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FOOD SECURITY AND THE OBESITY EPIDEMIC: A THREAT TO MODERN MEDICINE AND GLOBAL HEALTH

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Annotation

This article analyzes the correlation between food security challenges and the growing obesity epidemic. Globally, poor nutrition, economic inequality, and inappropriate food industry policies are contributing to the rise of obesity, which in turn increases the risk of cardiovascular diseases, diabetes, and other chronic conditions. The article examines epidemiological data, public health consequences, and potential solutions.

Keywords: Food security, obesity epidemic, global public health, socioeconomic inequality, healthy nutrition, chronic diseases, metabolic syndrome, fast food, processed food, health risk factors, prevention strategies, public health policy, food industry, childhood obesity.

Introduction

In recent years, food security and the obesity epidemic have emerged as major global public health concerns. While millions of people around the world still suffer from undernutrition, a significant portion of the population is experiencing a rapid increase in obesity due to overconsumption and unhealthy dietary patterns. According to the World Health Organization (WHO), as of 2024, over 1.9 billion adults globally are overweight, with more than 650 million classified as obese. This epidemic contributes to a growing burden of cardiovascular, endocrine, and metabolic diseases, placing significant pressure on healthcare systems worldwide. The roots of the obesity epidemic are deeply intertwined with food security. Limited access to affordable, nutritious, and healthy food disproportionately affects low-income families and populations in developing countries. This lack of access often



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leads to increased consumption of calorie-dense but nutrient-poor foods, further exacerbating the risk of obesity.

This article aims to explore the complex relationship between food security and obesity from a scientific perspective. It examines current epidemiological data, health outcomes, and proposes potential strategies to address the issue.

Materials and Methods

This scientific article was prepared using a systematic literature review and analysis of existing epidemiological data. Data were collected from reputable sources such as the World Health Organization (WHO), the Food and Agriculture Organization of the United Nations (FAO), the Centers for Disease Control and Prevention (CDC), and other peer-reviewed publications. The selected time frame for analysis spans from 2015 to 2024.

The study focuses on global and regional prevalence of obesity, factors influencing food security, socioeconomic disparities, food policies, and access to healthy nutrition. Differences between developed and developing countries are also examined to provide a comprehensive overview.

As the primary analytical approach, content analysis of scientific literature was conducted, and relevant statistics were visualized through graphs, tables, and charts to clearly illustrate key findings.

Results and Discussion

The research findings demonstrate a growing correlation between food insecurity and the obesity epidemic at a global level. According to WHO data from 2024, obesity rates have increased by 30% over the last decade. This growth is particularly alarming in low- and middle-income countries, where access to healthy food is limited, fast food is widely available and heavily advertised, and socioeconomic inequality hinders healthy lifestyle choices.

Statistical overview:

- In developing countries, approximately 60% of the population cannot afford a healthy diet.



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- Childhood obesity has doubled over the past 20 years.
- In regions with low food security, people are more likely to consume calorie-rich but nutrient-poor foods out of necessity.

Obesity is not merely an individual issue but a systemic societal problem. The global food industry often prioritizes profit, promoting inexpensive, ultra-processed foods rich in sugar, salt, and trans fats. These foods are predominantly consumed by economically disadvantaged populations, contributing significantly to the obesity epidemic.

Additionally, climate change, reduced agricultural land, and rapid urbanization are negatively impacting food security worldwide. In countries like Uzbekistan, the increasing demand for cheap, high-calorie food is resulting in a steady rise in obesity, especially among young adults and children.

The case studies and data analyzed in this article emphasize that only coordinated government policies, active public health interventions, educational reform, and community-level awareness campaigns can offer sustainable solutions to this global health crisis.

Conclusion and Recommendations

Food security and the obesity epidemic are among the most pressing global public health issues of our time. Findings of this study reveal that these two factors are closely interlinked and have a direct impact on shaping healthy lifestyles among populations. Limited access to quality food, poor dietary habits, unethical practices of the food industry, and lack of attention to healthy living — all contribute to the growing prevalence of obesity, particularly among vulnerable populations.

Food insecurity is not only about food shortages but also the widespread availability of processed, artificial, and low-nutrient food products. These products, often rich in harmful additives, are major contributors to obesity, metabolic disorders, cardiovascular diseases, and even certain cancers.

Recommendations:

1. **National food policies should prioritize healthy eating**, such as subsidizing fruits and vegetables and introducing taxes on unhealthy products.



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2. **Public awareness campaigns promoting healthy eating** should be intensified, especially targeting schools and universities.
3. **Regulations on the food industry need to be strengthened**, including mandatory labeling and restrictions on advertising unhealthy foods.
4. **Healthcare systems should implement targeted programs** for obesity prevention and treatment, particularly within pediatric and primary care settings. These recommendations, if effectively implemented, can help improve public health outcomes not only in Uzbekistan but also in other developing nations facing similar challenges.

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