

# Impact of Social Media on Fast Food Consumption and Increased Bad Nutritional Habits: Systematic Review

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## Abstract

**Background:** Researchers now have unprecedented access to low-latency data at affordable prices thanks to social media's widespread acceptance and continuous use. Given how often food is discussed and uploaded on social media, nutrition research may find this to be of special interest. **Objectives:** To summarize current published evidence on the impact of social media on fast food consumption and increased bad nutritional habits. **Methods:** PubMed, SCOPUS, Web of Science, and Science Direct were systematically searched for relevant literature. Rayyan QRCI was employed throughout this comprehensive process. **Results & Interpretation:** We included six studies with a total of 10988 participants, and 5899 (53.7%) were females. The reported rate of using social media ranged from 72.9% [15] to 95.9% [17]. The average daily usage of social media and the choices and behaviours related to fast food were found to be strongly correlated. The activity that most negatively impacted children's eating habits was watching food videos. Due to the previously identified connections between conventional forms of food marketing and children's eating habits, food marketing is controlled or prohibited in the majority of Western nations. In general, social media has a negative impact on people's relationship with food and how they view their bodies.

**Keywords:** Social media, Fast food, Unhealthy food, Nutrient intake Systematic review.

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## INTRODUCTION

In 2021, almost 4 billion people will use social media globally [1], and social media is changing people's eating habits through news, posts, and advertisements on various platforms. Social media influencers are well-known content creators with large followings who promote goods and services in order to inspire others [2].

Social media influencers are fresh, independent external advocates who use postings, blogs, and tweets to influence audience behaviour. A social media influencer's popularity depends on their followers having a more favourable attitude towards buying the goods and companies they promote [3, 4].

Social media use is linked to eating problems and poor body perceptions, which primarily affect young users. Young adults who use social media and are

influenced by it have been shown to interact more negatively with their bodies and make unhealthy dietary choices [5]. Additionally, watching videos produced by social media celebrities on different social media platforms may have a negative impact on the health of the younger generation in the future due to changes in food habits, eating times, and sleeping schedules [6].

Through photographs and videos, social media also heavily promotes cultural norms of attractiveness and thinness, which can cause body shame and concern about how others perceive you [7]. Exposure to this kind of content is linked to body dissatisfaction in young individuals under the age of 25. This can result in compulsive physical activity coupled with extreme dietary restriction [8]. The desire to shed body fat in order to seem more in line with the slender feminine ideal may be motivated by these physical problems [9].

The use of social media significantly affects healthy young adults' dietary preferences and body image, according to a recent systematic study by Rounsefell *et al.*, [10]. As a result, it has been suggested that social media and eating habits are related. In this work, we offer a model that aims to explain how social media use and food cravings may be related. A strong, compulsive urge to eat a particular food is known as a food craving [11], and it is also characterised by a psychological and physiological motivational state that prompts consumption or absorption of the sought item [12].

Social media has given internet users the ability to communicate on a wide range of subjects, including weight loss and overall health, over the previous ten years. It is crucial to comprehend how social media affects eating disorders, nevertheless, given the ongoing rise of social media and its expanding impact. When choosing what to eat, for instance, consumers may unknowingly be influenced by social media messages. The main objective of this study is to summarize current published evidence on the impact of social media on fast food consumption and increased bad nutritional habits.

## **MATERIALS AND METHODS**

This Integrative Literature Review includes exploratory research with a quantitative approach (ILR). ILR is a technique for compiling previously published studies with the objective of synthesizing the evidence on a topic; it is frequently used in the health sciences to identify healthcare methods and determine innovations, enabling the application of evidence-based services, guaranteeing quality, and promoting patient safety.

Due to their reputation as reliable sources, PubMed and EBSCO Information Services were chosen as the search databases for the publications used in the study. One of the biggest online digital libraries, PubMed, was created by the National Center for Biotechnology Information (NCBI), a division of the National Library of Medicine of the United States.

Topics relating to eating disorders were utilized in creating the paper. The titles and abstracts of the founded articles were scrutinized.

## **SELECTION CRITERIA**

### **Inclusion Criteria**

The articles were selected based on their relevance to the project, which should include one of the following topics: eating disorders, social media, fast food, and bad dietary habits.

### **Exclusion Criteria**

All other articles that did not have one of these topics as their primary end, or repeated studies and review studies, were excluded.

### **Statistical Analysis**

No software was utilized to analyze the data. The data was extracted based on a specific form that contains the title of the publication, author's name, objective, summary, results, and outcomes. Double revision of each member's outcomes was applied to ensure the validity and minimize the mistakes.

During article selection, studies were double-reviewed, and their results were reviewed to ensure that we enrol the studies related to the objective of our study and to avoid or minimize errors in the results.

## **RESULTS**

### **Search Results**

A total of 210 study articles resulted from the systematic search, and 22 duplicates were deleted. Title and abstract screening were conducted on 188 studies, and 123 were excluded. 65 reports were sought for retrieval, and 4 articles were retrieved. Finally, 61 studies were screened for full-text assessment; 25 were excluded for wrong study outcomes, 27 for the wrong population type, and 3 articles were letters to the editors. Six eligible study articles were included in this systematic review. A summary of the study selection process is presented in Figure 1.

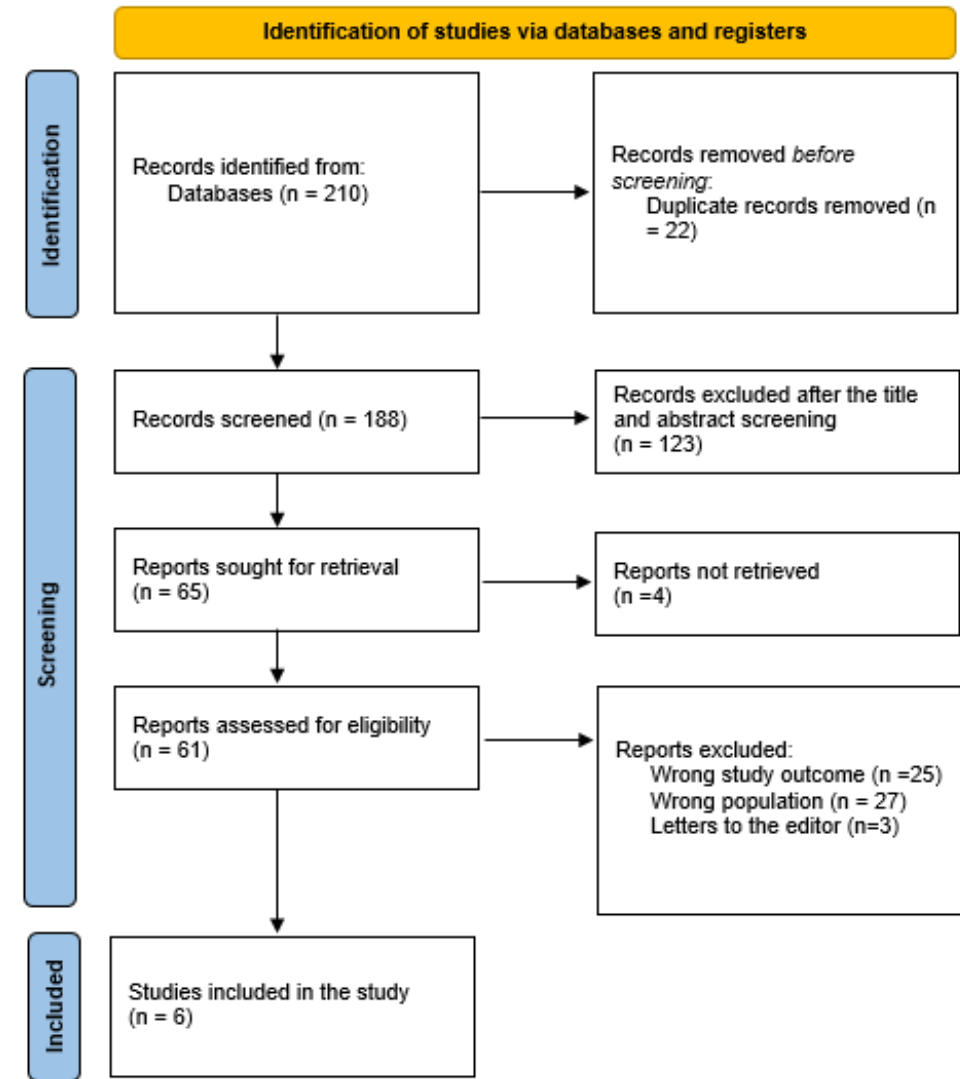


Figure 1: PRISMA flowchart summarizes the study selection process

**Characteristics of the included studies**

Table (1) presents the sociodemographic characteristics of the included study articles. Our results

included six studies with a total of 10988 participants, and 5899 (53.7%) were females. All of the included studies are cross-sectional studies [13-18].

**Table 1: Sociodemographic characteristics of the included participants**

Study	Study design	Country	Participants	Age	Females (%)
Alanazi <i>et al.</i> , 2022 [13]	Cross-sectional	Saudi Arabia	300	NM	242 (80.7%)
Smit <i>et al.</i> , 2020 [14]	Cross-sectional	Australia	453	8 to 12	238 (52.5)
Baldwin <i>et al.</i> , 2018 [15]	Cross-sectional	Australia	417	10 to 16	221 (53)
Gascoyne <i>et al.</i> , 2021 [16]	Cross-sectional	Australia	8708	12 to 17	4583 (52.6)
Al Ali <i>et al.</i> , 2021 [17]	Cross-sectional	USA	1001	20 ± 2.08	539 (59.2%)
Hutchison, 2023 [18]	Cross-sectional	Ireland	109	23 ± 2.47	76 (69.1)

Table (2) presents the clinical characteristics. The reported rate of using social media ranged from 72.9% [15] to 95.9% [17]. There was a strong correlation found between the average daily usage of social media and fast food selections and behaviours. Watching food videos had the worst impact on children’s dietary

behaviours. In most Western countries, food marketing is regulated or restricted as a result of previously noted links between traditional types of food marketing and children’s dietary practices. Overall, social media negatively affects people’s perception of their bodies and their connection to food.

**Table 2: Clinical characteristics and outcomes of the included studies**

Study	Population type	Rate of using social media	Main outcomes
Alanazi <i>et al.</i> , 2022 [13]	Children and adolescents	285 (95%)	There was a strong correlation found between the average daily usage of social media and fast food selections and behaviours. Individuals who enjoy fast food, eat it at restaurants, drink soda, prefer salty food over sweet food, and don't believe that seeing online ads for fast food encourages consumption were more likely to be heavy social media users.
Smit <i>et al.</i> , 2020 [14]	Children	NM	In most Western countries, food marketing is regulated or restricted as a result of previously noted links between traditional types of food marketing and children's dietary practices. Their research on the Consumption of Unhealthy Beverages suggests that social media influencers could also market food.
Baldwin <i>et al.</i> , 2018 [15]	Children	304 (72.9 %)	Children who engage with food companies more, especially through internet videos, have a higher likelihood of consuming harmful foods and beverages. It is the responsibility of social media firms to safeguard their most vulnerable users from harmful advertising.
Gascoyne <i>et al.</i> , 2021 [16]	Adolescents	NM	A high consumption of unhealthy drinks was linked to exposure to food or drink advertisements on social media at least once in the previous week, and a high consumption of unhealthy food and drinks was linked to liking or sharing a food or drink post at least once in the previous month (all $p < 0.01$ ). Males were the main drivers of the link between high consumption of harmful drinks and exposure to and participation in food and drink marketing; these correlations held true regardless of age.
Al Ali <i>et al.</i> , 2021 [17]	University students	960 (95.9%)	Social media is heavily used by university students in their daily lives, and many of them rely on these platforms for information about nutrition, exercise, and health. The Students Union and the Deanship of Students' Affairs can frequently encourage their healthy behaviours, such as a balanced diet and regular exercise, by using campus social media sites to spread health-related content.
Hutchison, 2023 [18]	General population	NM	The results of this study help to clarify how social media use among users negatively impacts people's perceptions of their bodies and their connection with food. Findings that challenge the notion that males are less affected by these issues than women are important because they suggest that further research on gender disparities needs to be done.

## DISCUSSION

Adolescents can choose their food and drinks without parental or school supervision these days. Teenagers, on the other hand, are frequently exposed to food and beverage advertisements, the majority of which promote unhealthy options. In the present study, the reported rate of using social media ranged from 72.9% [15] to 95.9% [17]. Most of the included participants were children, adolescents, and university students. These rates were extremely high regarding the daily use of social media. Between 2005 and 2019, the proportion of US adults using social media rose from 5% to 79%. Even on a worldwide scale, the rate of spread is

remarkable: in 2008, Facebook covered only 1.5% of the world's population; by 2018, that number had risen to about 30%. Social media's rapid transformations inevitably arouse concerns about potential drawbacks. In particular, one of the most crucial questions in the context of social media is whether these new communication technologies are detrimental to our mental health. We address the evidence for this critical subject in another piece [19].

We also found that most studies reported a strong correlation between the average daily usage of social media and fast food selections and behaviours.

Watching food videos had the worst impact on children's dietary behaviours. It's possible that videos are more compelling than other types of material because watching food brand films was linked to unhealthy food consumption, while interacting with brand profiles on Facebook was not. This could assist in explaining Facebook's trend towards using more images and videos in its promoted and advertising postings. Furthermore, consumers actively search out YouTube videos to watch, but Facebook content is more inadvertently displayed to users via a newsfeed that scrolls.

One of the issues with advertising on television and digital media is that it becoming harder and harder for kids to tell the difference between entertainment and commercial material [20, 21]. This probably applies especially to social media advertising that is interactive and specially integrated [20].

In this study, it is also reported that food marketing is regulated or restricted as a result of previously noted links between traditional types of food marketing and children's dietary practices in most Western countries. Overall, social media negatively affects people's perception of their bodies and their connection to food. Obesity is one of the impacts of screen media usage that has been thoroughly studied. Fast food consumption and its impacts have become a major global public health concern due to the growing health repercussions, especially in children, adolescents, and the elderly. Fast food is generally defined as quick, unhealthy, and filling meals that may be ordered from self-serve establishments using precooked components and delivered in a package for customers to take away. Examples of this type of food include pizza, French fries, and burgers [22]. Fast food is typically low in protein, vitamins, and fiber and rich in refined sugar, white flour, polyunsaturated fats, salts, and various dietary additives. Fast food's ease of production, ease of consumption, and excellent flavour have made it popular [23].

The socioeconomic and racial characteristics were not consistently recorded in the publications, while the papers that did mention ethnicity had primarily white samples. Research on how social media is used in society indicates that while there may be differences in the types of social media used, rates of use are comparable across socioeconomic classes and ethnic groups [24, 25]. Studies that specifically evaluate the effects of treatments and variations in social media use across age groups, genders, ethnic groups, educational attainment levels, and income brackets are therefore imperative. Future research may employ large sample sizes that are typical of the population and/or the demographics of how different forms of social media are used in society, as well as focused interventions for particular groups.

## LIMITATIONS

The majority of studies included food consumption patterns as well as attitudes and beliefs

related to food. This could be connected to the dearth of social media information on eating habits in particular. According to research by Barre *et al.*, [26], sharing exceptional or enticing cuisine, food in a social setting, eating out, feelings about food, and food guidance were the key themes detected in posts about food on social media. Conclusions about food intake in other settings, such as the home and workplace, are limited by this kind of data. The frequency of eating occasions, the time spent eating meals and snacks, and other behavioural elements that are crucial to comprehending food consumption habits were not recorded. In less than half of the studies, the research question included a specific food-related topic (e.g., the consumption of dairy).

## CONCLUSION

The average daily usage of social media and the choices and behaviours related to fast food were found to be strongly correlated. The activity that most negatively impacted children's eating habits was watching food videos. Due to the previously identified connections between conventional forms of food marketing and children's eating habits, food marketing is controlled or prohibited in the majority of Western nations. In general, social media has a negative impact on people's relationship with food and how they view their bodies.

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