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ORIGINAL

Quality of eating habits in older adults at the MIES Gerontology Center, Santo Domingo, 2024

Calidad de los hábitos alimentarios en adultos mayores en el Centro Gerontológico del MIES, Santo Domingo, 2024

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ABSTRACT

The quality of the eating habits of older people is very important to maintain their health and prevent diseases, minimizing the risks of complications during aging. This research aims to determine the quality of the eating habits of older people at the MIES Gerontological Center, Santo Domingo 2024. Methodologically, it was developed through a quantitative approach as a descriptive and transversal field research, with a fundamental purpose. The sample was made up of 100 older adults, to whom a polytomous tool was used, which produces a measurement scale and, after being applied, the results obtained show that only 24 % of older adults have good eating habits. while 76 % have bad eating habits.Quality eating habits. In the classification of bad eating habits, 36 % corresponds to good quality and 64 % to poor quality of eating habits. Furthermore, when evaluating the general quality of diet, it was found that only 13 % of older adults have a good quality diet, compared to 87 % who have a poor quality diet. These results highlight the significant prevalence of poor eating habits and poor diet quality in this population. In general, the eating habits of older adults present some deficiencies. There is often a low intake of essential foods such as dairy products, meat, fruits and vegetables, and a high intake of fats. It is important to implement corrective measures to improve the quality of the diet, ensuring adequate intake of essential nutrients to maintain your health and well-being.

Keywords: Diet; Gerontology; Malnutrition; Nutrition; Health.

RESUMEN

La calidad de los hábitos alimentarios de las personas mayores es muy importante para mantener su salud y prevenir enfermedades, minimizando los riesgos de complicaciones durante el envejecimiento. Esta investigación tiene como objetivo determinar la calidad de los hábitos alimentarios de las personas mayores en el Centro Gerontológico MIES, Santo Domingo 2024. Metodológicamente se desarrolló mediante un enfoque cuantitativo como una investigación descriptiva y transversal de campo, con un propósito fundamental. La muestra estuvo conformada por 100 adultos mayores, a quienes se les utilizó una herramienta politómica, la cual produce una escala de medición y, luego de ser aplicada, los resultados obtenidos muestran que solo el 24 % de los adultos mayores tiene buenos hábitos alimentarios, mientras que el 76 % tiene malos hábitos alimentarios. Hábitos alimentarios de calidad. En la clasificación de malos hábitos alimentarios, el 36 % corresponde a la buena calidad y el 64 % a la mala calidad de los hábitos alimentarios. Además, al evaluar la calidad general de la alimentación, se encontró que sólo el 13 % de los adultos mayores tiene una alimentación de buena calidad, frente al 87 % que tiene una alimentación de mala calidad. Estos resultados resaltan la prevalencia significativa de malos hábitos alimentarios y mala calidad de la dieta en esta población. En general, los hábitos alimentarios de los adultos mayores presentan algunas deficiencias. A menudo hay una ingesta baja de alimentos esenciales como productos lácteos, carne, frutas y verduras, y una ingesta elevada de grasas. Es importante implementar medidas correctivas para mejorar la calidad de la dieta, asegurando una ingesta adecuada de nutrientes esenciales para mantener su salud y bienestar.

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Palabras clave: Dieta; Gerontología; Malnutrición; Nutrición; Salud.

INTRODUCTION

According to the United Nations (UN), an estimated 720 to 811 million people worldwide went hungry in 2020 due to the global coronavirus (COVID-19) pandemic. In 2021, the proportion of people affected by hunger worldwide increased to 828 million people, corresponding to 11,7 % of the world's population. Furthermore, by 2022, nearly 924 million people (11,7 % of the world's population) will face severe food insecurity. According to the WHO[1], malnutrition includes different conditions such as undernutrition (weight loss, stunted growth, and underweight), vitamin and mineral imbalances, overweight, obesity, and diet-related diseases. In 2022, 2,5 billion adults were overweight, of whom 890 million were obese, and 390 million were underweight.

According to the Pan American Health Organization[2], "in Latin America and the Caribbean in 2022, 22,5 % of the population suffered from a severe shortage of food products, thus affecting the ability of natural and vulnerable persons to achieve a healthy diet". The year 2020 saw a specific contribution indicating that there was a rise in food prices in almost all of Latin America, as many suppliers were unable to complete their daily sales due to the lockdown caused by COVID-19. Older adults were the most affected, as many do not have the financial means or family members who can facilitate their access to healthy diets. This situation, observed throughout the region, is also associated with various socioeconomic and nutritional indicators.[3,4,5,6]

The study "Eating Habits in Older Adults in Ecuador: A Systematic Review" aimed to assess the quality of life and eating habits of this group, identifying risk factors associated with dietary deficiencies or excesses that can lead to chronic diseases. Through a review of 21 selected studies, it was observed that older adults in Ecuador tend to suffer from malnutrition due to economic factors, behaviors, and emotional states. This leads them to consume unbalanced diets, with processed foods and sugary drinks, which poses a risk to their health. The study recommends family support and more balanced diets.[7,8,9]

In Santo Domingo de los Tsáchilas, no specialized studies have yet been conducted on the eating habits of older adults, so there is no specific data on this group. It is essential that priority research be conducted on this topic in the coming years, as these are important issues that deserve attention and concrete action to benefit older adults in the region. Researching their eating habits and nutrition is essential to understanding and improving their health and well-being.[10,11,12]

Factors that impact people's nutritional status and health include dietary practices. These practices refer to the specific behaviors and interactions that occur during mealtimes. In the case of older adults, nutritional status is crucial because it directly influences their health, well-being, and quality of life. Therefore, maintaining proper eating habits helps prevent chronic noncommunicable diseases such as diabetes, hypertension, and heart disease. In the geriatric population, poor nutritional status negatively impacts the maintenance of physical and cognitive function, decreases the sense of well-being, and generally affects quality of life.[13,14,15]

In addition, it is important for nursing technicians to conduct studies on the eating habits of older adults in order to provide comprehensive care, design chronic disease prevention programs, and offer personalized nutrition education. This allows for the creation of strategies that improve the quality of life and autonomy of older adults, while also providing valuable data for public health policies. This research strengthens professional development by providing practical solutions for the needs of this vulnerable population.[16,17]

What is the quality of the eating habits of older adults at the Santa Ana San Joaquín Nursing Home and the MIES Gerontological Center, Santo Domingo, 2024?

Objective

Determine the quality of eating habits among older adults at the MIES gerontology center, Santo Domingo 2024.

METHOD

Type and design of the research

Type

This research was developed with a quantitative approach, descriptive in nature, with a basic descriptive depth. The quantitative approach was appropriate for objectively measuring the quality of the eating habits of older adults in a gerontological center using empirical and statistical data. As field research, it was possible to capture accurate and contextualized information by directly observing older adults in their environment.[3] The descriptive nature of the study allowed for a detailed look at the characteristics of eating habits without delving into the causes, facilitating a clear understanding of the current state of nutrition in this population.[4] Finally, the basic orientation of the research was essential for expanding knowledge about the factors that affect the quality of nutrition, laying the groundwork for future research in geriatric nutrition.[5]

Design

According to the manipulation of the variable, it was non-experimental, which was appropriate for addressing the topic of "Quality of eating habits in older adults" because it allows the researcher to observe and analyze the variables without manipulating them, based on correlations, surveys, or case studies to draw conclusions about eating habits. In terms of cross-sectional timing, it is relevant because it compares the characteristics of older adults at a specific point in time, which facilitates understanding of their nutritional status in a given context, without the need to establish cause-and-effect relationships. This approach is the most appropriate as it allows for a detailed and realistic picture of the eating habits of the population studied.

Population and sample

Population

This is the set of individuals or objects about which information is sought in a study, which may consist of people, animals, medical records, births, laboratory samples, traffic accidents, among others (Pineda 1994). For the purposes of this research, the population consisted of 350 older adults registered at the MIES Santo Domingo Gerontological Center, of whom 150 were residents and 200 were outpatients.

Sample

The same author, Pineda[2], explains that it is a fraction of the universe or population in which the study will be carried out, which must adequately represent the population. In this case, it consisted of 100 older adults from the MIES gerontological center, of whom 50 were residents and 50 were outpatients.

Bearing in mind that sampling is the technique used to select members of the sample from the total population, which includes a set of rules, procedures, and criteria that allow a group of elements from a population to be selected, representing what happens in that entire population.[6] In this research, the sample was established through non-probabilistic convenience sampling due to ease of access, the availability of people to participate in the sample during a specific period of time, or other practical specifications of a particular element.

Inclusion and exclusion criteria

Inclusion criteria

- Older adults enrolled in the gerontological center.
- Both sexes.
- Who wish to participate in the study on a voluntary basis.
- Without severe cognitive impairment.

Exclusion criteria

- With advanced cognitive impairment.
- Who do not wish to participate in the survey.
- Data collection instruments.

A questionnaire-type survey was used as the data collection instrument, which is a data collection tool consisting of a series of questions designed to obtain information from study participants. It is mainly used as an instrument in surveys.[5]

For the purposes of this research, the "Survey on the Quality of Nutrition in Older Adults (ECAAM)" was used, based on Chilean dietary guidelines and international dietary guidelines, and included questions about the Program for Older Adults (PACAM). Validated by Duran, Candia, and Pizarro through the judgment of 28 experts in nutrition and gerontology, the final questionnaire consisted of 23 questions with a content validity ratio (CVR) of 0,37 or higher for each item, meeting the minimum acceptable standard. Although nine questions had low CVRs, seven reached the maximum value of 1,00, especially in the Healthy Eating Habits subscale. The overall validity index was 0,85, with minor adjustments made to the appearance of some questions without altering their content.

In this research, it seemed appropriate to add sociodemographic data, consisting of three questions; but the survey itself consisted of a section focused on healthy eating habits, with 15 questions, and another focused on unhealthy eating habits, with eight questions. In order to measure healthy and unhealthy eating habits in the sample, the answer options were assigned scores, generating two subscales: healthy eating habits and unhealthy eating habits.

The first subscale of healthy eating habits consisted of 15 questions, each with 5 answer options, each answer having a score with 1 being the lowest and 5 being the highest. This results in a score ranging from 15 to 75 points, with higher scores indicating better eating habits. The second subscale, unhealthy eating habits, consists of 8 questions, the first 7 questions with 5 answer options each, with a score from 1 to 5, with 1 being the minimum score and 5 being the maximum score. The last question has three answer options with a score

from 1 to 3, with 1 being the lowest and 3 being the highest. The higher the score, the better the person's eating habits, generating a scale from 8 to 38 points.

To analyze people's habits, the scores from both subscales were added together, obtaining a minimum of 23 points and a maximum of 113 points to evaluate eating habits, which lead to the establishment of dietary practices, according to the scale described in the following table:

Table 1. Classification of healthy habits

Classification of healthy habits	Score
Good quality eating habits	52 - 65
Poor quality eating habits	13 - 51
Classification of unhealthy habits	4
Good quality eating habits	31 - 38
Poor quality eating habits	8 - 30
Adult dietary quality (sum of items I and II)	
Good dietary quality	83 - 103
Poor quality of food	21 - 82

Data processing and analysis plan

Taking into account that data processing and analysis serve to design data collection formats, in order to ensure that the information is secure and concise the descriptive statistical method was used because it provided guidelines for effectively summarizing research data, using charts and tables to facilitate understanding, taking into account the objectives of the study and recognition of the measurement scales of the recorded variables, ensuring that the results are accurate and consistent with the purposes of the research. This was essential in researching the quality of eating habits in older adults, as it allowed the collected data to be summarized and presented in a clear and accessible manner, facilitating the interpretation of the results, aligning with the study's objectives, and considering the measurement scales used, ensuring that the analysis accurately reflects the trends and patterns observed in the population under investigation.

The following steps were followed:

- For data collection, a questionnaire administered through Google Forms was used to obtain information on the eating habits of older adults.
- Once the data had been collected through the questionnaire, it was exported and entered into an Excel spreadsheet, facilitating the organization and management of the information.
- In the Excel spreadsheet, the scale previously defined in the instrument was applied to assess healthy and unhealthy eating habits. The scores obtained in the questionnaire were taken into account to perform the necessary calculations and establish the percentages of healthy and unhealthy habits based on the scores obtained.
- The results of these two percentages were added together to determine the quality level of eating habits in the study population.
- The results obtained were described in detail, providing a clear and accurate interpretation of the data.
- The results were presented in percentage statistics tables, which facilitated their understanding and analysis, allowing for a clear visualization of the levels of healthy and unhealthy eating habits among older adults.
- This data processing and analysis plan ensured a rigorous and accurate assessment of the quality of older adults' eating habits, allowing for well-founded conclusions that can contribute to the understanding and improvement of nutrition in this population.

Ethical considerations

Ethical aspects in research with older adults are fundamental to ensuring good nutrition and care for older adults. In the context of eating habits in older adults, ethical considerations involve ensuring that participation in studies is voluntary and based on informed consent. Ethical principles can be defined as part of human knowledge that deals with and is concerned with the human principles of older adults. Justice and dignity are fundamental concepts in human life. Dignity refers to the intrinsic value of each person. The right to food is a fundamental human right that is linked to the dignity of all human beings.

Legal Framework

The legal framework refers to the legal aspects that the researcher must take into account when addressing the subject of study, including the rules referred to in the law of laws, the country's political constitution. For the purposes of this research, various legal frameworks were taken into account, of which the following are highlighted:

Constitution of the Republic of Ecuador, art. 32. Official Register, 449. Last modified: January 25, 2021. Status: Amended. - Health is a right guaranteed by the State, the realization of which is linked to the exercise of other rights, including the right to water, food, education, physical culture, work, social security, healthy environments, and others that support good living. Therefore, the constitution recognizes food as an essential element for the well-being and fulfillment of the right to health of Ecuadorian citizens, highlighting the importance of health as a fundamental right.

Articles 35, 36, 37, 38, and 39 state that older adults are part of the population that will receive priority and specialized care in the public and private spheres, especially in the areas of social and economic inclusion and protection against

violence. Furthermore, a person is considered to be an older adult from the age of 65, and they are entitled to free and specialized health care. The State is responsible for implementing policies and programs for older adults, taking into account urban and rural differences, gender, ethnic, and cultural inequalities. It will also promote personal autonomy and participation in the formulation and implementation of these policies.

Organic Law on Older Persons, arts. 1 and 2. Supplement to the Official Register, No. 484. Latest amendment: Law. Regulation: In force. It states that its purpose is to promote, regulate, and ensure the full exercise and dissemination of the specific rights of older persons, under the principle of priority and specialized care, in accordance with the Constitution, international human rights instruments, and related laws, with a focus on gender, human mobility, generational, and intercultural issues.

RESULTS

The results section of a research paper or thesis presents the findings obtained from data collection and statistical analysis in an orderly manner, in this case to facilitate the response to the objectives set out in the research. The results are described below:

Sociodemographic data

Table 2. Sociodemographic data

Indicator	%
Gender	
Male	55
Female	45
Age	
65-75 years	13
76-85 years	61
86 years or older	26
Marital status	
Single	37
Married	19
Divorced	12
Widowed	20
Others	12
Number of Children	
1	9
2	29
More than 3	53
None	9
Religion	
Catholic	80
Seventh-day Adventist	2
Evangelical	16
Mormons	0
Others	1
None	1
Retired	
Yes	93
No	7

Table 2 describes the sociodemographic data of the sample under study, showing that, in terms of gender, 55 % were male and 45 % were female; in terms of age, 61 % were between 76 and 85 years old; 26 % were 86 years old and over; and 13 % were between 65 and 75 years old. In terms of marital status, 37 % were single, 20 % were widowed, 19 % were married, 12 % were divorced, and 12 % were in other situations. Regarding the number of children, 53 % had more than three children, 29 % had two children, 9 % had one child, and another 9 % had none. Regarding religion, 80 % said they were Catholic, 16 % evangelical, 2 % Seventh-day Adventist, 1 % other, 1 % none, and 0 % Mormon. Regarding pensions, 93 % answered yes and 7 % answered no.

Healthy eating habits

The data obtained on healthy eating habits took into account several aspects, which are described below:

Figure 1 corresponds to the item on breakfast frequency. The results show that 0 % never eat breakfast, 40 % eat breakfast less than once a week, 16 % eat breakfast 1 to 3 times a week, 0 % eat breakfast 4 to 6 times a week, and 44 % eat breakfast every day.

Indicador	Nunca		Menos de 1 por semana		1-3 veces por semana		4-6 veces por semana		Todos los días		Total	
	N°	%	N°	%	N°	%	N°	%	N°	%	N°	%
Desayuno	0	0%	40	40%	16	16 %	0	0%	44	44%	100	100 %

Figure 1. Breakfast frequency

Indicador	No consume		Ocasionalmente a la semana		1 porción al día		2 porciones al día		3 porciones al día		Total	
	N°	%	N°	%	N°	%	N°	%	N°	%	N°	%
Lácteos	1	1%	42	42%	39	39%	13	13%	5	5%	100	100 %

Figure 2. Frequency of dairy consumption

Figure 2 corresponds to the item on frequency of dairy consumption. The results show that 1 % do not consume dairy products, 42 % occasionally consume dairy products once a week, 39 % consume one serving of dairy products per day, 13 % consume two servings of dairy products per day, and 5 % consume three servings of dairy products per day.

Indicador	No consume		Ocasionalmente a la semana		1 porción al día		2 porciones al día		3 porciones al día		Total	
	N°	%	N°	%	N°	%	N°	%	N°	%	N°	%
Frutas	1	1%	12	12%	66	66 %	16	16%	5	5%	100	100 %

Figure 3. Frequency of fruit consumption

Figure 3, corresponding to the item on the frequency of fruit consumption, shows that 1 % do not consume fruit, 12 % occasionally consume fruit per week, 66 % consume one serving of fruit per day, 16 % consume two servings of fruit per day, and 5 % consume three servings of fruit per day.

Figure 4, corresponding to the item on the frequency of vegetable consumption, shows that 0 % do not consume vegetables, 14 % occasionally consume vegetables per week, 31 % consume 1/2 serving of vegetables per day, 22 % consume one serving of vegetables per day, and 33 % consume two servings of vegetables per day.

Indicador	No consume		Ocasionalmente a la semana		1/2 porción al día		1 porción al día		2 porciones al día		Total	
	N°	%	N°	%	N°	%	N°	%	N°	%	N°	%
Verduras	0	0%	14	14%	31	31%	22	22%	33	33%	100	100 %

Figure 4. Frequency of vegetable consumption

Indicador	No consume		Ocasionalmente a la semana		1 porción por semana		2 porciones por semana		3 o más porciones por semana		Total	
	N°	%	N°	%	N°	%	N°	%	N°	%	N°	%
Leguminosa	2	2%	21	21%	31	31 %	38	38%	8	8%	100	100 %

Figure 5. Frequency of legume consumption

Figure 5 corresponds to the item on the frequency of legume consumption. The results show that 1 % do not consume legumes, 21 % occasionally consume legumes once a week, 31 % consume one serving per week, 38 % consume two servings per week, and 8 % consume three or more servings per week.

Indicador	No consume		Menos de 3 veces en la semana		1 porción al día		2 porciones al día		3 porciones al día		Total	
	N°	%	N°	%	N°	%	N°	%	N°	%	N°	%
Avena o Pan integral	2	2%	46	46%	42	42 %	8	8%	2	2%	100	100 %

Figure 6. Frequency of consumption of oats or whole wheat bread

Figure 6, corresponding to the item on the frequency of consumption of oats or whole wheat bread, shows that 2 % do not consume oats or whole wheat bread, 46 % consume it less than 3 times a week, 8 % consume two servings a day, and 2 % consume three servings a day.

Indicador	Nunca		Menos de 1 vez por semana		1-3 veces por semana		4-6 veces por semana		Todos los días		Total	
	N°	%	N°	%	N°	%	N°	%	N°	%	N°	%
Comida Casera	5	5 %	14	14 %	41	41%	8	8%	32	32%	100	100 %

Figure 7. Frequency of consumption of home-cooked meals

The figure 7 shows that 5 % never eat home-cooked meals, 14 % eat them less than once a week, 41 % eat them one to three times a week, 8 % eat them 4-6 times a week, and 32 % eat them every day.

Indicador	Nunca		Menos de 1 vez por semana		1-3 veces por semana		4-6 veces por semana		Todos los días		Total	
	N°	%	N°	%	N°	%	N°	%	N°	%	N°	%
Cena	0	0 %	12	12 %	41	41 %	1	1 %	46	46%	100	100 %

Figure 8. Frequency of dinner per week

Figure 8, corresponding to the item on how many times a week respondents eat dinner, shows that 0 % never eat dinner, 12 % eat dinner less than once a week, 41 % eat dinner 1-3 times a week, 1 % eat dinner 4-6 times a week, and 46 % eat dinner every day.

Indicador	No toma		Menos de 1 vez por semana		2 vasos al día		3 vasos al día		4 o más vasos al día		Total	
	N°	%	N°	%	N°	%	N°	%	N°	%	N°	%
Agua y Líquidos	0	0%	3	3 %	42	42%	43	43%	12	12 %	100	100 %

Figure 9. Frequency of water consumption

Figure 9, corresponding to the item frequency of water consumption, shows that 0 % do not drink water, 3 % drink less than once a week, 42 % consume 2 glasses a day, 43 % consume 3 glasses a day, and 12 % consume 4 or more glasses a day.

Indicador	No consume		1 vez cada 15 días		1 vez por semana		2 veces por semana		3 veces por semana		Total	
	N°	%	N°	%	N°	%	N°	%	N°	%	N°	%
Proteína Animal	20	20%	30	30%	14	14 %	29	29%	7	7 %	100	100 %

Figure 10. Frequency of animal protein consumption

Figure 10, corresponding to the item on frequency of animal protein consumption, shows that 20 % do not consume it, 30 % consume it once every 15 days, 14 % consume it once a week, 29 % consume it twice a week, and 7 % consume it three times a week.

Indicador	No consume		1 vez cada 15 días		1 vez por semana		2 veces por semana		3 veces por semana		Total	
	N°	%	N°	%	N°	%	N°	%	N°	%	N°	%
Huevos	1	1 %	13	13%	21	21 %	50	50 %	15	15%	100	100 %

Figure 11. Frequency of egg consumption

Figure 11, corresponding to the item on frequency of egg consumption, shows that 1 % do not consume eggs, 13 % consume them once every 15 days, 21 % consume them once a week, 50 % consume them twice a week, and 15 % consume them three times a week.

Indicador	Menos de 1		2 comidas		3 comidas		4 comidas		4 comidas y refrigerios		Total	
	N°	%	N°	%	N°	%	N°	%	N°	%	N°	%
Comida Consumida	1	1%	1	1 %	94	94 %	4	4%	0	0%	100	100 %

Figure 12. Frequency of daily meal consumption

Figure 12, corresponding to the item frequency of daily meals, shows that 1 % consume less than once a day, 1 % consume two meals, 94 % consume three meals, 4 % consume four meals, and 0 % consume four meals and snacks.

Indicador	5 porciones al día		4 porciones al día		3 porciones al día		2 porciones al día		½ - 1 porción al día		Total	
	N°	%	N°	%	N°	%	N°	%	N°	%	N°	%
Carbohidratos	1	1 %	9	9 %	41	41%	43	43 %	6	6%	100	100 %

Figure 13. Frequency of carbohydrate consumption

Figure 13, corresponding to the item frequency of carbohydrate consumption, shows that 1 % consume 5 servings per day, 9 % consume 4 servings per day, 41 % consume 3 servings per day, 43 % consume 2 servings per day, and 6 % consume less than ½ or 1 serving per day.

Indicador	5 porciones al día		4 porciones al día		3 porciones al día		2 porciones al día		½ - 1 porción al día		Total	
	N°	%	N°	%	N°	%	N°	%	N°	%	N°	%
Carbohidratos	1	1 %	9	9 %	41	41%	43	43 %	6	6%	100	100 %

Figure 14. Frequency of physical activity

Figure 14, corresponding to the item frequency of physical activity, shows that 53 % never engage in physical activity, 41 % very rarely engage in physical activity, 2 % sometimes engage in physical activity, 4 % almost always engage in physical activity, and 0 % always engage in physical activity.

Indicador	No hago ejercicio		1-2 días a la semana		3-4 días a la semana		5-6 días a la semana		Diario		Total	
	N°	%	N°	%	N°	%	N°	%	N°	%	N°	%
Ejercicios	69	69 %	25	25%	4	4 %	2	2%	0	0%	100	100%

Figure 15. Frequency of exercise

Figure 15, corresponding to the item on exercise frequency, shows that 69 % reported not exercising, 25 % exercise 1-2 days a week, 4 % exercise 3-4 days a week, 2 % exercise 5-6 days a week, and 0 % exercise daily.

Unhealthy eating habits

Figure 16, corresponding to the item on frequency of consumption of sugary drinks, shows that 2 % consume 3 or more glasses per day, 12 % consume 2 glasses per day, 42 % consume 1 glass per day, 38 % consume less than one glass per day or occasionally, and 6 % do not consume any.

Indicador	3 o más vasos al día		2 vasos al día		1 vaso al día		Menos de un vaso al día u ocasionalmente		No consume		Total	
	N°	%	N°	%	N°	%	N°	%	N°	%	N°	%
Bebidas o jugos azucarados	2	2 %	12	12%	42	42 %	38	38%	6	6%	100	100 %

Figure 16. Frequency of consuming sugary drinks

Indicador	3 o más vasos al día		2 vasos al día		1 vaso al día		Menos de un vaso al día u ocasionalmente		No consume		Total	
	N°	%	N°	%	N°	%	N°	%	N°	%	N°	%
Alcohol	0	0 %	0	0 %	0	0 %	21	21%	79	79 %	100	100 %

Figure 17. Frequency of alcohol consumption

Figure 17, corresponding to the item frequency of alcohol consumption, shows that 0 % consume 3 or more glasses per day, 0 % consume 2 glasses per day, 0 % consume 1 glass per day, 21 % consume less than one glass per day or occasionally, and 79 % do not consume alcohol.

Indicador	3 o más porciones por semana		2 porciones por semana		1 porción por semana		Ocasionalmente		No consume		Total	
	N°	%	N°	%	N°	%	N°	%	N°	%	N°	%
Frituras	2	2 %	10	10%	13	13 %	55	55%	20	20 %	100	100 %

Figure 18. Frequency of fried food consumption

Figure 18, corresponding to the item on frequency of consumption of fried foods, shows that 2 % consume 3 or more servings per week, 10 % consume 2 servings per week, 13 % consume 1 serving per week, 55 % consume occasionally, and 20 % do not consume.

Indicador	Todos los días		3-5 veces por semana		2-3 veces por semana		Menos de 1 vez por semana		No utiliza		Total	
	N°	%	N°	%	N°	%	N°	%	N°	%	N°	%
Mantecas elaboradas	13	13 %	5	5 %	9	9 %	28	28 %	45	45 %	100	100 %

Figure 19. Frequency of consumption of processed butter

Figure 19, corresponding to the item on the frequency of consumption of processed fats, shows that 13 % consume it every day, 5 % consume it 3-5 times per week, 9 % consume it 2-3 times per week, 28 % consume it less than once per week, and 45 % do not consume it.

Indicador	3 o más porciones al día		2 porciones al día		1 porción al día		Menos de 1 vez al día		No consume		Total	
	N°	%	N°	%	N°	%	N°	%	N°	%	N°	%
Comida chatarra	0	0 %	0	0 %	3	3 %	25	25 %	72	72%	100	100 %

Figure 20. Frequency of consumption of junk food

Figure 20, corresponding to the item on the frequency of consumption of junk food, shows that 0 % consume 3 or more portions per day, 0 % consume 2 portions per day, 3 % consume 1 portion per day, 25 % consume less than once per day, and 72 % do not consume junk food.

Indicador	3 o más porciones día		2 porciones al día		1 porción al día		Menos de 1 vez al día		No consume		Total	
	N°	%	N°	%	N°	%	N°	%	N°	%	N°	%
Dulce	0	0 %	0	0 %	14	14%	50	50%	36	36 %	100	100 %

Figure 21. Frequency of consumption of sweets

Figure 21, corresponding to the item on frequency of consumption of sweets, shows that 0 % consume 3 or more portions per day, 0 % consume 2 portions per day, 14 % consume 1 portion per day, 50 % consume less than once per day, and 36 % do not consume sweets.

Indicador	3 o más tazas al día		2 tazas al día		1 taza al día		Menos de 1 taza al día		No consume		Total	
	N°	%	N°	%	N°	%	N°	%	N°	%	N°	%
Café	0	0 %	18	18 %	34	34%	21	21%	27	27%	100	100%

Figure 22. Frequency of coffee consumption

Figure 22, corresponding to the item on frequency of coffee consumption, shows that 0 % consume 3 or more cups per day, 18 % consume 2 cups per day, 34 % consume 1 cup per day, 21 % consume less than 1 cup per day, and 27 % do not consume coffee.

Indicador	Siempre le agrega		Le agrega ocasionalmente		No le agrega		Total	
	N°	%	N°	%	N°	%	N°	%
Sal	43	43 %	41	41%	16	16%	100	100%

Figure 23. Frequency of salt consumption

Figure 23, corresponding to the item on salt consumption frequency, shows that 43 % always add salt, 41 % add it occasionally, and 16 % do not add it.

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Quality of eating habits among older adults

Figure 24, corresponding to the item on the classification of good eating habits, shows that 24 % have good eating habits and 76 % have poor eating habits among older adults at the MIES gerontological center.

Indicador	N°	%
Buena calidad de hábitos alimentarios	24	24
Mala calidad de hábitos de alimentarios	76	76
Total	100	100

Figure 24. Classification of good eating habits

Indicador	N°	%
Buena calidad de hábitos alimentarios	36	36
Mala calidad de hábitos de alimentarios	64	64
Total	100	100

Figure 25. Classification of poor eating habits

Figure 25, corresponding to the classification of poor eating habits, shows that 36 % of older adults at the MIES Gerontological Center have good eating habits, while 64 % have poor eating habits.

Indicador	N°	%
Buena calidad de alimentación	13	13
Mala calidad de alimentación	87	87
Total	100	100

Figure 26. Quality of Adult Nutrition

Figure 26, corresponding to the item on adult food quality, shows that 13 % corresponds to good food quality and 87 % corresponds to poor food quality among older adults at the MIES Gerontological Center in Santo Domingo.

DISCUSSION

The sociodemographic data on older adults at the MIES Gerontological Center in Santo Domingo in 2024 reveal that the majority are men (55 %) and are mainly in the 76-85 age range (61 %). In terms of marital status, 37 % are single and 20 % are widowed, highlighting a significant prevalence of people without a partner. Most have more than three children (53 %), and the predominant religion is Catholicism (80 %). In addition, 93 % are pensioners, indicating a high dependence on pension income. These results are significant as they provide a clear picture of the characteristics and needs of this population.[18,19]

The predominance of men may be due to demographic and health factors that affect longevity and gender distribution at this advanced age. The high percentage of single and widowed individuals could be related to higher mortality among partners at these ages, as well as changes in family and social dynamics throughout their lives.[20] The prevalence of more than three children suggests that many older adults formed large families, which was more common in past generations. The high proportion of Catholics reflects the historical and cultural influence of religion in the region. The dependence on pensions underscores the importance of social security systems for the livelihood of older adults, showing the relevance of maintaining and strengthening these systems to ensure their economic well-being.[21]

Compared to previous studies, the gender and age distribution is consistent with patterns observed in other research on older adults, where women tend to have a higher life expectancy, but in this case, a male majority was observed, which could be a specific local variation. High levels of singlehood and widowhood are also common in studies on older adults, reflecting changes in family dynamics and the impact of mortality.[22,23] In terms of pension dependency, studies such as those by ECLAC (Economic Commission for Latin America and the Caribbean) indicate that many older adults in Latin America depend heavily on pensions for their livelihood, similar to the findings of this research. The higher the percentage, the greater the proportion of older adults who are economically dependent on other people and institutions to meet their consumption needs.[24,25]

Religious influence is consistent with the literature as a significant factor in the well-being of older adults. According to the study entitled "Importance of Religion in the Elderly," religiosity has proven to be a significant resource in the well-being of older adults. Intrinsic and extrinsic religiosity are associated with a better quality of life, lower cardiac mortality, reduced stress and depression, and greater life satisfaction. These findings suggest that the strong presence of religion in the lives of older adults at the MIES gerontological center may be contributing positively to their overall well-being.[26]

In conclusion, the sociodemographic data from the MIES gerontological center in Santo Domingo reflect significant trends that affect the well-being and needs of older adults. The majority are men, of advanced age, single or widowed, economically dependent on pensions, and strongly influenced by Catholicism. The limitations of the study include the lack of comparative data from other gerontological centers and the possible cultural variability that was not captured. For future research, it is recommended to further explore the quality of life and emotional needs of single and widowed older adults, as well as the impact of religion on their well-being. It would also be beneficial to conduct comparative studies with other regions to identify patterns and variations in the needs of older adults.

The data obtained from the study on the healthy eating habits of older adults at the MIES gerontological center in Santo Domingo reveal some significant patterns. Regarding the frequency of breakfast, 44 % eat breakfast every day, however, 40 % do so less than once a week, indicating a significant proportion that does not maintain a regular breakfast habit. Dairy consumption shows that 1 % do not consume dairy products and 42 % do so occasionally, which may reflect a possible deficiency in the intake of this essential food group. In terms of fruit consumption, 1 % do not consume fruit and 66 % consume one serving per day, which is positive but indicates that there is room for increasing intake.[27]

In terms of vegetable consumption, 0 % do not consume vegetables, but 14 % do so occasionally, suggesting that a minority do not consume them regularly. Thirty-eight percent consume two servings of legumes per week, which is favorable, but 1 % do not consume legumes, which may be indicative of a diet insufficient in vegetable protein. With regard to oats or whole wheat bread, 2 % do not consume them and 46 % consume them less than three times a week, indicating a low frequency of consumption of these fiber-rich foods.[28]

Five percent never consume home-cooked meals and 14 % do so less than once a week, which may reflect a dependence on processed or prepared foods outside the home. As for dinner, 46 % eat dinner every day, but 12 % do so less than once a week, indicating irregular eating habits. Water consumption shows that 3 % drink less than once a week, while 43 % consume three glasses a day, which is positive but could be improved.[29]

Regarding animal protein consumption, 20 % do not consume any, which may be concerning for their protein intake. The frequency of egg consumption varies, with 50 % consuming them twice a week, but 1 % do not consume them at all. The majority (94 %) consume three meals a day, which is adequate, but 1 % consume less than once a day, which is alarming.[30]

In terms of physical activity, 53 % never engage in physical activity and 69 % do not exercise, which is significantly concerning for overall health. This pattern of physical inactivity is consistent with previous studies indicating that older adults often face barriers to maintaining an active lifestyle due to health issues and reduced mobility. According a study, religiosity and community activities can have a positive impact on motivation to maintain a healthy diet and engage in physical activity, suggesting that strengthening these aspects could benefit older adults at the Gerontológico el MIES.[31]

In conclusion, despite the positive aspects of some eating habits, the lack of animal protein and insufficient physical activity require urgent attention. Limitations of the study include the lack of a larger comparative sample and possible biases in self-reported data.[32] For future research, it is recommended to explore strategies to improve physical activity and the inclusion of protein in the diet of older adults, as well as to study the impact of community and religious programs on improving these habits. Implementing educational and support programs that promote a balanced diet and increased physical activity could significantly improve the health and quality of life of older adults at the MIES Gerontological Center in Santo Domingo.[33]

The data obtained from the study on the healthy eating habits of older adults at the MIES gerontological center in Santo Domingo reveal that, in terms of breakfast frequency, 44 % of older adults eat breakfast every day, but 40 % do so less than once a week. Dairy consumption is occasional in 42 % of cases, and 1 % do not consume dairy products.[34] One percent do not consume fruit, while 66 % consume one serving daily. As for vegetables, 33 % consume two servings a day, although 14 % do so occasionally. One percent do not consume legumes, while 38 % consume two servings per week. Forty-six percent consume oats or whole wheat bread less than three times a week, and 2 % do not consume them. Five percent never consume homemade food. As for dinner, 46 % eat dinner every day, but 12 % do so less than once a week. Three percent drink water less than once a week, while 43 % drink three glasses a day. Twenty percent do not consume animal protein. The majority (94 %) eat three meals a day, although 1 % eat less than once a day. Fifty-three percent never engage in physical activity, and 69 % do not exercise.[35]

The results show that, although there is a positive trend in fruit and vegetable consumption, other habits such as irregular breakfast, occasional consumption of dairy products, and lack of animal protein in the diet suggest nutritional deficiencies. Lack of physical activity is a significant problem that could be related to physical limitations, lack of motivation, or adequate programs to encourage exercise in this population.

In this regard, and according to the study "Nutrition in Older Adults" by Lorena Roja[7], it is important for older adults to enjoy a balanced diet rich in essential nutrients to improve their quality of life and prevent chronic diseases. When comparing these results, it can be seen that both studies identify a deficiency in protein consumption and a low frequency of physical activity. However, Roja's study also emphasizes the need to consume

sufficient fluids and fiber, aspects not addressed in such detail in the present study by the MIES gerontological center. This comparison suggests that, although both studies agree on the identification of similar problems, it is crucial to address all aspects of diet and exercise in older adults in a more comprehensive manner to promote healthy aging.[36]

With regard to identifying unhealthy eating habits among older adults at the MIES gerontology center in Santo Domingo 2024, in terms of sugary drink consumption, 2 % of older adults consume 3 or more glasses per day, 12 % consume 2 glasses per day, and 42 % consume 1 glass per day, while 38 % do so occasionally and 6 % do not consume them. With regard to alcohol consumption, 79 % do not consume alcohol and 21 % do so occasionally. With regard to the consumption of fried foods, 2 % consume 3 or more portions per week and 20 % do not consume them, while 55 % do so occasionally.[37]

Regarding the use of processed fats, 13 % consume them every day, 45 % do not use them, and 28 % do so less than once a week. As for junk food, 72 % do not consume it and 25 % do so less than once a day. Regarding the consumption of sweets, 14 % consume one serving per day and 36 % do not consume them. In relation to coffee consumption, 18 % consume two cups per day and 27 % do not consume it. Finally, regarding the use of salt, 43 % always add it and 41 % do so occasionally.

The results indicate that, although there is a low prevalence of excessive consumption of sugary drinks and junk food, there is regular consumption of fried foods and sweets. The constant use of salt (43 %) and the consumption of daily-made spreads (13 %) suggest eating habits that could be harmful to cardiovascular health. The low frequency of alcohol consumption (79 % do not consume) is a positive aspect that contributes to the overall health of older adults.

Compared to previous studies, such as that of ECLAC, it can be seen that older adults tend to have a diet high in saturated fats and salt, similar to the results of this study. According to the WHO, a diet high in salt and saturated fats increases the risk of cardiovascular disease, which is consistent with the findings of this study, where a high percentage of older adults regularly add salt to their meals. In contrast, low alcohol consumption in this population is a positive aspect that coincides with public health recommendations to minimize alcohol consumption in older adults.

In conclusion, although there are some positive eating habits such as low alcohol and junk food consumption, unhealthy habits such as high consumption of salt and processed fats, as well as regular consumption of fried foods and sweets, require attention. Limitations of the study include possible unaccounted cultural variability and the lack of a larger comparative sample. For future research, it is recommended to explore strategies to reduce salt and saturated fat consumption among older adults, as well as to study the impact of educational programs on improving these habits. Implementing educational and support programs that promote a balanced diet and the reduction of unhealthy eating habits could significantly improve the health and quality of life of older adults at the MIES gerontological center in Santo Domingo.

In relation to the overall objective of determining the quality of eating habits among older adults at the MIES gerontological center in Santo Domingo 2024, the results reveal that only 24 % of older adults have good quality eating habits, while 76 % have poor quality habits. This trend is also reflected in the classification of poor eating habits, where 64 % correspond to poor quality and only 36 % to good quality. Likewise, the overall quality of nutrition shows that 87 % of older adults have poor nutrition, compared to a mere 13 % with good nutrition.

The interpretation of these results suggests a significant prevalence of poor eating habits among older adults at the MIES gerontological center. This situation may be related to various factors, including a lack of adequate nutrition education, resistance to changing ingrained habits, and possible economic limitations that hinder access to healthy foods.

When comparing these findings with previous studies, we observe that earlier research also highlights the need to promote healthy eating habits and nutritional education among the elderly population. For example, the study Quality of Life and Training in Healthy Eating Habits in Older Adults emphasizes the importance of a balanced and varied diet, as well as regular physical activity, to improve the quality of life of older adults. However, unlike our results, some studies find slightly better percentages in diet quality, which may be due to differences in intervention and nutrition education strategies implemented in other geographical or institutional contexts.

In conclusion, the results of our research underscore the urgent need to implement diet and nutrition improvement programs for older adults at the MIES gerontological center, focusing on correcting negative habits and promoting healthier eating. The limitations of the study include a sample limited to a single gerontological center and the possible influence of uncontrolled external factors. For future research, it is recommended to explore specific nutritional education interventions and evaluate their long-term impact on the quality of older adults' eating habits.

CONCLUSIONS

Objective-oriented Identifying the sociodemographic data of older adults at the MIES gerontological center, Santo Domingo 2024, it is concluded that the majority are men (55 %) and the majority are between 76 and 85

years old (61 %). The predominant marital status is single (37 %) and the majority have more than three children (53 %). In terms of religion, 80 % identify as Catholic. In addition, a high percentage (93 %) are pensioners, indicating a notable dependence on pension income in this population.

When determining the healthy eating habits of older adults at the MIES gerontological center in Santo Domingo 2024, a diversity of consumption practices is evident. Most eat breakfast every day (44 %), consume fruits (66 %) and vegetables (33 %) regularly, and most eat three meals a day (94 %). However, there is a notable deficiency in the consumption of animal proteins (20 % do not consume them) and a low frequency of physical activity and exercise, with 53 % never engaging in physical activity and 69 % not exercising. These results indicate the need to promote a more balanced diet and increase physical activity in this population.

Identify unhealthy eating habits among older adults at the MIES gerontological center, Santo Domingo 2024. With regard to the objective of identifying unhealthy eating habits among older adults at the MIES gerontological center, Santo Domingo 2024, the results show that 2 % consume three or more glasses of sugary drinks per day, 21 % consume alcohol occasionally, 25 % consume junk food less than once a day, and 14 % consume a portion of sweets per day. In addition, 18 % consume two cups of coffee per day, and 43 % always add salt to their meals. Although some percentages are lower, these negative habits highlight key areas for improving nutritional health in this population.

In relation to the overall objective of determining the quality of the eating habits of older adults at the MIES gerontological center in Santo Domingo 2024, it is concluded that the quality of the eating habits of older adults at the MIES gerontological center in Santo Domingo is largely deficient. Only 24 % have good eating habits, while 76 % have poor habits. In the classification of poor habits, 64 % correspond to poor food quality. In addition, 87 % have poor overall food quality. These results highlight the urgent need to implement diet and nutrition improvement programs for this population, focusing on correcting negative habits and promoting healthier eating.

RECOMMENDATIONS

It is recommended that further studies be conducted to gain a deeper understanding of the eating habits of older adults from a nursing care perspective. This will allow for more accurate identification of the specific needs and barriers faced by this population in relation to their diet and nutrition.

Develop and implement specific educational programs for older adults and their environment to promote the importance of a balanced diet and the inclusion of animal proteins in their diet.

Create and implement physical activity programs adapted to the abilities and limitations of older adults. Include regular physical activities that are accessible and attractive to encourage their participation.

Review and improve the menus offered in gerontological centers to ensure that they are balanced and nutritious, meeting the specific needs of older adults. Include a greater variety of fruits, vegetables, and proteins.

Design awareness campaigns and workshops on the negative effects of excessive consumption of salt, sugary drinks, and processed foods. Encourage the consumption of fresh and natural foods.

Provide personalized nursing care to older adults to monitor and support their eating and physical activity habits. Conduct regular follow-ups and make necessary adjustments to their diet and exercise plans.

Provide psychosocial support to older adults by creating support groups and community activities that encourage social interaction and emotional well-being, which can positively influence their eating habits and overall health.

Encourage collaboration between health professionals, nutritionists, nurses, and social workers to comprehensively address the dietary and health problems of older adults.

Conduct periodic evaluations of the programs and strategies implemented to ensure that they are meeting their objectives and make necessary adjustments based on the results obtained.

BIBLIOGRAPHIC REFERENCES

1. Organización Mundial de la Salud. Reducción de la ingresa de sodio. 2025 Sep 11. https://www.who.int/es/news-room/fact-sheets/detail/salt-reduction

2. De Pineda B, Alvarado E, De Canales F. Metodología de la investigación: manual para el desarrollo del personal de salud. 2a ed. Organización Panamericana de la Salud; 1994.

3. Escárcega J. Investigación de campo: ¿qué es y por qué hacerla? Berumen; 2023 Nov 8. https://berumen.com.mx/investigacion-de-campo-que-es-y-por-que-hacerla/

4. Muguira A. ¿Qué es la investigación descriptiva? QuestionPro; 2018 Oct 23. https://www.questionpro.com/blog/es/investigacion-descriptiva/

5. Narváez M. Investigación básica: qué es, ventajas y ejemplos. QuestionPro; 2022 Jul 13. https://www.questionpro.com/blog/es/investigacion-basica/

6. Mata L. El enfoque cuantitativo de investigación. 2019. https://investigaliacr.com/investigacion/el-enfoque-cuantitativo-de-investigacion/

7. Roja L. Nutrición en adultos mayores. https://biblioarchivo.unaj.edu.ar/uploads/38acaad94c8ba705f3eff1322af2c0c903666bf8.pdf

8. Amador L, Ibáñez M. Calidad de vida y formación en hábitos saludables en la alimentación de personas mayores. 2015. https://dialnet.unirioja.es/descarga/articulo/5148754.pdf

9. ATS/DUE de atención especializada del Instituto Catalán de la Salud. Temario volumen 1. Sevilla: Editorial MAD; 2006.

10. Barbosa S. Conceptos de calidad: todo lo que usted necesita saber. PariPassu. https://www.paripassu.com.br/es/blog/conceptos-de-calidad

11. Bartrina JA. Nutrición comunitaria. Barcelona: Elsevier; 2023.

12. Bhupathiraju SN. Introducción a la nutrición. Manual MSD, versión para público general. https://www.msdmanuals.com/es-ec/hogar/trastornos-nutricionales/introducci%C3%B3n-a-la-nutrici%C3%B3n/introducci%C3%B3n-a-la-nutrici%C3%B3n

13. Boluda RMZ, Ayala ES, Márquez Hernández VV, López Rodríguez MM, Jiménez AJG. Jornadas internacionales de investigación en educación y salud. Almería: Universidad de Almería; 2015.

14. Caballero MG. Manual de alimentación geriátrica. Jaén: Formación Alcalá; 2020.

15. Cabezuelo G, Frontera P. Educación nutricional básica: guía para educadores y familias. Madrid: Narcea Ediciones; 2021.

16. Comisión Económica para América Latina y el Caribe. Impacto social y económico de la malnutrición: análisis y estudio piloto en Chile, Ecuador y México. CEPAL. https://www.cepal.org/sites/default/files/publication/files/41247/LCTS2017-32_es.pdf

17. Universidad Técnica de Ambato. Hábitos alimenticios y su relación con el índice de masa corporal en adultos de 35 a 59 años del cantón Salcedo: informe de investigación. https://repositorio.uta.edu.ec/bitstream/123456789/31094/2/TESIS%20Marcos%20Acosta.pdf

18. Domínguez ÁZ, Coy JL. Guía práctica para elaborar proyectos de investigación aplicada en administración, gerencia y negocios. Barranquilla: Universidad del Norte; 2023.

19. Espinosa JSV, Calderón CAV. Riesgo nutricional y hábitos alimentarios en adultos mayores del centro de atención integral para grupos prioritarios, Ibarra 2023. Horizontes de Enfermería. 2023;13:91-104. doi:10.32645/13906984.1232

20. González E. Hábitos para una alimentación equilibrada. CinfaSalud; 2015 Ene 12. https://www.cinfasalud.com

21. Nutrición clínica geriátrica. Google Books. http://google.com.ec/books/edition/Nutrición_clínica_geriátrica/RsDoDwAAQBAJ

22. Guallo Paca MJ, Parreño Urquizo ÁF, Chávez Hernández JP. Estilos de vida saludables en adultos mayores. Rev Cub Reumatol. 2022;24(4). http://scielo.sld.cu/scielo.php?pid=S1817-59962022000400008&script=sci_arttext

23. Universidad Veracruzana. Introducción a la investigación: guía interactiva. Unidad 3: encuesta. https://www.uv.mx/apps/bdh/investigacion/unidad3/encuesta.html

24. Maita L. Los nutrientes, tipos y funciones. Discapnet; 2010 Oct 11. https://www.discapnet.es/salud/

guias-y-articulos-de-salud/guia-de-alimentacion-y-nutricion/los-nutrientes-tipos-y-funciones

25. Max Editorial. El poder de los hábitos alimenticios: cómo crear rutinas saludables. 2023.

26. Max Editorial. Nutrición conductual. 2023.

27. McIntosh SN. Williams. Nutrición básica y dietoterapia. Elsevier Health Sciences; 2022.

28. Morales AR, Zárate LEM. Epidemiología clínica: investigación clínica aplicada. Editorial Médica Panamericana; 2004.

29. Oficina del Alto Comisionado de las Naciones Unidas para los Derechos Humanos. El derecho a la alimentación adecuada. Hoja informativa N.º 34. ACNUDH. https://www.ohchr.org/sites/default/files/Documents/Publications/FactSheet34sp.pdf

30. Ortega C. ¿Qué es el muestreo por conveniencia? QuestionPro; 2018 Abr 28. https://www.questionpro.com/blog/es/muestreo-por-conveniencia/

31. Prades P. ¿Cómo influye la alimentación en nuestra salud? Policlínica Prades; 2021 Jun 24. https://www.policlinicaprades.com/blog/como-influye-alimentacion-salud

32. Restrepo-Mesa SL, Manjarrés-Correa LM, Parra-Sosa BE. Alimentación y nutrición de la mujer en etapas de gestación y lactancia: de lo básico a lo aplicado. Medellín: Universidad de Antioquia; 2021.

33. Valdivieso JMV. La calidad es la clave: descubre por qué es importante en cualquier producto o servicio. 7 conceptos que debes saber. LinkedIn; 2023 May 15. https://es.linkedin.com/pulse/la-calidad-es-clave-descubre-por-qu%C3%A9-importante-en-o-vera-valdivieso

34. Williams PA. Enfermería geriátrica. Elsevier; 2020.

35. Svedbom A, Hernlund E, Ivergård M, Compston J, Cooper C, Stenmark J, et al. Osteoporosis in the European Union: a compendium of country-specific reports. Arch Osteoporos. 2013;8:137. https://www.elsevier.es/es-revista-revista-espanola-geriatria-gerontologia-124-articulo-valoracion-del-estado-nutricional-geriatria-S0211139X15001341

36. Mata MC. Cómo conocer la audiencia de una emisora: los debates de audiencia. ALER; 1996. https://ia801005.us.archive.org/2/items/comoconocerlaaudienciadeunaemisoralosdebatesdeaudiencia/C%C3%B3mo%20conocer%20la%20audiencia%20de%20una%20emisora_%20Los%20debates%20de%20audiencia-Mar%C3%ADa%20Cristina%20Mata.pdf

37. Reyes-Ortiz CA. Importancia de la religión en los ancianos. Colombia Médica. 1998;29(4):155-157. https://www.redalyc.org/pdf/283/28329409.pdf

FINANCING

None.

CONFLICT OF INTEREST

Authors declare that there is no conflict of interest.

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