Aylén Domínguez Alcantar²

Received on July 15th, 2024.

Approved on August 15th, 2024

RESUMEN

Introducción: Las prácticas nutricionales son un componente de estudio importante en el área de la salud pública. Por múltiples experiencias, se ha verificado cómo influyen de manera positiva en la salud de las personas cuando se adoptan hábitos nutricionales adecuados. **Objetivo:** Determinar las prácticas nutricionales en cuidadores informales de personas con discapacidad, vinculadas a la Regional Pamplona, Norte de Santander. **Metodología:** Estudio cuantitativo, descriptivo transversal. Se utilizó para él la dimensión de nutrición de la escala de estilos de vida saludables HPLP - II de Nola Pender Enfermera, pionera en la promoción de la salud. **Resultados:** La mayoría de los cuidadores respondieron en la categoría de «Algunas veces», frente a las prácticas de comer frutas, verduras y limitar el consumo de azúcares y carbohidratos, representados entre un 49 % y un 51 %, excepto el hábito del consumo del desayuno, que se ubicó en la categoría «Rutinariamente» (39,9 %). **Conclusiones:** Los cuidadores informales de personas con discapacidad, de la Regional de Pamplona, presentan prácticas poco saludables en la dimensión nutricional.

¹ Nurse, Teacher of the program of infirmary of the University of Pamplona, Master's Degree in Infirmary. Email: Mayra.barajas@unipamplona.edu.co, <https://orcid.org/0000-0002-1583-4214>

² Student in Nutrition University of Vizcaya of the Américas. Email: chris24.bella@gmail.com, <https://orcid.org/0009-0003-0811-9882>

How to cite this article?: Barajas-Lizarazo Mayra, Domínguez-Alcantar Christian, Nutritional Practices In Informal Caregivers Of People With Disabilities In The Pamplona Region, North Of Santander, Basic Health Sciences Journal, 2(3):83-95 , September 2024, ISSN 2981-5800.



PALABRAS CLAVES: prácticas saludables, nutrición conductual, cuidadores informales, personas con discapacidad.

ABSTRACT

Introduction. Nutritional practices are an important study component within the area of public health; it has been seen how they positively influence people's health when appropriate nutritional habits are adopted. **Objective:** Determine nutritional practices in informal caregivers of people with disabilities in the Pamplona region, Norte de Santander. **Methodology:** Quantitative, descriptive cross-sectional study. The nutrition dimension of the HPLP-II healthy lifestyle scale by Nola Pender, a pioneer nurse in health promotion, was used. **Results:** the majority of caregivers responded in the category of sometimes regarding the practices of eating fruits, vegetables, limiting the consumption of sugars and carbohydrates represented between 49% to 51%, except for the habit of breakfast practice who I routinely place in the category (39.9%). **Conclusions:** informal caregivers of people with disabilities in the Pamplona region present unhealthy practices in the nutritional dimension.

KEYWORDS: Healthy practices, behavioral nutrition, informal caregivers, people with disabilities.

INTRODUCTION

Nutritional practices are understood as the specific behaviors that occur during mealtimes (Rodríguez, 2021). Healthy eating is defined as that which is varied, provides energy, and contains all the essential nutrients each individual needs to stay healthy; hence the importance of adopting healthy habits (Alcaraz, S.; Velázquez, 2021).

In recent years, there has been a global 40% increase in obesity, malnutrition, and non-communicable

diseases related to diet among adults (Gondivkar et al., 2019).

In Colombia, despite ongoing efforts, alarming indicators persist, as these are linked to metabolic and endocrine problems associated with poor dietary habits. This situation worsens with age in the population (Global Nutrition Report, 2022).

Some of the causes are related to poor habits acquired since childhood, lack of knowledge, time constraints, and disinterest in buying and preparing food. These situations become even more complex for informal caregivers,

How to cite this article?: Barajas-Lizarazo Mayra, Domínguez-Alcantar Christian, Nutritional Practices In Informal Caregivers Of People With Disabilities In The Pamplona Region, North Of Santander, Basic Health Sciences Journal, 2(3):83-95 , September 2024, ISSN 2981-5800.



as they face new challenges in decision-making and reorientation of their personal goals, directly affecting their quality of life (Toffoletto & Reynaldos, 2019; Yue et al., 2022).

Literature reveals that the role assumed by informal caregivers of people with disabilities consumes much of their time, preventing them from performing personal activities such as shopping and preparing food (Ávila-Toscano & Vergara, 2015). Added to this are the lack of financial resources to purchase healthy foods (MinSalud, 2015) and to maintain a balanced diet.

As a consequence, the consumption of processed foods high in sodium, saturated fats, cholesterol, excess carbohydrates, and sugary beverages, as well as irregular eating habits and eating while overloaded with responsibilities, are predisposing factors for cardiovascular diseases, hypertension, type 2 diabetes, metabolic syndrome, and certain types of cancer (MinSalud, 2021; Torres & Galvis, 2021).

Therefore, the purpose of this study is to determine the nutritional patterns of

informal caregivers of people with disabilities in the Pamplona region, Norte de Santander.

METHODOLOGY

Type of Study:

This is a descriptive cross-sectional study.

Target Population:

Informal caregivers in the Pamplona region, Norte de Santander.

Participants:

Participants were selected through non-probability convenience sampling. The group consisted of 308 informal caregivers.

Instrument:

The Health-Promoting Lifestyle Profile II (HPLP-II) was developed to examine perceived health control. It consists of 52 items and 6 dimensions (health responsibility, physical activity, nutrition, spiritual growth, interpersonal relationships, and stress management). In this study, the focus is on the nutrition dimension, which

How to cite this article?: Barajas-Lizarazo Mayra, Domínguez-Alcantar Christian, Nutritional Practices In Informal Caregivers Of People With Disabilities In The Pamplona Region, North Of Santander, Basic Health Sciences Journal, 2(3):83-95 , September 2024, ISSN 2981-5800.



refers to the selection, knowledge, and consumption of healthy and essential foods. This includes the selection of a healthy diet, guided by the Food Pyramid Guide.

Procedure and Data Collection:

A Google Forms questionnaire was designed for information collection from caregivers, with a duration of 15 minutes. It included: informed consent, basic sociodemographic variables (sex, age, education, health system affiliation), and data collected through questions about self-care practices. Each participant completed the form voluntarily and independently.

The survey team received one week of training on research instrument application techniques. After data collection, the Excel database was downloaded for further analysis.

Statistical Analysis:

The SPSS Version 25.0 software was used for statistical processing. For ratio-level variables, the mean and

standard deviation were estimated; proportions for the categories of the different subscales were also calculated, according to the cut-off points suggested by the instrument.

RESULTS

Among the total study population, it was observed that the majority were single adult women. The data shows that most of them had completed primary education, belonged to socioeconomic stratum one, and lived in urban areas. Of the caregivers, 66% were in adulthood. Additionally, most caregivers (68.5%) had some medical condition.

The duration of caregiving ranged from 25 to 132 weeks for 45.5% of participants; the number of hours per day dedicated to caregiving was 52.3%.

Furthermore, 26.6% of these caregivers usually did not know the degree of dependency of the person they were caring for.

Table 1. Frequency of Sociodemographic, Economic, Occupational, and Clinical Characteristics in Caregivers of People with Disabilities.

Sociodemographic variables	Category	Frecuency	Percentage
Gender	F	245	79,5
	M	63	20,5
Life Course	Young	37	12,0
	Adult	205	66,6
	Senior	66	21,4
Religious Belief	Christian Catholic	280	90,9
	Christian non-Catholic	24	7,8
		4	1,3
Marital Status	Married	86	27,9
	Divorced	12	3,9
	Single	128	41,6
	Free union	65	21,1
	Widowed	17	5,5
School Level	Completed elementary school	127	41,2
	Completed high school	101	32,8
	Technological	39	12,7
	Higher education	27	8,8
	None	14	4,5
Social Stratum	1	174	56,5
	2	110	35,7
	3	23	7,5
	4	1	0,3
SGSSS affiliation regime	Contributive	54	17,5
	Subsidized	241	78,2
	Special	3	1,0
	None	3	1,0
EPS to which you belong	Coosalud	16	5,2
	Nueva EPS	120	39,0
	Comfaoriente	54	17,5
	Sanitas	83	26,9
	Compensar	17	5,5
	OIM	1	3
	Other	17	5,5
Municipality where you live	Cácota	24	7,8
	Chitagá	43	14,0
	Cucutilla	22	7,1
	Mutiscua	24	7,8

How to cite this article?: Barajas-Lizarazo Mayra, Domínguez-Alcantar Christian, Nutritional Practices In Informal Caregivers Of People With Disabilities In The Pamplona Region, North Of Santander, Basic Health Sciences Journal, 2(3):83-95 , September 2024, ISSN 2981-5800.



	Pamplona	137	44,5
	Pamplonita	30	9,7
	Silos	28	9,1
Location of housing	Urban	228	74,0
	Rural	80	26,0
Economic variables	Less than one minimum wage	275	89,3
	Greater than one minimum wage	33	10,7
Clinical variables	Category	Frecuency	Percentage
Disease diagnosed by physician	Yes	211	68,5
	NO	97	31,5

Source: Own elaboration – Results of the sociodemographic characteristics of caregivers.

In Table 2, it can be observed that the majority of caregivers only occasionally adopt lifestyle habits related to food frequency, food

choices, portion sizes, and label reading. However, 39.6% do report having the habit of eating breakfast routinely.

Table 2. Results of the nutrition dimension

Healthy Lifestyle (Nutrition)	Never		Sometim es		Frequently		Most of the times	
	Fr	%	Fr	%	Fr	%	Fr	%
Eat 2 to 4 servings of fruit every day	50	16,2	151	49,0	63	20,5	44	14,3
Limit the use of sugars and sugar-containing foods.	35	11,4	152	49,4	65	21,1	56	18,2
Eat 6 to 11 servings of bread, cereal, rice, or pasta (noodles) every day.	29	9,4	135	43,8	77	25,0	67	21,8
Choose a diet low in fat, saturated fat, and cholesterol.	40	13,0	160	51,9	67	21,8	41	13,3
I eat 3 to 5 servings of vegetables every day.	44	14,3	148	48,1	64	20,8	52	16,9
I eat 2 to 3 servings of yogurt, milk, or cheese every day.	51	16,6	139	45,1	69	22,4	49	15,9

How to cite this article?: Barajas-Lizarazo Mayra, Domínguez-Alcantar Christian, Nutritional Practices In Informal Caregivers Of People With Disabilities In The Pamplona Region, North Of Santander, Basic Health Sciences Journal, 2(3):83-95 , September 2024, ISSN 2981-5800.



I eat only 2 to 3 servings of meat, poultry, fish, beans, eggs, and nuts every day.	28	9,1	125	40,6	87	28,2	68	22,1
Read nutrition labels to identify the fat and sodium content of packaged foods.	83	26,9	131	42,5	64	20,8	30	9,7
Eat breakfast.	18	5,8	60	19,5	108	35,1	122	39,6

Source: Own elaboration – Results from the nutrition dimension of the HPLP-II instrument.

DISCUSSION

Nutrition is the process by which the body obtains, absorbs, and utilizes the necessary nutrients required for the growth and development of its organs.

Most studies on informal caregivers show that women most often assume the caregiving role. This finding supports the idea that it is not always the type of family bond that determines who takes on caregiving responsibilities, but rather the long-standing role women have played as caregivers (Chen et al., 2006).

The study "Gender, social interaction, and food consumption: the Eve Effect" reports a strong influence of women over men in promoting food consumption, referred to as the "Eve Effect." It concludes that gender is an important factor in the study of dietary behavior (López et al., 2011).

In the present study, it was found that most caregivers have only completed primary education, which is considered a risk factor due to the lack of formal instruction on healthy habits

in schools and limited access to nutritional education. As a result, these individuals may face challenges later in adulthood.

Ideally, individuals in adolescence, youth, adulthood, and old age should have a solid foundation in food education, demonstrated by habits such as eating a good breakfast, knowing where to buy nutritious food at affordable prices, enjoying the preparation of meals, and understanding the nutritional value of food, among other factors (Agustín & Cialdella, 2019).

The research titled "Healthy eating as a factor influencing academic performance in students from educational institutions in Ecuador" concludes that having a proper diet from an early age contributes to normal physical, psychological, and personal development, and helps prevent diseases that could have long-term negative consequences (Bajaña et al., 2017).

How to cite this article?: Barajas-Lizarazo Mayra, Domínguez-Alcantar Christian, Nutritional Practices In Informal Caregivers Of People With Disabilities In The Pamplona Region, North Of Santander, Basic Health Sciences Journal, 2(3):83-95 , September 2024, ISSN 2981-5800.



The World Health Organization (WHO) states that high blood pressure, fasting hyperglycemia, overweight, and obesity are among the leading risk factors for death worldwide (PAHO; WHO, 2021).

In the population studied, it was observed that informal caregivers already suffer from chronic diseases. The literature suggests that the excessive intake of critical nutrients is partly due to the marketing and promotion of processed and ultra-processed foods (López-Torres & López-Alcaraz, 2022).

Additionally, families with monthly incomes below the minimum wage, like those in this study, face difficulties accessing healthy foods. However, the report "Access to food as a determining factor of food and nutritional security and its representations in Brazil" provides tools for Latin America to include affordable food options in the household basket that meet the recommended daily energy requirements, thereby improving quality of life (Figuerola, 2005).

One protective factor found in this study is that 39.9% of participants routinely eat breakfast daily—a positive dietary pattern. However, it is important to evaluate not just the habit itself, but also the types of food consumed (López-Sobaler et al., 2018).

Fruits contain fiber and natural antioxidants that help keep the body healthy. Along with vegetables, which produce enzymes that aid digestion, the research shows that 49.0% of informal caregivers do not habitually consume enough fruit, and 48.1% do not consume enough vegetables. These findings are similar to those of the study "Dietary practices and nutritional status in adolescents from a publicly subsidized private school in the city of Luque", which found that 87% of adolescents did not consume at least three fruits a day (Alcaraz, S; Velázquez, 2021). Regarding sugar intake, 49.4% of informal caregivers do not control their consumption of high-sugar foods. These findings are theoretically supported by the study "Added sugars in food: health effects and global regulation", which states that in Colombia, 3 out of 4 people consume sugary products daily (soft drinks, candies, and sugar-rich foods) (Cabezas-Zabala et al., 2016).

In terms of carbohydrate intake, 43.8% of caregivers only occasionally measure their daily portion sizes, and 51.9% sometimes choose foods low in saturated fats and cholesterol. Foods such as butter, coconut oil, cheese, and red meat contain high levels of saturated fats. Both the FAO and EFSA recommend minimizing saturated fat intake as much as possible, though not eliminating it entirely (Roper, 2017).

How to cite this article?: Barajas-Lizarazo Mayra, Domínguez-Alcantar Christian, Nutritional Practices In Informal Caregivers Of People With Disabilities In The Pamplona Region, North Of Santander, Basic Health Sciences Journal, 2(3):83-95 , September 2024, ISSN 2981-5800.



Regarding dairy and dairy products, informal caregivers sometimes meet the recommended intake of 2 to 4 servings per day of unsweetened dairy. The study "Intake of milk and dairy products among university students" found that 98.6% of surveyed students had consumed some dairy product in the previous 24 hours: 92% drank milk, 60% consumed yogurt, 32.6% ate cheese, and 13% had other dairy products (Durá Travé, 2008).

Normally, the consumption of animal-based foods should occur 3 to 4 times per week. Some caregivers occasionally neglect this recommendation and consume more portions per day than advised. The WHO recommends not exceeding 500 grams of meat per week (Quintana, 2018).

CONCLUSION

Most informal caregivers in the Pamplona Region adopt unhealthy practices in the nutrition dimension. They only occasionally consume fruits and vegetables in the recommended portions and frequencies. However, they do recognize the importance of maintaining a routine breakfast habit.

REFERENCES

Agustín, A., & Cialdella, L. (2019). Alimentación y nutrición de los alumnos de Educación Primaria. Universitat de les Illes Balears.

Alcaraz, S; Velázquez, P. (2021). Prácticas alimentarias y estado nutricional en adolescentes de un centro educativo privado subvencionado de la ciudad de Luque en agosto de 2019. Revista científica ciencias de la salud, 3(2), 26–38. <https://doi.org/10.53732/rccsalud/03.02.2021.26>

Ávila-Toscano, J. H., & Vergara-Mercado, M. (2015). Quality of life of informal caregivers of chronically ill persons. Aquichan, 14(3), 417–429. <https://doi.org/10.5294/aqui.2014.14.3.11>

Bajaña, R; Quimis, M; Sevilla, M; Vicuña, L. C. J. (2017). Alimentación saludable como factor influyente en el rendimiento escolar de los estudiantes de instituciones educativas en Ecuador. facsalud 1(1), 34–39.

Cabezas-Zabala, C., Hernández-Torres, B., & Vargas-Zárate, M. (2016). Sugars added in food: Health effects and global regulation. Revista Facultad de Medicina, 64(2), 319–329. <https://doi.org/10.15446/revfacmed.v64n2.52143>

Chen, J., Zhu, D., & He, S. (2006). Research on numerical prediction method for wavemaking resistance of catamaran/trimaran.

How to cite this article?: Barajas-Lizarazo Mayra, Domínguez-Alcantar Christian, Nutritional Practices In Informal Caregivers Of People With Disabilities In The Pamplona Region, North Of Santander, Basic Health Sciences Journal, 2(3):83-95 , September 2024, ISSN 2981-5800.



- Chuan Bo Li Xue/Journal of Ship Mechanics, 10(2), 23–29.
- Durá Travé, T. (2008). Ingesta de leche y derivados lácteos en la población universitaria. *Nutricion Hospitalaria*, 23(2), 89–94.
- Figueroa, D. (2005). Acceso a los alimentos como factor determinante de la seguridad alimentaria y nutricional y sus representaciones en Brasil. *Revista Costarricense de Salud Pública*, 14(27), 77–86. https://www.scielo.sa.cr/scielo.php?script=sci_arttext&pid=S1409-14292005000200009
- Global Nutrition Report. (2022). Informe de la Nutrición Mundial. https://globalnutritionreport.org/documents/909/Spanish_Executive_summary_2022_Global_Nutrition_Report.pdf
- Gondivkar, S., Gadbail, A., Gondivkar, R., Sarode, S., Sarode, G., Patil, S., & Awan, K. (2019). Nutrition and oral health. *Disease-a-Month*, 65(6), 147–154. <https://doi.org/10.1016/j.disamonth.2018.09.009>
- López-Sobaler, A., Cuadrado-Soto, E., Peral Suárez, Á., Aparicio, A., & Ortega, R. (2018). Importancia del desayuno en la mejora nutricional y sanitaria de la población. *Nutrición Hospitalaria*, 35(6), 4–7. <https://doi.org/10.20960/nh.2278>
- López-Torres, L., & López-Alcaraz, F. (2022). Ultra-processed foods: Consumption implications, advances, and challenges in Latin America for public health in adults. *Revista Chilena de Nutricion*, 49(5), 637–643. <https://doi.org/10.4067/S0717-75182022000600637>
- López, A; Martínez, A; Aguilera, V; De la Torre, C; Cárdenas, A; Valdés, E; Macías, A; Santoyo, F; Barragán, M. (2011). Género, Interacción Social y Consumo de Alimento: “El Efecto Eva”. *Revista mexicana de trastornos alimentarios*, 2(1), 10–23.
- MinSalud. (2015). Encuesta Nacional de la Situación Nutricional-ENSIN 2015.
- MinSalud. (2021). Modos, condiciones y estilos de vida saludables. MinSalud. <https://www.minsalud.gov.co/salud/Paginas/habitos-saludables.aspx>
- PAHO; OMS. (2021). Consumo de productos alimentarios ultra procesados y procesados con exceso de nutrientes asociados a las enfermedades crónicas no transmisibles y a la alimentación insalubre en las Américas. https://iris.paho.org/bitstream/handle/10665.2/55547/OPSNMHRF210036_spa.pdf

How to cite this article?: Barajas-Lizarazo Mayra, Domínguez-Alcantar Christian, Nutritional Practices In Informal Caregivers Of People With Disabilities In The Pamplona Region, North Of Santander, Basic Health Sciences Journal, 2(3):83-95 , September 2024, ISSN 2981-5800.



- Quintana, L. (2018). Alimentación del preescolar y escolar. PubMed, 2, 321–328.
eped.es/sites/default/files/documentos/3-alimentacion_escolar.pdf
- Rodríguez, G. (2021). Prácticas alimentarias, consumo alimentario y percepción del peso corporal en estudiantes adolescentes de una Institución Educativa en Bogotá durante el confinamiento por la pandemia del Covid-19 [Pontificia Universidad Javeriana]. En Pontificia Universidad Javeriana.
- Ropero, A. (2017). Grasas saturadas. En Badalí.
<https://badali.umh.es/assets/documentos/pdf/artic/grasa-saturada.pdf>
- Toffoletto, M., & Reynaldos-Grandón, K. (2019). Determinantes sociales de salud, sobrecarga familiar y calidad de vida de cuidadores familiares de pacientes oncológicos en cuidados paliativos. Revista de Salud Pública, 21(2), 154–160.
<https://doi.org/10.15446/rsap.v21n2.76845>
- Torres, A., & Galvis, E. (2021). ¿De qué hablamos cuando decimos 'Estilos de Vida?': la experiencia de una comunidad educativa en Colombia. Saúde em Debate, 45(130), 633–646.
<https://doi.org/10.1590/s0034-76882021000100010>
- Yue, L., Jia, C., Hu, B., Zhang, Z., Bai, M., Wang, S., & Yao, N. (2022). Caregiving stress among family caregivers of older adults living with disabilities in China. Geriatric Nursing, 47, 226–231.
<https://doi.org/10.1016/j.gerinurse.2022.07.017>

How to cite this article?: Barajas-Lizarazo Mayra, Domínguez-Alcantar Christian, Nutritional Practices In Informal Caregivers Of People With Disabilities In The Pamplona Region, North Of Santander, Basic Health Sciences Journal, 2(3):83-95 , September 2024, ISSN 2981-5800.

