

## Relationship Between Healthy Diet And Prevalence Of Obesity Among Adults

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### ABSTRACT

*This study aims to analyze the relationship between healthy eating and the prevalence of obesity in adults, with reference to various literature studies. Obesity has become a significant global health problem, which is associated with an increased risk of chronic diseases such as type 2 diabetes, hypertension, heart disease, as well as some types of cancer. Furthermore, obesity also contributes to physical and cognitive disabilities in adults, especially among older adults. Although weight loss can reduce this risk, there are concerns among healthcare providers about the potential risks that can arise from weight loss, such as loss of muscle mass and bone density. Intentional weight loss has been shown to be effective in improving glycemic control, reducing cardiovascular risk factors, and improving physical function, but it should be done with close supervision. A healthy diet, including a balanced intake of macronutrients, as well as essential micronutrients such as vitamins D and B-12, is essential in reducing the prevalence of obesity and maintaining a healthy body. The study emphasizes the importance of health policies that strengthen access to nutritious food and educational programs that focus on dietary changes and increased physical activity*

**Keywords :** Adult, diet, healthy, obesity, prevalensi,

### BACKGROUND

Obesity is a global health problem that has been increasing since 1975, as reported by the World Health Organization (WHO) (Nittari et al., 2021). The increase in the prevalence of obesity is influenced by a variety of factors, including genetic, environmental, social, economic, psychological, and biological (Masrul, 2018). Genetically, some individuals have a tendency to become obese due to variations in genes that affect metabolism and appetite. Environmental factors, such as urbanization and easy access to fast food that is high in calories but low in nutrients, also contribute to increasing the risk of obesity. Stress and emotional disturbances can trigger unhealthy diets, while low economic status often limits access to nutritious food and exercise facilities (Faith & Kral, 2020). In addition, changes in global diets characterized by increased consumption of processed foods and sugary drinks have played a major role in increasing daily calorie intake. Biologically, obesity is also associated with hormonal disorders,



such as insulin resistance and metabolic dysfunction, which worsen the body's condition.

Obesity management requires a holistic approach that includes the promotion of healthy lifestyles, policies that support access to nutritious food, and appropriate medical interventions (Silalahi et al., 2024). Public education, especially in schools and communities, is very important to increase awareness of the importance of maintaining an ideal weight (Doak et al., 2020). A healthy diet that includes vegetables, fruits, whole grains, as well as foods low in saturated fat, sugar, and salt plays an important role in weight management and the prevention of chronic diseases such as type 2 diabetes and heart disease. In contrast, excessive consumption of fast food, high-calorie snacks, and sugary drinks contributes significantly to an increase in obesity (Mititelu et al., 2024). For this reason, policies that facilitate access to healthy food are needed, such as subsidies for nutritious food and restrictions on unhealthy food advertisements. The integration of health programs that encourage an active lifestyle and healthy food consumption in schools and communities is expected to encourage behavior change, reduce the prevalence of obesity, and improve the quality of life of the community as a whole (Syurrahmi et al., 2023).

The increasing prevalence of obesity among adults is becoming an increasingly urgent global public health problem (Wyatt et al., 2021). Many individuals still choose foods that contain high amounts of calories, sugar, and saturated fat, which are at risk of leading to obesity as well as various other related diseases, despite various efforts to promote a healthy diet (Buttar & Ravi., 2022). Socio-economic factors also exacerbate this condition, as individuals with low economic status often have difficulty accessing healthy foods and are more likely to consume cheap but low-value foods. The level of knowledge about nutrition and its impact on long-term health also influences eating behavior, so many individuals ignore the importance of healthy food consumption (Mulyani et al., 2020). The fast-paced modern lifestyle encourages the consumption of ready-to-eat and processed foods, which further exacerbates the obesity problem (Thike et al., 2020). This study aims to identify the relationship between healthy eating and obesity prevalence, as well as the factors that influence food choices, in order to provide deeper insights into the development of more effective obesity prevention strategies.

The information presented in advertisements rarely highlights the calorie content or nutritional imbalances of these foods, leading many individuals to become trapped in a cycle of unhealthy eating habits, contributing to the rising prevalence of obesity and chronic diseases. Additionally, the lack of nutrition education exacerbates the accessibility of unhealthy food choices, making it difficult for individuals to make informed decisions. In this context, there is an urgent need for public health initiatives that not only raise awareness about the importance of a balanced diet but also promote healthier alternatives, such as stricter regulations on food advertising and community programs that encourage cooking and consuming whole foods, to foster healthier eating habits and improve overall public health. Irregular eating patterns and overeating habits,

especially at certain times when the pressure of work or daily activities makes individuals feel stressed and seek instant gratification from food, also exacerbates this situation (Reuben., 2022).

Excessive consumption patterns of fast food and high-calorie processed snacks trigger weight gain, increase the risk of obesity, and reduce the intake of essential nutrients such as vitamins, minerals, and fiber that the body needs to function optimally (Kostecka, 2024). Low public awareness of the importance of nutritional balance as well as the long-term impact of unhealthy diets exacerbates this condition, especially in urban environments where access to fast food is easy with aggressive promotions that encourage uncontrolled dietary changes. Low-income groups face more challenges because access to healthy foods, such as fresh fruits and vegetables, is often limited and unaffordable, while processed foods high in sugar, salt, and saturated fat are more accessible, increasing the risk of obesity in this group (Pintakami, 2023). Comprehensive solutions are needed through policies that support the affordability and availability of healthy food, education on balanced diets and calorie control, and the development of public infrastructure such as parks and gyms to encourage physical activity. Collaboration between the government, the private sector, and local communities is essential to create an environment that supports healthy food choices and active lifestyles, so that people can reduce the risk of chronic diseases and achieve a better quality of life in a sustainable manner.

The increased risk of chronic diseases such as type 2 diabetes, hypertension, and other metabolic disorders is increasingly affected by unhealthy diets and sedentary lifestyles, exacerbated by a lack of public knowledge about nutrition and the long-term impact of poor diets (Yusran et al., 2023). Environmental factors are also a challenge, such as the lack of open space and sports facilities that limit physical activity, as well as the difficulty of accessing healthy food, especially in low-income areas (Yusran et al., 2023). This condition triggers a surge in cases of obesity and related diseases, so a comprehensive solution is needed that includes policies to increase the availability and affordability of healthy food, effective health education, and the development of infrastructure that supports physical activity (Syafriana et al., 2018). Good nutrition education plays an important role in shaping public awareness about the importance of a balanced diet and food choices that support long-term health, encouraging people to make smart decisions regarding their daily consumption. The procurement of public facilities such as parks and bicycle paths can also facilitate physical activity, create a sustainable healthy lifestyle and reduce the risk of chronic diseases in the future.

The program needs to reach people from all walks of life, including groups with limited access to nutrition information, as well as provide training on how to read nutrition labels, manage food portions, and take advantage of affordable healthy food resources. Proper knowledge allows individuals to be more aware of their food choices and their impact on their health and quality of life in the long run. A healthy diet is not only important to avoid obesity, but also plays a role in the prevention of various obesity-related diseases, such as type 2 diabetes,

hypertension, and heart disease (Angely et al., 2021). Scientific research has proven that a diet rich in fiber, plant-based protein, and healthy fats, such as those found in nuts, seeds, and fatty fish, can lower the risk of metabolic diseases, control blood sugar levels, and maintain an ideal weight. Consuming foods that contain antioxidants, vitamins, and minerals, which are commonly found in fresh fruits and vegetables, can also strengthen the immune system and improve overall health.

This healthy diet not only helps maintain energy balance, but also plays a role in improving the quality of life by reducing the risk of chronic diseases that can affect organ function and quality of life in the long term. The implementation of a healthy diet is a strategic step in the prevention and management of obesity among adults. A balanced diet, coupled with an active lifestyle, can effectively regulate the body's metabolism and help prevent excess weight gain. Programs that educate the public about the benefits of healthy diets, as well as provide access to affordable nutritious food, are essential to support obesity prevention efforts. People who are used to choosing healthy foods tend to be better able to control calorie intake and avoid consuming foods high in saturated fat, sugar, and salt that can trigger obesity and health complications. The adoption of healthy diets should be a priority in public health policy as part of a long-term effort to reduce the prevalence of obesity and related diseases. A healthy diet is important in obesity management, but it is not the only factor that affects this condition. Adequate physical activity, stress management, and good sleep patterns also play a big role in maintaining the body's energy balance and supporting optimal metabolic function.

Regular exercise helps burn calories, improve heart fitness, and reduce stress, while adequate and quality sleep is important for the body's recovery process and hormone regulation. Stress management also plays an important role, because prolonged stress can trigger unhealthy eating habits and increase body fat accumulation, especially in the abdominal area. The combination of a healthy diet and an active lifestyle is considered the most effective approach to prevent obesity and its health complications. A holistic healthy lifestyle should be applied at the individual and community level, which includes healthy eating habits, increased physical activity, stress management, and good sleep patterns. Public health policies that support this approach can create an environment that makes it easier for people to live a healthy lifestyle, as well as raise awareness about the importance of maintaining a balance between calorie intake and energy expended for long-term health. Public policy plays an important role in efforts to prevent obesity through the creation of an environment that supports a healthy lifestyle. Governments can take strategic steps, such as regulating unhealthy food advertisements, particularly those targeting children and adolescents, to reduce exposure to the promotion of high-calorie and low-nutrient foods.

Providing wider access to nutritious food for underprivileged communities, through support for local markets or subsidies for nutritious products, is a strategic step to reduce nutritional inequality. Education campaigns about nutrition and health need to be strengthened by conveying clear information

about the importance of healthy diets, how to read nutrition labels, and the negative impact of unhealthy food consumption on long-term health. Educational programs that target vulnerable groups, such as low-income families, can help them take advantage of healthy food resources and make more informed food choices. Policies that support healthy diets and create an environment that facilitates access to nutritious options are expected to reduce obesity rates and encourage changes in people's behavior towards healthier lifestyles. Research on the link between healthy eating and obesity prevalence among adults is important to support the formulation of evidence-based and relevant policies. A deep understanding of the influence of food choices on obesity risk allows for the formulation of more effective strategies in reducing the prevalence of obesity in the community.

The results of the study have the potential to provide valuable insights into the role of healthy eating in obesity prevention, including its impact on related health risk factors such as blood sugar levels, cholesterol, and blood pressure. The long-term impact of proper nutrition intake can be the foundation for the development of more effective public health initiatives. Awareness campaigns on the importance of a balanced diet in maintaining health and policies that expand access to nutritious food, especially for vulnerable groups, are important steps in driving change. The findings of this study can be the basis for designing programs that facilitate behavior change both at the individual and community levels to form healthy eating habits. More targeted interventions, such as more effective nutrition education and adjustments to the food environment, can make it easier for people to choose healthy foods. In the long term, the strategy is expected to be able to reduce the prevalence of obesity, improve public health, and improve the quality of life of the community as a whole.

## **METHODOLOGY**

This study uses a literature study approach to analyze the relationship between healthy eating and obesity prevalence among adults. This study collects and analyzes various relevant previous studies regarding diet, obesity, and the factors that affect both. Data sources are obtained from scientific articles, health journals, books, World Health Organization (WHO) reports, as well as related research that has been published in recent years. The literature selection process is carried out by looking for sources that have high credibility and relevance, using academic databases such as Google Scholar and other health journal databases. The main focus of this literature study is to identify healthy diets and how they relate to obesity risk, as well as to examine other factors that can influence obesity prevalence, such as socio-economic factors, education, and nutritional knowledge. Thematic analysis is used to identify patterns and themes that emerge from previous studies, which are then synthesized to build a more comprehensive understanding of the relationship between healthy eating and obesity. The study also aims to evaluate obesity prevention policies and programs that have been implemented in various countries and explore their effectiveness. This literature study is expected to provide more in-depth and

evidence-based insights into the factors that affect obesity, as well as recommendations for more effective prevention strategies.

## **RESULTS AND DISCUSSION**

Overweight and obesity have a strong association with increased risk of various chronic diseases that often occur in the elderly, such as hypertension, type 2 diabetes, dyslipidemia, heart disease, several types of cancer, and arthritis. Obesity causes significant changes in the body, one of which is insulin resistance, which increases a person's potential for diabetes (Ardiani et al., 2021). In addition, excess body fat affects cholesterol and triglyceride levels, worsening dyslipidemia and increasing the risk of cardiovascular disease and vascular disorders (Arief et al., 2023). It also triggers systemic inflammation, which contributes to the emergence of various cancers, such as breast, colorectal and prostate cancer (Mesensy & Putri, 2024).

Gaining excess weight also impacts joint health, especially knees and hips, where the added load can trigger osteoarthritis and cause long-term damage to the joints, restrict movement, and reduce quality of life. Therefore, the prevention and management of obesity is crucial to reduce the burden of chronic diseases in the elderly and improve their well-being (Kosasih et al., 2024). Studies show that the elderly with a high body mass index (BMI), large waist circumference, and excess fat mass experience a faster decline in physical function and are more prone to early disability compared to those of normal weight (Anggraini & Hendrati, 2024). According to research, at the age of 70, obese men are predicted to spend the rest of their lives with a disability, while obese women will spend half of their lives under the same conditions. This figure is much higher compared to men and women without obesity, who only experience disability in a fifth and a third of the rest of their lives, respectively. Obesity also accelerates cartilage damage, decreases exercise capacity, and increases the prevalence of chronic diseases, which ultimately worsens physical disability (Vincent, 2020). In addition, obesity has been shown to be associated with an increased risk of cognitive decline. Older people with high BMI and large waist circumference are more prone to developing dementia, and obesity in middle age has also been identified as a major predictor of dementia in old age (Davis et al., 2022).

Weight loss in the elderly poses a dilemma, because while it can reduce the risk of heart disease and diabetes, it also risks leading to loss of muscle mass, decreased bone density, and increased physical fragility (Ablett et al., 2019). The risk of cardiovascular disease and obesity-related diabetes in the elderly is lower than in the middle-aged group, so weight loss is not always recommended. Few small studies show improvements in blood sugar and blood pressure control (Zomer et al., 2023), but long-term studies such as the Look AHEAD trial\* are still needed to understand their impact on quality of life and risks such as decreased physical function. Weight loss programs for the elderly must be carefully planned, involving strength training, adequate nutritional intake, and emotional support so that the benefits do not sacrifice quality of life and well-being.

Weight loss in older adults, although it has not been specifically tested for its impact on disability, has shown benefits on physical function in some studies. When weight loss is combined with physical activity such as aerobic and strength training, it is shown to significantly improve muscle strength and physical performance. Weight loss without physical activity does not have the same impact. In the Arthritis, Diet, and Activity Promotion Trial, a 5% weight loss followed by aerobic and strength exercise increased 6-minute distance by 15% and accelerated stair climbing time by 23% over 18 months. In the Physical Activity, Inflammation, and Body Composition Trial study, weight loss between 10% and 12% accompanied by aerobic and strength exercise resulted in an approximately 25% increase in knee strength and improvement in muscle quality, despite a decrease in muscle mass over a 6-month period. The results of this study indicate that weight loss combined with physical exercise can improve physical function and reduce the risk of disability in older adults, who generally experience a decline in muscle strength and physical capacity as they age.

Regular aerobic exercise is highly recommended for adults, especially older ones, as it provides great benefits for physical and mental health (Keysor., 2023). Aerobic activities such as walking, swimming, or cycling increase aerobic capacity, strengthen the heart, and improve overall endurance (Aryanti et al., 2022). This exercise also reduces the risk of cardiovascular disease, type 2 diabetes, as well as some types of cancer, which are more common in older age groups. Regular physical activity helps reduce functional limitations, maintain mobility, and support independence in daily life. The combination of aerobic exercise and healthy weight loss can improve overall quality of life, reduce the risk of injury, and delay cognitive decline. Recommendations from the American College of Sports Medicine and the American

Although obesity rates increased from 1994 to 2000, advice for weight loss has actually decreased, especially among older adults, with only one-third of those receiving the recommendation. Based on research in the Health, Aging, and Body Composition Study, weight loss is recommended for about 47% of participants according to guidelines from the National Heart, Lung, and Blood Institute, but only 38% of those recommended reported having attempted weight loss. About 40% of men and women aged 60 and over in the 2005-2006 NHANES survey reported having tried to lose weight in the past year. These findings reflect the gap between professional recommendations and actions taken, which may be due to uncertainty regarding the benefits and risks of weight loss in this age group, as well as the need for greater support to help them achieve their weight loss goals in a safe and effective way. The position statement from the National Heart, Lung, and Blood Institute emphasizes that age should not be a barrier in the treatment of obesity in adults, including in older age groups. Weight loss in older adults needs to be evaluated based on its potential benefits, both in terms of improved daily functioning and a reduced risk of cardiovascular disease in the future.

Individual motivation to lose weight is also an important factor in determining the success of this intervention (Putri., 2022). Weight loss programs

must be careful not to have a negative impact on bone health or other aspects of nutritional status that can affect long-term quality of life (Rizolli et al., 2024). This is also in line with recommendations from the American Society for Nutrition and Obesity Society, which emphasize the importance of an individualized approach for older adults, taking into account comorbidities and bodily functions that may influence the decision to lose weight. Weight loss at this age should be seen as a step to reduce existing health risks, while maintaining a balance so that muscle mass, bone density, and nutritional conditions are well maintained. Medical evaluation of individuals with obesity should include a variety of factors, including the age of onset of obesity, fluctuations in weight throughout life, as well as events associated with weight gain, such as chronic conditions or the use of certain medications. It is also important to evaluate any weight loss attempts that have been made, both successful and unsuccessful, as well as any complications that may arise from such efforts.

The weight loss readiness evaluation process includes an assessment of personal reasons, motivation, and available social support, as well as an understanding of the risks and benefits (Elfhag & Roosner., 2021). Another important aspect is the readiness to overcome any obstacles that may arise during the weight loss process, including physical and psychological factors. The goal of a weight loss intervention is to achieve a loss of about 5% to 10% of the initial body weight within six months, followed by efforts to maintain that weight in the long term (Rachma et al., 2024). These interventions should involve dietary changes, such as low-energy diets, and increased physical activity in accordance with the individual's abilities. A healthy diet has a significant association with a decrease in the prevalence of obesity among adults, especially through the consumption of foods rich in fiber, vitamins, minerals, and low in saturated fat and added sugars (Huth et al., 2023).

This diet not only helps maintain an ideal weight, but it also supports metabolism and overall health. Fiber promotes satiety, while healthy fats, such as unsaturated fats, play a role in preventing visceral fat buildup associated with obesity and cardiovascular disease. Adults who consistently adopt a healthy diet tend to be better able to maintain an ideal weight compared to those who frequently consume high-calorie but low-nutrient foods, such as processed and fast food, which can trigger fat accumulation as well as increase the risk of insulin resistance and chronic inflammation. Studies show that a nutrient-rich diet is effective in reducing and preventing excess weight gain, as well as reducing the risk of obesity-related chronic diseases, such as type 2 diabetes and heart disease (Widiastuti et al., 2024). The combination of a healthy diet with an active lifestyle and good stress management is one of the most effective ways to control obesity in adults (Hijriana et al., 2022).

Consumption of processed foods, fast food, and sugary drinks has been shown to increase the risk of obesity due to its high calorie content, saturated fat, and added sugars, while its fiber and nutrient content is low. Research shows that individuals who consume these foods frequently tend to have a higher body mass index (BMI) and a greater risk of obesity. A diet rich in fruits, vegetables,



whole grains, and lean protein sources is associated with weight loss and improved overall health (Suprapti., 2020). These healthy foods support a better metabolism, increase satiety, and help reduce excess calorie intake. Nutritional awareness and access to healthy foods also influence individual eating habits. Those who have a good understanding of nutrition and adequate access to healthy foods tend to be better able to make choices that support health. Limited access in some settings as well as unhealthy eating habits, such as overeating or emotional eating, exacerbate the risk of obesity. Efforts to improve nutrition education and access to healthy food are important steps in reducing the prevalence of obesity in the community. The results of the study show that the combination of a healthy diet with regular physical activity is more effective in reducing the prevalence of obesity (Nabila et al., 2024).

Adults who follow a healthy diet and exercise regularly are more successful at maintaining their ideal weight and overall health, as a balanced diet helps regulate calories and nutrients, while exercise improves metabolism, fat burning, and muscle mass. This combination not only supports weight control, but also reduces the risk of chronic diseases such as heart and diabetes, while improving sleep quality, mental health, and preventing loss of muscle mass (Reswari et al., 2024). Intentional weight loss through a healthy diet can lower the risk of obesity, improve insulin sensitivity, control blood pressure, and reduce visceral fat, with the added benefit of increased energy and better mood (Himmah, 2020). According to the National Heart, Lung, and Blood Institute, age should not be a barrier in the treatment of obesity, but weight loss programs in the elderly should consider the individual's health condition so as not to harm bone mass or nutritional status (Vilareal et al., 2020). Changes in diet and physical activity, along with stress management and social support, are essential for long-term success. In addition, access to healthy food through policies such as nutritious food subsidies and fast food advertising regulations is urgently needed to create an environment that supports healthy lifestyles, reduces obesity rates, and improves people's welfare.

## **CONCLUSION**

Healthy diets and the prevalence of obesity in adults show that a balanced diet, rich in essential nutrients and low in calories from saturated fat and added sugars, plays a major role in preventing and reducing the risk of obesity. A healthy diet combined with regular physical activity can help maintain a healthy weight and avoid obesity. In addition, socio-economic factors and access to healthy foods also affect the prevalence of obesity, so it is important to ensure that each individual has adequate access to nutritious food options. A healthy diet not only contributes to the prevention of obesity, but also improves the quality of life and reduces the risk of various chronic diseases such as diabetes, hypertension, and heart disease. The implications of this study include the need for more in-depth policies related to the promotion of healthy diets and increased access to nutritious foods, especially for high-risk groups and those with socio-economic limitations. Education programs and interventions that focus on lifestyle changes, including diet and physical activity, must be further expanded,

both through health institutions and governments, to reduce the prevalence of obesity and related diseases in the community.

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