

REVIEW

Healthy eating and nutrition, a review of the theoretical aspects of a healthy diet

Alimentación y nutrición saludables, una revisión de los aspectos teóricos de una dieta sana

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ABSTRACT

Introduction: food and nutrition are fundamental pillars for maintaining good health and preventing diseases. In a world where the prevalence of eating disorders and chronic diseases is increasing, it is essential to understand the correct eating habits and the components of a healthy diet.

Objective: to review the existing literature on proper eating habits, identify the key components of a balanced diet and highlight their importance in promoting health and general well-being.

Development: correct eating habits include choosing fresh, varied and nutrient-rich foods, as well as portion control and moderation in the consumption of sugars and saturated fats. A healthy diet consists of fruits, vegetables, whole grains, lean proteins and healthy fats. These components not only provide the nutrients necessary for the optimal functioning of the body, but also help prevent diseases such as obesity, type 2 diabetes and cardiovascular diseases. Nutrition education plays a crucial role in the formation of healthy habits, encouraging informed decisions about food.

Conclusions: adopting correct eating habits and a balanced diet is vital for long-term health. Promoting conscious eating and access to accurate nutrition information are essential to combat current trends in poor nutrition. Encouraging these habits from an early age can significantly contribute to improving quality of life and reducing the burden of diet-related diseases.

Keywords: Dietary Practices; Physical Activity; Well-Being; Diet.

RESUMEN

Introducción: la alimentación y nutrición son pilares fundamentales para mantener una buena salud y prevenir enfermedades. En un mundo donde la prevalencia de trastornos alimentarios y enfermedades crónicas está en aumento, es esencial comprender los hábitos correctos de alimentación y los componentes de una dieta saludable.

Objetivo: revisar la literatura existente sobre los hábitos alimentarios adecuados, identificar los componentes clave de una dieta equilibrada y destacar su importancia en la promoción de la salud y el bienestar general.

Desarrollo: los hábitos correctos de alimentación incluyen la elección de alimentos frescos, variados y ricos en nutrientes, así como el control de porciones y la moderación en el consumo de azúcares y grasas saturadas. Una dieta saludable se compone de frutas, verduras, granos enteros, proteínas magras y grasas saludables. Estos componentes no solo proporcionan los nutrientes necesarios para el funcionamiento óptimo del organismo, sino que también ayudan a prevenir enfermedades como la obesidad, diabetes tipo 2 y enfermedades cardiovasculares. La educación nutricional juega un papel crucial en la formación de hábitos saludables, fomentando decisiones informadas sobre la alimentación.

Conclusiones: adoptar hábitos alimentarios correctos y una dieta equilibrada es vital para la salud a largo plazo. La promoción de una alimentación consciente y el acceso a información precisa sobre nutrición son esenciales para combatir las tendencias actuales de mala alimentación. Fomentar estos hábitos desde una edad temprana puede contribuir significativamente a mejorar la calidad de vida y reducir la carga de enfermedades relacionadas con la alimentación.

Palabras clave: Prácticas Alimentarias; Actividad Física; Bienestar; Dieta.

INTRODUCTION

Malnutrition, overweight, and obesity have a direct impact on the health of underdeveloped people and in developing countries as well, so while malnutrition causes a decrease in growth and physical and cognitive development, overweight and obesity can trigger diseases such as hypertension, type 2 diabetes, various types of cancer with different etiology, etc., This impedes the correct development of people and prevents them from achieving a correct and healthy lifestyle, since food plays a fundamental role in a healthy life, which is related to eating habits. However, these habits manifest in the family, the media, and education.^(1,2,3)

The World Health Organization determines that inadequate eating habits begin in the first years of life, which is why proper nutrition contributes to the healthy growth of the human body. Moreover, it provides long-term benefits to human beings, among them the reduction of the risk of suffering from overweight and obesity; on the other hand, eating habits are fostered in the family and have a strong influence on the diet of children and adults, and the behaviors related to food; however, current socioeconomic changes have led parents and children to eat inadequately, and this has led to several diseases related to eating habits.

It is essential to understand that a healthy diet is fundamental for a person's lifespan and helps prevent malnutrition, non-communicable diseases such as diabetes, cancer, chronic respiratory diseases, and cardiovascular diseases, which in general are the cause of 63 % of deaths, thus killing more than 36 million people each year. Eighty percent of deaths are concentrated in low- and middle-income countries. Alcohol consumption, smoking, physical inactivity, and unhealthy diets are also responsible for human mortality.⁽⁴⁾

According to the Pan American Health Organization (PAHO) and the United Nations (FAO), Ecuador's food system has the following characteristics:

Ecuador is undergoing a progressive transformation of eating habits. Moving from consuming natural or minimally processed foods to foods rich in processed fats, salt, or simple sugars has led to a transition or epidemiological accumulation characterized by the double burden of malnutrition. That is, in addition to stunting and micronutrient deficiencies, there is a growing increase in the prevalence of overweight and obesity in all age groups.^(5,6)

Overweight and obesity in Ecuadorian adults exceed 60 %, and it is established that this has influenced the increase in non-communicable diseases that are the cause of poor eating habits.⁽⁵⁾ According to Vélez,^(1,7) he says that diabetes mellitus is one of the main reasons for mortality in Ecuadorians; hypertensive diseases are the second cause due to inadequate eating habits and a sedentary lifestyle; these pathologies are preventable by performing physical activity for at least 30 minutes a day and having a healthy diet.

METHOD

A search for information was conducted in Redalyc, Elsevier Science Direct, PubMed/Medline, and SciELO, as well as in the ClinicalKeys services and the Google Scholar search engine. Advanced search strategies were used to retrieve the information by structuring search formulas using the terms "food," nutrition," habits," health," etc., as well as their equivalents in English. We selected the resulting documents that provided theoretical and empirical information in Spanish or English.

DEVELOPMENT

Nutrition

Anareda⁽⁸⁾ states that it is the process of swallowing the food necessary for an optimal life, meaning it should be sufficient, moderate, balanced, and varied. Sufficient because it provides the energy, nutrients, and fiber necessary to maintain a person's health. Balanced because it contains an equal composition of foods that provide all the necessary nutrients to the human body. Moderate because it generates the exact amounts of food to maintain a healthy weight, that is, eating only the necessary amount of food the body needs. Varied because it includes several foods belonging to different food groups.

A healthy diet is part of maintaining health for all stages of life. Inadequate food intake can cause food-related diseases that, in the short, medium, and long term, can be a factor in several diseases related to food and this is to eat an amount of food that will add to the human body enough nutrients to have a healthy life,

feel good and have energy. These foods include carbohydrates, proteins, fats, water, vitamins, and minerals. People can enjoy better health with the whole food group in the body.^(9,10)

Nutrition

Nutrition is the science that studies the interaction between diet and health and establishes the basis for the design, implementation, and evaluation of nutritional mediations at the community and population level to improve people's health status. The relationship between diet and health can be observed from a nutritional perspective, in harmony with the elements and chemical composition of the diet, dietary, in terms of its content of foods or food groups, or global, through the analysis of dietary or food cycles.^(11,12,13)

Dietary Habits

Generally known as a dietary habit, these are patterns of food consumption that have been taught from childhood to old age or are gradually acquired according to the tastes and preferences of individuals.^(14,15)

A healthy diet satisfies each person's nutritional and energetic deficiencies to maintain an optimal state of health. So that a balance is achieved between nutrients, calories, and vitamins to meet the needs of each individual and help the body develop its functions properly. Our society has different diets, including the Mediterranean diet, which brings together all these characteristics and their benefits for our health.^(14,15)

Inadequate Eating Habits

Eating habits are individual eating behavior practices that have been changing, altering family dynamics and interaction. One of the factors is the economic situation that affects the consumption behaviors of both children and adults. The lack of interest in food preparation and the lack of time to cook is what causes families to adopt new ways of cooking food, in addition to the lack of organization in the home and the loss of authority of parents towards their children today has caused many children and adults to decide when, how and what to eat.^(14,15)

High Caloric Density Foods

Fast food was born in the United States to satisfy the dietary needs of a population primarily dedicated to production and work and had no time for leisure and sports. However, through snacks, soft drinks, and candy, fast food has always existed in our lives. Around the world, these foods are a quick escape from poor nutrition and, in turn, move millions of dollars from the planet's economies. This paper discusses the nutritional values of these foods and clears up some misperceptions about them.⁽¹⁶⁾

Flavor Enhancers

Flavor enhancers are substances that increase the flavor and aroma of foods. They are used because they balance, combine, and enhance the characteristics of other flavors. Among the best-known flavor enhancers is monosodium glutamate, which is found in many Ecuadorian products such as chicken, meat, or vegetable concentrates (chicken or meat broth powders, Chinese sauce, seasoning, marinades, etc.); these appear and enhance the flavor of meat, chicken, fish, and vegetables in cooked dishes, preserves, creams, snacks and in turn provides a false flavor to foods that do not have the same, and thus, you can cheat the lack of quality ingredients.

Healthy diet

A healthy diet consists of giving the body the amount of food necessary for the development that it can ingest. A healthy diet is one of the main factors in maintaining and caring for good health throughout life. Inadequate nutrition is one of the causes of the appearance of some non-communicable diseases (NCDs), such as cardiovascular diseases, cancer, or diabetes mellitus. In Latin America, a healthy diet is promoted to reduce obesity rates by consuming fruits, vegetables, legumes, and vegetable oil, limiting animal fats, preferably meat, fish, turkey, chicken, and low-fat milk, and avoiding salt and sugar.⁽¹⁷⁾

Types of diet

Ovo Lacto Vegetarian Diet

The ovo lacto vegetarian diet is one of the most practiced by some people since it does not contain animal foods but uses eggs, dairy products, and honey as food. Seeds, cereals, and grains are also integrated into this diet. It is advisable to consume at least two servings of vegetables and greens a day, three servings of fruits, three to five servings of vegetables a week combined with fruits to increase the absorption of iron, and can also be combined with cereals so that the proteins are of higher biological value. Suppose the requirements of primary nutrients still need to be met. In that case, it is recommended to take supplements of vitamin B12, calcium, vitamin D, and foods rich in minerals and vitamins, especially during the winter and in exceptional

cases such as childhood, adolescence, and menopause. Since animal foods are not consumed, there is a specific deficit of nutrients in the body; therefore, the use of these supplements is recommended.⁽¹⁸⁾

Vegetarian Diet

Vegetarian diets are somehow preventive for certain types of diseases, such as cancer, since they have a lower incidence of colon, breast, and prostate disease. In this type of people, it has been observed that the levels of leukocytes are elevated, which increases the possibility of attacking cancer cells. It is also beneficial to avoid cardiovascular diseases because there is a decrease in the consumption of saturated fats and cholesterol. Therefore, it is diagnosed as low in fat but rich in complex carbohydrates and fiber.⁽¹⁹⁾

Mediterranean diet

The Mediterranean diet is one of the most widely used diets for people with heart problems. It began in the 1960s with the observation that coronary heart disease caused fewer deaths in Mediterranean countries, such as Greece and Italy, than in the United States and northern Europe. Subsequent studies revealed that the Mediterranean diet reduces risk factors for cardiovascular disease.⁽²⁰⁾

Therefore, this diet can be defined as a diet based on the daily consumption of vegetables, fruits, whole grains, and healthy fats and the weekly consumption of fish, poultry, beans, and eggs. Moderate portions of dairy products and limited consumption of red meat. Olive oil plays a vital role in this diet, as it provides monounsaturated fat and helps reduce total cholesterol and low-density lipoprotein LDL or bad cholesterol. Nuts and seeds are also an essential part of these fats.⁽²⁰⁾

PyramidThe food pyramid's main objective is to establish a balanced diet; nutrients are not presented alone, so they need to be part of supplies that contain them in quantity and combination. For this reason, it is important to choose different food products that can meet the body's needs and, therefore, are grouped into families located in different steps with the appropriate portions and the recommended frequency. It is essential to know that this nutritional tool improves people's lifestyles and excludes alcoholic beverages such as beer and wine that have been eliminated. "The presence of processed meat, sweets and pastries in the pyramid does not mean that they are part of a balanced diet; on the contrary, they are included to show that, if consumed, they should be consumed occasionally".⁽¹¹⁾

Nutritional Dish

The nutritional plate is intended to help achieve a balanced and nutritious diet. It is beneficial for the body to have healthy and balanced foods, whether served in a bowl or packed to take along for a snack or lunch. The plate is made up as follows: $\frac{1}{2}$ should contain fruits and vegetables, $\frac{1}{4}$ of whole grains such as barley, quinoa, oatmeal, brown rice, etc., which have a moderate effect on the blood, $\frac{1}{4}$ of protein such as chicken and fish, etc. mixed with salads.

Carbohydrates

Carbohydrates are composed of three elements: hydrogen, carbon, and oxygen, and their primary function is to provide energy to the body; they also provide fiber, a substance necessary for proper digestion, since the recommended consumption of carbohydrates is represented by 45 % and 65 % of calories. Two thousand daily calories should be consumed, and between 900 and 1,300 are represented by calories. This refers to 225 and 325 grams per day. Within the nutritional plate, they are represented by 25 % of 100 % of the plate.⁽²¹⁾

Water

Water is the primary component of the human body. It is essential for the physiological processes of digestion, absorption, and proper elimination of non-digestible metabolic wastes, as well as for the correct structure and function of the human body since the need to drink water depends on several factors such as physical activity, age, state of health and the temperature of the environment.

Vegetables

Vegetables are plants of herbaceous edible origin, which are usually produced in gardens or small fields, while greens are an element of vegetables whose characteristic is the green color; these foods are rich in vitamins and minerals that help the body to have an optimal development and a healthier food life.

Physical Activity

Physical activity is performed frequently once people adapt to a good lifestyle. The WHO defines physical activity as a bodily movement produced by the muscles in any activity requiring a light or intense energy expenditure. In addition, it has been observed that lack of exercise is the fourth leading risk factor for mortality worldwide. It is essential to mention that inactivity can have substantial health consequences, such as obesity,

diabetes, and diseases related to cardiac function.⁽²²⁾

Physical activity should not be confused with exercise. The WHO states that physical activity must be planned, varied, sequential, orderly, repetitive, and performed with an objective related to improving or maintaining the development of the human body. Socially, everyone should increase physical activity; therefore, it has a population-based, multisectoral, multidisciplinary, and culturally appropriate perspective.⁽²²⁾

Among the benefits of physical activity are the reduction of the risk of hypertension and cerebrovascular accidents and improved bone and functional health; in addition to improving the cardiorespiratory system, it is part of the caloric balance and improves weight control in the body. It is essential to understand that it also contributes beneficially to the mental health of people and even the emotional part as it allows the body to relieve its tensions and have optimal development and functioning.⁽²³⁾

Physical activity has been related to the reduction of depression and anxiety; it can have psychological and social benefits in the lives of people who practice sports or do physical exercise as it helps in the construction of good self-esteem, the creation of a good image, and improves their quality of life. Stress at work, personality disorders, social anxiety, etc. These illnesses can be overcome with physical activity, psychological treatment, and improved nutrition to obtain optimal health.^(22,23)

Gallardo,⁽²⁴⁾ in his food project called “Food and healthy habits guide in the workplace for the administrative staff of the Medical Systems of the San Francisco de Quito University” (SIME-USFQ), indicated that a large part of the adult population spends 8 hours or more in the workplace. The WHO establishes that the workplace is essential for promoting health and adopting lifestyle changes in the adult population. The knowledge and practices of administrative and community personnel are limited, and there needs to be more information regarding healthy eating and physical activity during working hours; however, this sector’s dietary attitudes vary. This is why the present work intends to identify the eating habits that put the health and economy of the community at risk by having an inadequate diet. It is also intended to be used to identify food in general.

Espín,⁽²⁵⁾ in his review, mentions that the objective of this study was to determine the eating habits and nutritional status of the workers of a dairy company in the north of Ecuador. The research methodology was observational, descriptive, and cross-sectional, using a survey through a questionnaire with sociodemographic and anthropometric variables to determine the nutritional status and the frequency of consumption to identify eating habits. The results report a preeminence of male sex and mestizo ethnicity among the workers, with an age range between 30 and 60 years. They conclude that body mass index and waist circumference increase disproportionately with advancing age and eating habits due to excess and imbalance in food.

The objective of Gallegos’ research⁽¹²⁾ was to identify the relationship between nutritional status, eating habits, and socioeconomic level of adult men and women in the Province of Loja, Canton Gonzanamá, Nambacola parish. For this purpose, a cross-sectional study was carried out with a qualitative-quantitative approach and a descriptive and field level, where food habits and socioeconomic level were identified as factors that could alter the nutritional status of this ethereal group, formed by a sample of 88 people, which was selected according to inclusion and exclusion criteria. The main results indicated that the incidence of average weight was 51 % and of overweight and obesity 49 %, with women having the most significant impact. Regarding eating habits, 42,05 % of the population presented a diet that needs improvement.

CONCLUSIONS

Adopting correct eating habits and a balanced diet is essential for long-term health. Promoting mindful eating, including fresh and nutritious food choices, improves physical well-being and positively influences mental and emotional health. Nutrition education is critical to empowering people to make informed decisions about their diet, especially in an environment where ultra-processed foods are available. Encouraging these habits from an early age can have a lasting impact, helping to prevent chronic diseases and improving quality of life. In addition, public health policies must support access to adequate nutritional information and promote environments that facilitate healthy food choices. In this way, a healthier society that is aware of the importance of food in overall well-being can be built.

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