



## UNHEALTHY DIET AND ASSOCIATED DISEASES AND THEIR PREVENTION: A SYSTEMATIC REVIEW

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<https://doi.org/10.5281/zenodo.19660810>

### Abstract

Unhealthy dietary patterns represent one of the leading modifiable risk factors contributing to global morbidity and mortality. Diets high in saturated fats, trans fats, added sugars, and sodium, combined with insufficient intake of fruits, vegetables, and whole grains, are strongly associated with non-communicable diseases (NCDs). This study aims to systematically analyze the relationship between unhealthy dietary habits and major chronic diseases, and to propose evidence-based preventive strategies. A systematic review methodology was employed using peer-reviewed databases. The findings indicate a strong correlation between poor nutrition and obesity, cardiovascular diseases, type 2 diabetes mellitus, gastrointestinal disorders, and certain cancers. Preventive strategies such as dietary modification, public health interventions, and education programs are critical in reducing disease burden.

### Introduction

Non-communicable diseases (NCDs) account for approximately 74% of global deaths, with unhealthy diet being a primary contributing factor. Rapid urbanization, globalization, and lifestyle changes have significantly altered traditional dietary patterns, leading to increased consumption of ultra-processed foods.

According to the World Health Organization (WHO), excessive intake of salt (>5g/day), free sugars (>10% of total energy), and saturated fats significantly increases the risk of chronic diseases. Adolescents and young adults are particularly at risk due to aggressive marketing and accessibility of fast food.

This study aims to systematically evaluate diseases associated with unhealthy diets and identify effective prevention strategies based on current scientific evidence.[1,2,3,4,5]

### Methods

#### Study Design

This research follows a systematic review design in accordance with PRISMA guidelines.[6,7]

#### Data Sources

Scientific databases including PubMed, Scopus, Web of Science, and Google Scholar were used.[8,9,10]

#### Search Strategy

Keywords included: "unhealthy diet", "fast food consumption", "non-communicable diseases", "obesity", "cardiovascular diseases", "type 2 diabetes", and "dietary prevention".[12,13]

#### Inclusion Criteria

-Articles published between 2015–2025



- Peer-reviewed journal articles
- Studies focusing on human populations

#### **Exclusion Criteria**

- Non-English publications
- Case reports
- Animal studies

#### **Data Analysis**

Data were analyzed qualitatively, focusing on associations between dietary patterns and disease outcomes.[14,15]

#### **Results**

##### **1. Obesity**

Obesity prevalence has nearly tripled since 1975. Studies show that high consumption of ultra-processed foods increases obesity risk by 20–30%.[1]

##### **2. Cardiovascular Diseases (CVD)**

Dietary factors contribute to approximately 31% of cardiovascular deaths globally. High sodium intake is associated with hypertension, while trans fats increase LDL cholesterol levels.[16]

##### **3. Type 2 Diabetes Mellitus**

Unhealthy diets rich in refined carbohydrates and sugars significantly increase insulin resistance. Epidemiological studies show a 25% increased risk among individuals consuming sugary beverages daily.[17]

##### **4. Gastrointestinal Disorders**

Low fiber intake is linked to constipation, irritable bowel syndrome (IBS), and colorectal complications.

##### **5. Cancer**

Approximately 30–40% of cancers are linked to dietary factors. Processed meat consumption increases colorectal cancer risk by 18%.

#### **Discussion**

The findings confirm that unhealthy dietary habits are a major determinant of chronic diseases. A multi-sectoral approach is required to address this issue.[18]

#### **Prevention Strategies**

##### **1. Dietary Modification**

- Increase intake of fruits, vegetables, and whole grains
- Reduce consumption of processed foods and sugar

##### **2. Public Health Interventions**

- Food labeling policies
- Taxation on sugary drinks
- Regulation of food advertising

##### **3. Education and Awareness**

Nutrition education programs significantly improve dietary behaviors among adolescents.

##### **4. Physical Activity**

WHO recommends at least 150 minutes of moderate physical activity per week.

##### **5. Policy Implementation**

Government-level interventions are essential for sustainable health improvements.

### Conclusion

Unhealthy diets are a critical global health challenge contributing to the rising burden of non-communicable diseases. This systematic review highlights the strong association between poor nutrition and major chronic diseases. Comprehensive prevention strategies, including dietary improvements, policy interventions, and education, are necessary to reduce disease prevalence and improve public health outcomes

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