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# Social Media as a Source of Weight-Loss Information: Patterns of Use, Trust, and Self-Reported Behavioral Responses Among Adults in Palestine

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**Research Article**

**Keywords:** Social Media, Weight Loss, Digital Health Literacy, Health Information Seeking, Misinformation, Palestine

**Posted Date:** April 14th, 2026

**DOI:** https://doi.org/10.21203/rs.3.rs-9003769/v1

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**Additional Declarations:** No competing interests reported.

## Abstract

# Background

Social media has become a dominant source of health-related information worldwide, including weight-loss guidance. However, concerns persist regarding misinformation, unverified claims, and their potential influence on health behaviors. Evidence from low- and middle-income settings, particularly Palestine, remains limited. This study aimed to assess the prevalence, behavioral patterns, trust dynamics, and perceived risks associated with social media use for weight-loss information among Palestinian adults.

# Methods

A cross-sectional study was conducted between November 2025 and February 2026 using a validated online questionnaire adapted from a previously published Saudi study. Adults aged ≥ 18 years residing in Palestine who had used at least one social media platform in the preceding three months were included. A total of 569 participants were analyzed. Descriptive statistics summarized participant characteristics. Associations were examined using chi-square, Fisher's exact, and Mann–Whitney tests. Variables with $p \leq 0.20$ were entered into a multivariable logistic regression model to identify independent predictors of using social media for weight-loss information.

# Results

Among participants (median age 28 years; 76.3% female), 58.3% reported using social media to seek weight-loss information. Female gender (aOR = 2.78, 95% CI: 1.45–5.34) and daily social media use exceeding four hours (aOR = 2.24, 95% CI: 1.11–4.52) were independently associated with weight-loss–related use. Behavioral engagement, particularly applying weight-loss information obtained online, was strongly associated with usage patterns. Trust in available weight-loss information also independently predicted engagement. Although many participants perceived social media as accessible and helpful, a substantial proportion acknowledged the presence of misleading or scientifically inaccurate content.

# Conclusions

Social media represents a widely used source of weight-loss information among adults in Palestine, particularly among females and high-frequency users. Trust and behavioral engagement appear to play central roles in shaping usage patterns. These findings highlight the urgent need to strengthen digital health literacy and promote evidence-based, professionally monitored weight-loss content in online environments.

## Introduction

Obesity is a chronic metabolic disorder characterized by excessive fat accumulation and defined as a body mass index (BMI) ≥ 30 kg/m² according to the World Health Organization (WHO). In recent years, it's become an important public health challenge worldwide. Globally, there are several factors that increase the rate of obesity, including a mix of genetic factors, eating habits, lack of exercise, and social and environmental influences (1). Palestine has a marked prevalence of obesity among adults, in which it reached 24.7% in males and 38.8% in females (2). The first prevention and treatment of obesity is lifestyle education (3). Lifestyle modification remains the cornerstone of obesity management; but many people still look for extra weight-loss information to help with diet changes, physical activity, and choices about medication or surgery (4, 5). Rising interest in weight-loss information has led many people to look for health guidance outside traditional medical care, often turning to online platforms (5, 6).

Social media has become a common place where people look for health information, and users can create, share, and read posts about nutrition, weight loss, and lifestyle habits (6, 7). Around the world, billions of people use social media, and many of them turn to these platforms for health-related information (6, 7). In Middle Eastern countries such as Saudi Arabia, the use of social media for health-related purposes has increased, and many people now turn to these platforms for information about health and weight management (4, 7).

Social media can be a useful source of health information because of its accessibility for many people that allows information to spread quickly, low costs, and can reach large and varied groups of users (6, 7). Social media platforms make them interact with peers, receive social support, and share experiences more easily and may increase motivation and participation in weight-loss behaviors (5, 8). Social media is used by public health organizations to raise health awareness and deliver health education campaigns effectively (7).

Behind the benefits, using social media for weight-loss information increases the exposure to widespread disseminated misinformation and unverified health advice (6, 7). Weight-loss posts on social media often share incorrect diet advice, promote unsafe behaviors, and encourage people to self-medicate without guidance from a health professional (5). Studies have shown that the exposure to misleading weight-loss information is associated with unsafe practices, misuse of medications, and a higher risk of harmful health outcomes (5, 9). Furthermore, the influence of unqualified influencers and algorithm-based content boosting may further compromise the quality and reliability of health information shared on social media platforms (5, 6).

Social media, such as Facebook, Instagram, and X (formerly Twitter) was becoming a major source of information and news around the world due to several factors, such as suitability and accessibility of such media facilitate reach of news and information, the rapid ways of access by using mobile phone, and the spread of apps that facilitate the share and distribution of information, exposing them to large amounts of information, opinions and recommendations of others, which plays an important role in the spread of it and positive impact on medical field (10, 11). On the other hand, it may lead to harm on

patients' health, such as health misinformation about diets or pro-eating disorder disagreement, which are moderately spread (36%) on social media (7, 9–12).

Regional studies have shown that there is a substantial exposure to diet/weight loss misinformation on social media. In Saudi Arabia, more than 40% of participants searched for weight loss medication on social media, ~ 30% of participants reported that their decision was influenced by social media, and ~ 40% have used weight loss medication without a medical prescription. In Jordan, more than half of the participants stated that their information about the weight loss medication came mainly from social media. In Egypt, more than 50% of enrolled participants use social media as a primary source of nutrition knowledge (12–14).

Despite social media being a major source of medical deceitful information, which can lead to harmful effects on patients' health (9), there is a lack of research assessing the impact of medical misinformation on patients' behaviors in Palestine, especially in relation to weight loss. Data on the Palestinian population are still limited. Only a small number of studies have used quantitative, scored measures to examine how patients view the benefits and risks of weight-loss information shared on social media and how much they trust that information. Few studies have combined evidence on how people use social media with measures of perception and the related effects on behavior. This gap limits healthcare professionals' ability to develop targeted interventions. Understanding how exposure, trust, and behavioral engagement interact in digital environments is essential for informing public health strategies aimed at reducing misinformation-related harm.

# Objectives

**Primary objective**

prevalence of using social media for searching for weight loss information and associated factors.

**Secondary objectives**:

1. To assess the frequency of social media use.
2. To assess the frequency of using platforms for weight loss.
3. To assess the association between the use of social media and the sociodemographic variables.
4. To assess the use of social media for weight loss information and the patterns of daily social media use.
5. To assess the use of social media for weight loss information and the perception of users regarding personal information.

# Methodology

In our cross-sectional study, we collected the data by using the validated questionnaire of the article titled "*The use of social media to search for weight reduction information: Assessment of the perception*

*among a sample of Saudi adults*" including five sessions (domains), targeting every adult Palestinian who using social media and attempted weight loss, in which we used online questionnaire on the google form in a period from November 2025 to February 2026 and saving the data with high privacy (accessible by authors only). Internal consistency reliability of conceptually grouped perception items was assessed using Cronbach's alpha to evaluate measurement properties. However, no composite scores were created, and all perception variables were analyzed individually in the statistical models.

The inclusion criteria include: social media users with ≥ 18-year-old age, living in Palestine, uses ≥ 1 social media platform in the last 3 months and agreed to sign the participation consent. The exclusion criteria includes people who cannot consent to participation due to a cognitive or psychological condition, from the medical field to avoid bias and social media users with < 18-year-old age.

Based on the literature review, it found that the prevalence of usage of social media to reach weight loss medical information can be as high as 89% among adults (4). The calculation of our sample using the OpenEpi online tool, confidence level of 95%, another 10% was added to compensate for non-responding or missing data and based on these the sample size will be 570 participants.

A non-probability convenience sampling technique was employed through online distribution of the questionnaire via social media platforms (e.g., WhatsApp, Facebook, and Instagram). Participants were encouraged to share the survey link within their networks, resulting in partial snowball sampling. Participation was voluntary and anonymous.

A total of 573 participants were included in our study, of whom 4 participants were excluded from the study due to incomplete responses and failure to meet inclusion criteria (e.g., age < 18 years and medical background). A final total of 569 participants were included in the analysis (Fig. 1). The online survey did not allow tracking of individuals who viewed but did not complete the questionnaire; therefore, the response rate could not be calculated. We used *Statistical Package for the Social Sciences* (**SPSS v27**) for data entry and analysis. We used the frequency to describe the categorical variables, and we used the median and IQR for age because it not a normally distributed continuous variable. To assess the association between the using social media to find ways for weight loss and sociodemographic, the most common used social media platforms, and perception of benefits and risks of social media use, we categorized the dependent variable (do you use social media to find ways for weight loss) into two groups as follows: yes, I use social media to find ways for weight loss (always, frequently and sometimes) and no, I did not use social media to find ways for weight loss (rarely and never). We used the Chi-square for the association of categorical variables, and Fisher's test was used when needed. We used the Mann-Whitney test for age to see the association with using social media for weight loss. A multivariable logistic regression analysis was conducted to identify independent predictors of using social media to search for weight-loss information. P-value was considered significant if < 0.05. The reference category for the dependent variable was "No use of social media for weight-loss purposes." Odds ratios (ORs) below 1 indicate a lower likelihood of reporting social media use for weight-loss purposes relative to the reference group. Multicollinearity among independent variables was assessed

using variance inflation factors (VIF). Model fit was evaluated using the Hosmer–Lemeshow goodness-of-fit test. Model explanatory power was estimated using Nagelkerke's $R^2$.

The IRB approval was obtained, and consent for participation in the study was obtained by choosing "I agree to participate in this study". All participants' data was kept anonymous and confidential, with no names, emails, or IP addresses collected. Data stored on a secure drive with restricted access and two-factor authentication, retained for five years, and then permanently deleted.

## Results

# Sociodemographic Characteristics of Participants:

The majority of the participants held a bachelor's degree (75.6%; n = 420), while the participants with higher degrees made up 12.7% (n = 72), those with high school education represented 9.1% (n = 52), and only 2.6% (n = 15) had less than a high school level of education. Monthly income distribution showed that 37.1% (n = 211) earned less than 2500 NIS, 26.9% (n = 153) earned 2500–3500 NIS, 14.4% (n = 82) earned 3500–4500 NIS, 9.5% (n = 54) earned 4500–5500 NIS, and 12.1% (n = 69) reported an income above 5500 NIS.

## Pattern of using social media platforms:

In terms of duration of social use, the majority of the participants (n = 541, 95.1%) reported being an active user of social media for over four years, with the remaining participants reporting less than three years of engagement with social media, indicating that the majority of participants have been consistently using these platforms for an extended period of time.

On a daily basis, participants reported their average amount of time spent on social media as follows: 193 participants (33.9%) reported spending more than four hours per day on social media sites; 139 participants (24.4%) indicated that they spent approximately three hours per day; and 117 participants (20.6%) reported using social media for approximately four hours per day. Fewer than 5.4% of the participants indicated that they spent one hour per day on social media; 15.6% indicated that they spent two hours per day on social media.

Concerning the purpose of social media use, more than half of the participants (n = 293, 51.5%) reported using social media for both personal and professional uses (mainly personal), while 177 participants (31.1%) used it exclusively for personal purposes. A smaller portion of the sample (n = 87; 15.3%) reported that they used social media for both personal and professional uses (mainly professional), and only 12 individuals (2.1%) reported using social media only for professional purposes. With respect to the place of social media use, slightly over half of the sample (n = 321; 56.4%) reported the use of social media at both home and work (mainly at home) while an additional 205 participants (36.0%) exclusively

used social media at home. There were few participants that reported using social media mainly or exclusively at work.

## Using social media to obtain weight loss information:

According to the data collected from the survey participants, it was found that YouTube was by far the most frequently mentioned source of weight loss information, with 275 individuals (48.3%) saying they had used YouTube to look for weight loss information. Regarding the platforms frequently used as a source for finding weight loss information, Facebook was the second most commonly used platform (43.2%), followed by Instagram (30.8%). The other platforms have frequently used as following TikTok had (22.8%), and WhatsApp (5.3%), Snapchat (4.4%), Twitter (1.8%), and Telegram (1.6%) had the lowest levels of use.

About one third of the participants (29.2%) reported that they never obtained weight loss information from unqualified influencers on social media, but 24.8% of participants reported doing so sometimes. 96 (16.9%) and 30 (5.3%) of participants reported frequent and always obtaining weight loss information from unqualified influencers, respectively. On the other hand, obtaining weight loss information from qualified influencers on social media, 202 (35.5%) reporting frequent use and 115 (20.2%) reporting always use. regarding the different types of weight loss information searched on social media, more than two thirds of the participants, 384 (67.5%) were searching for diet-related information, followed by exercise-related information (62.2%). Information related to herbs was searched by 32.7% of participants, while medications were the least searched topic (12.8%).

More than one third (37.3%) of the participants indicated that they sometimes applied weight loss information from social media, where less numbers of the participants 20.4% and 19.3% indicated frequently and rarely applied weight loss information respectively. Only a small number (8.1%) stated that they always applied it, while 15.1% said that they never applied. Less than half (44.1%) of the participants who have applied the weight loss information were found to have long-term positive results, 23.6% did not have positive results, and 32.3% did not applied the weight loss information at all.

According to trusting the weight loss information found on social media, about half of the participants (48.5%) reported that they sometimes trust such information. Smaller proportions reported frequent (17.4%) or rare (23.0%) trust, while 8.3% reported never trusting it and only 2.8% reported always trusting it. When the participants were asked how reliable they thought the information was, 54.7% said that it was somewhat reliable, while 41.1% said it was not reliable. Few participants rated the information as being very reliable (3.5%) and very few rated the information as accurate (0.7%).

Finally, with respect to checking the reliability of weight loss information, 30.2% of participants reported sometimes verifying information, while 26.7% did so frequently and 17.9% always, however 14.6 and 10.5% who rarely or never check, respectively. The most common methods for checking reliability included consulting a health professional such as a dietitian (36.4%) and using reliable online sources

such as the Ministry of Health (29.0%). However, 18.3% of participants reported not checking the reliability of weight loss information at all. A very few participants reported checking by asking a friend (9%) or family member (7.4%).

# Perceptions of benefits and risks of social media use:

Considering social media as an excellent source of weight loss information, 286 participants (50.3%) reported excellent sometimes, while 23.9% perceived it as excellent frequently and 6.7% always. Conversely, 14.6% and 4.6% reported rarely and never, respectively. In terms of increasing awareness of weight loss, 40.9% stated that social media sometimes serves as an excellent source, followed by 38.1% who reported frequently and 12.7% who reported always. While very few participants reported rarely (6.3%) or never (1.9%).

Regarding accessibility, majority of participants considered social media as an easily acceptable way to obtain weight loss information, less than half of participants (41.1%) reporting frequently and 19.5% reporting always. About one-third (31.6%) indicated sometimes, while only small percentages reported rarely (6.2%) or never (1.6%).

About half of the participants (52.4%) were concerned that using weight loss information on social media sometimes affects their health, while 21.1% reported frequently and 5.8% always. On the other hand, 14.8% and 6.0% indicated rarely and never, respectively. More than one third of participants (35.7%) reported that weight loss information on social media sometimes negatively affects their weight, followed by 32.9% who reported rarely. Smaller proportions reported frequently (13.4%) or always (2.3%), while 15.8% reported never.

Regarding the credibility of weight loss information on social media, about half of the participants (49.7%) believed that it could be sometimes misleading, and 33.2% believed it is frequently misleading. Smaller proportions reported rarely (10.9%) or always (3.2%), while 3% reported never. Also, it could be scientifically incorrect, in which less than half of the participants (42.5%) indicated that such information is sometimes scientifically incorrect, while 40.6% reported it frequently. Only a small proportion believed this information is rarely (11.4%) or never (2.8%) misleading or incorrect.

Finally, weight loss information on social media may be used for marketing and financial purposes, in which more than half of the participants (55.2%) were reported frequently and 12.3% reported always. Only a small percentage perceived this rarely (4.6%) or never (1.1%).

Reliability analysis showed good internal consistency for the perceived benefits items (Cronbach's $\alpha = 0.843$) and moderate internal consistency for perceived risk items ($\alpha = 0.627$). The trust-related items demonstrated low internal consistency ($\alpha = 0.086$), indicating conceptual heterogeneity. Therefore, all perception variables were retained and analyzed separately rather than as composite scales.

## Association between sociodemographic characteristics and using social media to find ways for weight loss:

Regarding gender, there was a marked statistically significant association between gender and the use of social media for weight loss (p = 0.001), in which females were more likely to use social media for weight-loss information compared to males (63.6% vs. 41.5%). In contrast, a higher proportion of males reported not using social media for this purpose (58.5%).

Regarding region of residence, participants living in cities (60.1%), towns (58.2%), villages (55.1%), and campuses (72.7%) reported comparable levels of social media use for weight loss. No statistically significant association was found between region and social media use (p = 0.562). Similarly, education level was not statistically significant associated with the use of social media for weight loss (p = 0.192). The highest proportion of users was observed among participants with less than high school education (73.3%) and high school education (69.2%), while those with bachelor's degrees (56.3%) and higher education (59.7%) showed slightly lower but comparable usage rates.

With respect to income, use of social media for weight loss differed by income level, rising from 53.6% among participants with an income above 5500 NIS to a peak of 75.9% in the 4500–5500 NIS income category. Despite these differences, income was not significantly associated with using social media for weight loss (p = 0.088).

## Association between most used platforms and using social media to find ways for weight loss:

Regarding specific platforms, no statistically significant associations were observed between the use of Twitter (p = 0.067), Facebook (p = 0.088), Snapchat (p = 0.972), WhatsApp (p = 0.062), Instagram (p = 0.494), Telegram (p = 0.128), or TikTok (p = 0.473) and the use of social media to find ways for weight loss. Although a higher proportion of participants who used Twitter (69.5%) and WhatsApp (60.5%) reported using social media for weight loss compared to non-users, these differences did not reach statistical significance.

In contrast, a statistically significant association was found between YouTube use and the use of social media for weight loss (p = 0.031). Participants who used YouTube were more likely to report using social media to find weight-loss information compared to those who did not use YouTube (63.3% vs. 54.3%).

The duration of social media use was not significantly associated with the use of social media for weight loss (p = 0.187). The majority of participants had been using social media for more than four years (95.1%), among whom 59.3% reported using social media for weight-loss purposes.

Daily duration of social media use showed a statistically significant association with using social media for weight loss (p = 0.045). Participants who used social media for more than four hours per day

reported a higher prevalence of using social media for weight-loss purposes (66.3%) compared to those with shorter daily usage durations.

Neither the purpose of social media use (personal, professional, or both) nor the place of social media use (home, work, or both) was significantly associated with using social media to find ways for weight loss ($p = 0.635$ and $p = 0.185$, respectively).

**Association between perception of benefits and risks of social media use and using social media to find ways for weight loss**:

A strong and statistically significant association was observed between the frequency of using social media to search for health information and the use of social media for weight loss ($p < 0.001$). Participants who always, frequently or sometimes searched for health information on social media were more likely to use it for weight loss (74.3%, 63.1 and 49.2 respectively), whereas those who rarely or never searched for health information showed markedly lower usage rates.

Obtaining weight-loss information from unqualified influencers showed a statistically significant association with the use of social media for weight loss ($p < 0.001$). Participants who always, frequently or sometimes relied on unqualified influencers had higher rates of social media use for weight loss compared to those who never relied on such sources. Similarly, obtaining weight-loss information from qualified influencers was also significantly associated with social media use for weight loss ($p < 0.001$), with higher usage among those reporting frequent or occasional reliance on qualified influencers.

Applying weight-loss information obtained from social media showed a strong association with using social media for weight loss ($p < 0.001$). The highest prevalence was observed among participants who always, frequently or sometimes applied this information, whereas those who rarely or never applied it were less likely to use social media for weight-loss purposes. In addition, participants who reported finding long-term positive results after applying weight-loss information were significantly more likely to use social media for weight loss compared to those who did not apply the information ($p < 0.001$).

Trust in weight-loss information available on social media was significantly associated with its use for weight loss ($p < 0.001$). Participants who always, frequently or sometimes trusted such information reported higher usage rates, while those who rarely or never trusted it were less likely to use social media for weight loss. Perceived reliability of weight-loss information was also significantly associated with usage ($p < 0.001$), with higher use among participants who considered the information fairly or very reliable.

Checking the reliability of weight-loss information was significantly associated with using social media for weight loss ($p < 0.001$). Participants who always, frequently or sometimes checked reliability were more likely to use social media for weight loss; however, the specific methods used to verify reliability (e.g., consulting family, friends, health professionals, or reliable online sources) were not significantly associated with usage ($p = 0.071$).

Perceived benefits of social media were strongly associated with its use for weight loss. Participants who believed that social media helps in weight loss, improves overall health, increases awareness, serves as an excellent source of weight-loss information, or is an acceptable way to obtain such information were significantly more likely to use social media for weight loss (all $p < 0.001$).

Regarding perceived risks, significant associations were observed between using social media for weight loss and the belief that weight-loss information could affect health ($p = 0.025$), negatively affect weight ($p = 0.040$), be misleading ($p = 0.038$), or be scientifically incorrect ($p = 0.007$). In contrast, the perception that weight-loss information on social media is purely for marketing or financial purposes was not significantly associated with its use for weight loss ($p = 0.303$).

# Regression: (refer to Table 8)

Table 1

shows the sociodemographic information of the participants. A total of 569 participants were included in our study. The majority were female (76.3%, n = 434), while males accounted for 23.7% (n = 135). Regarding place of residence, nearly half of the participants lived in cities (45.3%, n = 258), followed by villages (31.3%, n = 178) and towns (21.4%, n = 122), whereas a small proportion resided on campuses (1.9%, n = 11). The median age for the sample was 28 years (interquartile range = 23–38 years), indicating a fairly young population of participants in this study.

| **Sociodemographic frequencies** | | |
|---|---|---|
| Variable | | Number (Percentage) |
| Gender | Male | 135(23.7%) |
| | Female | 434 (76.3%) |
| | Total | 569 (100.0%) |
| Region | City | 258(45.3%) |
| | Town | 122(21.4%) |
| | Village | 178(31.3%) |
| | Campus | 11(1.9%) |
| | Total | 569(100.0%) |
| Education level | Less than high school | 15(2.6%) |
| | High school | 52(9.1%) |
| | Bachelor | 420(75.6%) |
| | Higher education | 72(12.7%) |
| | Total | 569(100.0%) |
| Income | < 2500 | 211(37.1%) |
| | 2500–3500 | 153(26.9%) |
| | 3500–4500 | 82(14.4%) |
| | 4500–5500 | 54(9.5%) |
| | > 5500 | 69(12.1%) |
| | Total | 569(100.0%) |
| | Median (year old) | Interquartile Range (IQR) |
| Age | 28 | 23–38 |

Table 2

shows the pattern of using social media platforms. There was a total of 569 participants that met inclusion criteria for this study who were able to provide information about their personal use of social media platforms. A list of the most frequently cited platforms is composed of the following: 433 participants (76.1%) reported using WhatsApp; 392 participants (68.9%) indicated Facebook as a frequently used platform; and 392 participants (68.9%) reported using Instagram, followed by 256 participants (45.0%) using YouTube, 230 participants (40.4%) using Snapchat, 175 participants (30.8%) using TikTok, and 166 participants (29.2%) using Telegram. Instagram was the second most cited platform at 392 participants (68.9%). X (Twitter) was indicated to be the least frequently used platform, indicating that only 59 participants (10.4%) used this type of platform.

| **Pattern of using social media platforms** | | |
|---|---|---|
| Variable | Number (N) | Percentage (%) |
| Most common social media platform used | | |
| Twitter | 59 | 10.4% |
| Facebook | 392 | 68.9% |
| Snapchat | 230 | 40.4% |
| WhatsApp | 433 | 76.1% |
| Instagram | 392 | 68.9% |
| YouTube | 256 | 45.0% |
| Telegram | 166 | 29.2% |
| TikTok | 175 | 30.8% |
| Duration of use | | |
| less than 1 year | 5 | 0.9% |
| less than 2 years | 6 | 1.1% |
| less than 3 years | 17 | 3.0% |
| more than 4 years | 541 | 95.1% |
| Total | 569 | 100.0% |
| Daily usage | | |
| one hour | 31 | 5.4% |
| two hours | 89 | 15.6% |
| three hours | 139 | 24.4% |
| four hours | 117 | 20.6% |

| **Pattern of using social media platforms** | | |
|---|---|---|
| more than four hours | 193 | 33.9% |
| Total | 569 | 100.0% |
| Purpose of using social media platforms | | |
| personal | 177 | 31.1% |
| professional | 12 | 2.1% |
| both (personal mainly) | 293 | 51.5% |
| both (professional mainly) | 87 | 15.3% |
| Total | 569 | 100.0% |
| Place of use social media | | |
| at home | 205 | 36.0% |
| at work | 6 | 1.1% |
| both (at home mainly) | 321 | 56.4% |
| both (at work mainly) | 37 | 6.5% |
| Total | 569 | 100.0% |

Table 3

presents participants' use of social media to obtain weight loss–related information. Out of all participants (569), the majority of them reported using social media to search for health information either frequently (34.3%) or sometimes (32.2%), while 26.0% reported always doing so. Only a small proportion reported rarely (6.3%) or never (1.2%) using social media for health information. Regarding the use of social media to find ways for weight loss, 27.1% of participants reported doing so sometimes, followed by 24.1% rarely and 17.6% never. Fewer participants reported frequent (17.2%) or always (14.1%) using social media for weight loss methods.

| **Using social media to obtain weight loss information** | | |
|---|---|---|
| Variable | Number (N) | Percentage (%) |
| Using social media to search for health information | | |
| Always | 148 | 26.0% |
| Frequently | 195 | 34.3% |
| Sometimes | 183 | 32.2% |
| Rarely | 36 | 6.3% |
| Never | 7 | 1.2% |
| Total | 569 | 100.0% |
| Using social media to find ways for weight loss | | |
| Always | 80 | 14.1% |
| Frequently | 98 | 17.2% |
| Sometimes | 154 | 27.1% |
| Rarely | 137 | 24.1% |
| Never | 100 | 17.6% |
| Total | 569 | 100.0% |
| The social media platforms that is mostly used to search for weight loss | | |
| Twitter | 10 | 1.8% |
| Facebook | 246 | 43.2% |
| Snapchat | 25 | 4.4% |
| WhatsApp | 30 | 5.3% |
| Instagram | 175 | 30.8% |
| YouTube | 275 | 48.3% |

| Using social media to obtain weight loss information | | |
|---|---|---|
| Telegram | 9 | 1.6% |
| TikTok | 130 | 22.8% |
| Obtain Weight Loss Information From Unqualified Influencers In Social Media | | |
| Always | 30 | 5.3% |
| Frequently | 96 | 16.9% |
| Sometimes | 141 | 24.8% |
| Rarely | 136 | 23.9% |
| Never | 166 | 29.2% |
| Total | 569 | 100.0% |
| Obtain Weight Loss Information From Qualified Influencers In Social Media | | |
| Always | 115 | 20.2% |
| Frequently | 202 | 35.5% |
| Sometimes | 174 | 30.6% |
| Rarely | 40 | 7.0% |
| Never | 38 | 6.7% |
| Total | 569 | 100.0% |
| The type of information of weight loss information that participants search | | |
| Diet | 384 | 67.5% |
| Exercise | 354 | 62.2% |
| Herbs | 186 | 32.7% |
| Medications | 73 | 12.8% |
| Applying Weight Loss Information From Social Media | | |
| Always | 46 | 8.1% |
| Frequently | 116 | 20.4% |
| Sometimes | 212 | 37.3% |
| Rarely | 109 | 19.2% |

| Using social media to obtain weight loss information | | |
|---|---|---|
| Never | 86 | 15.1% |
| Total | 569 | 100.0% |
| Find Long Term Positive Result After Applying | | |
| Yes | 251 | 44.1% |
| No | 134 | 23.6% |
| I did not apply | 184 | 32.3% |
| Total | 569 | 100.0% |
| Trust the available weight loss information in social media | | |
| Always | 16 | 2.8% |
| Frequently | 99 | 17.4% |
| Sometimes | 276 | 48.5% |
| Rarely | 131 | 23.0% |
| Never | 47 | 8.3% |
| Total | 569 | 100.0% |
| The Reliability Of Weight Loss Information In Social Media | | |
| Unreliable | 234 | 41.1% |
| fairly reliable | 311 | 54.7% |
| very reliable | 20 | 3.5% |
| Accurate | 4 | 0.7% |
| Total | 569 | 100.0% |
| Check The Reliably Of Weight Loss Information | | |
| Always | 102 | 17.9% |
| Frequently | 152 | 26.7% |
| Sometimes | 172 | 30.2% |
| Rarely | 83 | 14.6% |
| Never | 60 | 10.5% |
| Total | 569 | 100.0% |
| How Check The Reliably Of Weight Loss Information | | |

| Using social media to obtain weight loss information | | |
|---|---|---|
| by asking family member | 42 | 7.4% |
| by asking a friend | 51 | 9.0% |
| by reliable online source such as ministry of health | 165 | 29.0% |
| by asking health professional such as a dietitian | 207 | 36.4% |
| I don’t check the reliability | 104 | 18.3% |
| Total | 569 | 100.0% |

Table 4

presents respondents' perceptions of the benefits and risks of using social media for weight loss information among a total of 569 participants. Regarding the perceived usefulness of weight loss information from social media in helping with weight loss, more than half of the respondents indicated that it sometimes helps (55.2%), while 19.5% reported that it frequently helps. Smaller proportions stated that it always helps (4.6%) or rarely helps (16.7%), and only 4.0% indicated that it never helps with weight loss. In regard to using social media to help improve overall health, the majority of participants reported that weight loss information from social media sometimes helps (54.1%), followed by those who report frequently (21.8%) or always (7.0%). A relatively small proportion indicated rarely (14.4%) or never (2.6%).

| **Perceptions of the benefits and the risks of social media use** | | |
|---|---|---|
| Variable | Number (N) | Percentage (%) |
| Weight Loss Information Help In Weight Loss | | |
| Always | 26 | 4.6% |
| Frequently | 111 | 19.5% |
| Sometimes | 314 | 55.2% |
| Rarely | 95 | 16.7% |
| Never | 23 | 4.0% |
| Total | 569 | 100.0% |
| Weight Loss Information Help To Improve Overall Health | | |
| Always | 40 | 7.0% |
| Frequently | 124 | 21.8% |
| Sometimes | 308 | 54.1% |
| Rarely | 82 | 14.4% |
| Never | 15 | 2.6% |
| Total | 569 | 100.0% |
| Social Media Is An Excellent Source For Weight Loss Information | | |
| Always | 38 | 6.7% |
| Frequently | 136 | 23.9% |
| Sometimes | 286 | 50.3% |
| Rarely | 83 | 14.6% |
| Never | 26 | 4.6% |
| Total | 569 | 100.0% |

| Perceptions of the benefits and the risks of social media use | | |
|---|---|---|
| Social Media Is An Excellent Source To Increase Awareness Of Weight Loss | | |
| Always | 72 | 12.7% |
| Frequently | 217 | 38.1% |
| Sometimes | 233 | 40.9% |
| Rarely | 36 | 6.3% |
| Never | 11 | 1.9% |
| Total | 569 | 100.0% |
| Social Media Is An Easily Acceptable Way To Obtain Weight Loss Information | | |
| Always | 111 | 19.5% |
| Frequently | 234 | 41.1% |
| Sometimes | 180 | 31.6% |
| Rarely | 35 | 6.2% |
| Never | 9 | 1.6% |
| Total | 569 | 100.0% |
| Use of Weight Loss Information In Social Media Could Affect My Health | | |
| Always | 33 | 5.8% |
| Frequently | 120 | 21.1% |
| Sometimes | 298 | 52.4% |
| Rarely | 84 | 14.8% |
| Never | 34 | 6.0% |
| Total | 569 | 100.0% |
| Use Of Weight Loss Information In Social Media Negatively Affect My Weight | | |
| Always | 13 | 2.3% |
| Frequently | 76 | 13.4% |
| Sometimes | 203 | 35.7% |
| Rarely | 187 | 32.9% |

| Perceptions of the benefits and the risks of social media use | | |
|---|---|---|
| Never | 90 | 15.8% |
| Total | 569 | 100.0% |
| The Weight Loss Information In Social Media Could Be Misleading | | |
| Always | 18 | 3.2% |
| Frequently | 189 | 33.2% |
| Sometimes | 283 | 49.7% |
| Rarely | 62 | 10.9% |
| Never | 17 | 3.0% |
| Total | 569 | 100.0% |
| Weight Loss Information In Social Media Could Be Scientifically Incorrect | | |
| Always | 15 | 2.6% |
| Frequently | 231 | 40.6% |
| Sometimes | 242 | 42.5% |
| Rarely | 65 | 11.4% |
| Never | 16 | 2.8% |
| Total | 569 | 100.0% |
| Weight Loss Information In Social Media Could Be For Marketing And Financial Purpose Purely | | |
| Always | 70 | 12.3% |
| Frequently | 314 | 55.2% |
| Sometimes | 153 | 26.9% |
| Rarely | 26 | 4.6% |
| Never | 6 | 1.1% |
| Total | 569 | 100.0% |

Table 5

shows the association between sociodemographic characteristics and the use of social media to find ways for weight loss among the study participants (N = 569). In general, using social media for weight loss purposes, more than half of the participants (58.3%) reported that they use it, while 41.7% did not.

| **Association between sociodemographic characteristics and using social media to find ways for weight loss** | | | | |
|---|---|---|---|---|
| **Variable** | **Using social media to find ways for weight loss** | | | |
| | **Yes, I use social media to find ways for weight loss N (%)** | **No, I don't use social media to find ways for weight loss N (%)** | **Total N (%)** | **p-value** |
| **Gender** | | | | 0.001 |
| Male | 56 (41.5%) | 79 (58.5%) | 135 (100.0%) | |
| Female | 276 (63.6%) | 158 (36.4%) | 434 (100.0%) | |
| Total | 332 (58.3%) | 237 (41.7%) | 569 (100.0%) | |
| **Region** | | | | 0.562 |
| City | 155 (60.1%) | 103 (39.9%) | 258 (45.3%) | |
| Town | 71 (58.2%) | 51 (41.8%) | 122 (21.4%) | |
| Village | 98 (55.1%) | 80 (44.9%) | 178 (31.3%) | |
| Campus | 8 (72.7%) | 3 (27.3%) | 11 (1.9%) | |
| Total | 332 (58.3%) | 237 (41.7%) | 569 (100.0%) | |
| **Education level** | | | | 0.192 |
| Less than high school | 11 (73.3%) | 4 (26.7%) | 15 (2.6%) | |
| High school | 36 (69.2%) | 16 (30.8%) | 52 (9.1%) | |
| Bachelor | 242 (56.3%) | 188 (43.7%) | 430 (75.6%) | |
| Higher education | 43 (59.7%) | 29 (40.3%) | 72 (12.7%) | |
| Total | 332 (58.3%) | 237 (41.7%) | 569 (100.0%) | |

| Association between sociodemographic characteristics and using social media to find ways for weight loss | | | | |
|---|---|---|---|---|
| **Variable** | **Using social media to find ways for weight loss** | | | |
| | **Yes, I use social media to find ways for weight loss N (%)** | **No, I don't use social media to find ways for weight loss N (%)** | **Total N (%)** | **p-value** |
| **Income** | | | | 0.088 |
| < 2500 | 120 (56.9%) | 91 (43.1%) | 211 (37.1%) | |
| 2500–3500 | 89 (58.2%) | 64 (41.8%) | 153 (26.9%) | |
| 3500–4500 | 45 (54.9%) | 37 (45.1%) | 82 (14.4%) | |
| 4500–5500 | 41 (75.9%) | 13 (24.1%) | 54 (9.5%) | |
| > 5500 | 37 (53.6%) | 32 (46.4%) | 69 (12.1%) | |
| Total | 332 (58.3%) | 237 (41.7%) | 569 (100.0%) | |

Table 6

illustrates the association between the most frequently used social media platforms, patterns of social media use, and the use of social media to find ways for weight loss among the study participants (N = 569). Overall, 58.3% of participants reported using social media for weight-loss purposes.

| **Association between most used platforms and using social media to find ways for weight loss** | | | | |
|---|---|---|---|---|
| **Variable** | **Using social media to find ways for weight loss** | | | |
| | **Yes, I use social media to find ways for weight loss N(%)** | **No, I don't use social media to find ways for weight loss N(%)** | **Total N(%)** | **p-value** |
| **Twitter** | | | | 0.067 |
| No | 291 (57.1%) | 219 (42.9%) | 510 (89.6%) | |
| Yes | 41 (69.5%) | 18 (30.5%) | 59 (10.4%) | |
| Total | 332 (58.3%) | 237 (41.7%) | 569 (100.0%) | |
| **Facebook** | | | | 0.088 |
| No | 94 (53.1%) | 83 (46.9%) | 177 (31.1%) | |
| Yes | 238 (60.7%) | 154 (39.3%) | 392 (68.9%) | |
| Total | 332 (58.3%) | 237 (41.7%) | 569 (100.0%) | |
| **Snapchat** | | | | 0.972 |
| No | 198 (58.4%) | 141 (41.6%) | 339 (59.6%) | |
| Yes | 134 (58.3%) | 96 (41.7%) | 230 (40.4%) | |
| Total | 332 (58.3%) | 237 (41.7%) | 569 (100.0%) | |
| **WhatsApp** | | | | 0.062 |
| No | 70 (51.5%) | 66 (48.5%) | 136 (23.9%) | |
| Yes | 262 (60.5%) | 171 (39.5%) | 433 (76.1%) | |
| Total | 332 (58.3%) | 237 (41.7%) | 569 (100.0%) | |
| **Instagram** | | | | 0.494 |

| Association between most used platforms and using social media to find ways for weight loss | | | | |
|---|---|---|---|---|
| **Variable** | **Using social media to find ways for weight loss** | | | |
| | **Yes, I use social media to find ways for weight loss N(%)** | **No, I don't use social media to find ways for weight loss N(%)** | **Total N(%)** | **p-value** |
| No | 107 (60.5%) | 70 (39.5%) | 177 (31.1%) | |
| Yes | 225 (57.4%) | 167 (42.6%) | 392 (68.9%) | |
| Total | 332 (58.3%) | 237 (41.7%) | 569 (100.0%) | |
| **YouTube** | | | | 0.031 |
| No | 170 (54.3%) | 143 (45.7%) | 313 (55.0%) | |
| Yes | 162 (63.3%) | 94 (36.7%) | 256 (45.0%) | |
| Total | 332 (58.3%) | 237 (41.7%) | 569 (100.0%) | |
| **Telegram** | | | | 0.128 |
| No | 227 (56.3%) | 176 (43.7%) | 403 (70.8%) | |
| Yes | 105 (63.3%) | 61 (36.7%) | 166 (29.2%) | |
| Total | 332 (58.3%) | 237 (41.7%) | 569 (100.0%) | |
| **TikTok** | | | | 0.473 |
| No | 226 (57.4%) | 168 (42.6%) | 394 (69.2%) | |
| Yes | 106 (60.6%) | 69 (39.4%) | 175 (30.8%) | |
| Total | 332 (58.3%) | 237 (41.7%) | 569 (100.0%) | |
| **Duration of use** | | | | 0.187 |
| Less than 1 year | 2 (40.0%) | 3 (60.0%) | 5 (0.9%) | |
| Less than 2 years | 3 (50.0%) | 3 (50.0%) | 6 (1.1%) | |
| Less than 3 years | 6 (35.3%) | 11 (64.7%) | 17 (3.0%) | |

| Association between most used platforms and using social media to find ways for weight loss | | | | |
|---|---|---|---|---|
| **Variable** | **Using social media to find ways for weight loss** | | | |
| | **Yes, I use social media to find ways for weight loss N(%)** | **No, I don't use social media to find ways for weight loss N(%)** | **Total N(%)** | **p-value** |
| More than 4 years | 321 (59.3%) | 220 (40.7%) | 541 (95.1%) | |
| Total | 332 (58.3%) | 237 (41.7%) | 569 (100.0%) | |
| **Daily usage** | | | | 0.045 |
| One hour | 18 (58.1%) | 13 (41.9%) | 31 (5.4%) | |
| Two hours | 43 (48.3%) | 46 (51.7%) | 89 (15.6%) | |
| Three hours | 80 (57.6%) | 59 (42.4%) | 139 (24.4%) | |
| Four hours | 63 (53.8%) | 54 (46.2%) | 117 (20.6%) | |
| More than four hours | 128 (66.3%) | 65 (33.7%) | 193 (33.9%) | |
| Total | 332 (58.3%) | 237 (41.7%) | 569 (100.0%) | |
| **Purpose of using social media platforms** | | | | 0.635 |
| Personal | 106 (59.9%) | 71 (40.1%) | 177 (31.1%) | |
| Professional | 5 (41.7%) | 7 (58.3%) | 12 (2.1%) | |
| Both (personal mainly) | 172 (58.7%) | 121 (41.3%) | 293 (51.5%) | |
| Both (professional mainly) | 49 (56.3%) | 38 (43.7%) | 87 (15.3%) | |
| Total | 332 (58.3%) | 237 (41.7%) | 569 (100.0%) | |
| **Place of social media** | | | | 0.185 |
| At home | 117 (57.1%) | 88 (42.9%) | 205 (36.0%) | |
| At work | 1 (16.7%) | 5 (83.3%) | 6 (1.1%) | |

| Association between most used platforms and using social media to find ways for weight loss | | | | |
|---|---|---|---|---|
| **Variable** | **Using social media to find ways for weight loss** | | | |
| | **Yes, I use social media to find ways for weight loss N(%)** | **No, I don't use social media to find ways for weight loss N(%)** | **Total N(%)** | **p-value** |
| Both (at home mainly) | 191 (59.5%) | 130 (40.5%) | 321 (56.4%) | |
| Both (at work mainly) | 23 (62.2%) | 14 (37.8%) | 37 (6.5%) | |
| Total | 332 (58.3%) | 237 (41.7%) | 569 (100.0%) | |

Table 7

describes the association between participants' perceptions of the benefits and risks of social media use and the use of social media to find ways for weight loss (N = 569). Overall, 58.3% of participants reported using social media for weight-loss purposes.

| **Association between perception of benefits and risks of social media use and using social media to find ways for weight loss** | | | | |
|---|---|---|---|---|
| Variable | **Using social media to find ways for weight loss** | | | |
| | **Yes, I use social media to find ways for weight loss N (%)** | **No, I don't use social media to find ways for weight loss N (%)** | **Total N (%)** | **p-value** |
| **Using social media to search for health information** | | | | **< 0.001** |
| Always | 110 (74.3%) | 38 (25.7%) | 148 (100.0%) | |
| Frequently | 123 (63.1%) | 72 (36.9%) | 195 (100.0%) | |
| Sometimes | 90 (49.2%) | 93 (50.8%) | 183 (100.0%) | |
| Rarely | 8 (22.2%) | 28 (77.8%) | 36 (100.0%) | |
| Never | 1 (14.3%) | 6 (85.7%) | 7 (100.0%) | |
| Total | 332 (58.3%) | 237 (41.7%) | 569 (100.0%) | |
| **Obtain weight loss information from unqualified influencers on social media** | | | | **< 0.001** |
| Always | 24 (80.0%) | 6 (20.0%) | 30 (100.0%) | |
| Frequently | 77 (80.2%) | 19 (19.8%) | 96 (100.0%) | |
| Sometimes | 85 (60.3%) | 56 (39.7%) | 141 (100.0%) | |
| Rarely | 78 (57.4%) | 58 (42.6%) | 136 (100.0%) | |
| Never | 68 (41.0%) | 98 (59.0%) | 166 (100.0%) | |
| Total | 332 (58.3%) | 237 (41.7%) | 569 (100.0%) | |

| Association between perception of benefits and risks of social media use and using social media to find ways for weight loss | | | | |
|---|---|---|---|---|
| **Obtain weight loss information from qualified influencers on social media** | | | | **< 0.001** |
| Always | 71 (61.7%) | 44 (38.3%) | 115 (100.0%) | |
| Frequently | 124 (61.4%) | 78 (38.6%) | 202 (100.0%) | |
| Sometimes | 111 (63.8%) | 63 (36.2%) | 174 (100.0%) | |
| Rarely | 19 (47.5%) | 21 (52.5%) | 40 (100.0%) | |
| Never | 7 (18.4%) | 31 (81.6%) | 38 (100.0%) | |
| Total | 332 (58.3%) | 237 (41.7%) | 569 (100.0%) | |
| **Applying weight loss information from social media** | | | | **< 0.001** |
| Always | 39 (84.8%) | 7 (15.2%) | 46 (100.0%) | |
| Frequently | 103 (88.8%) | 13 (11.2%) | 116 (100.0%) | |
| Sometimes | 139 (65.6%) | 73 (34.4%) | 212 (100.0%) | |
| Rarely | 37 (33.9%) | 72 (66.1%) | 109 (100.0%) | |
| Never | 14 (16.3%) | 72 (83.7%) | 86 (100.0%) | |
| Total | 332 (58.3%) | 237 (41.7%) | 569 (100.0%) | |
| **Find long term positive results after applying weight loss information** | | | | **< 0.001** |
| Yes | 192 (76.5%) | 59 (23.5%) | 251 (44.1%) | |
| No | 86 (64.2%) | 48 (35.8%) | 134 (23.6%) | |
| Did not apply | 54 (29.3%) | 130 (70.7%) | 184 (32.3%) | |

| | | | | |
|---|---|---|---|---|
| **Association between perception of benefits and risks of social media use and using social media to find ways for weight loss** | | | | |
| Total | 332 (58.3%) | 237 (41.7%) | 569 (100.0%) | |
| **Trust the available weight loss information on social media** | | | | **< 0.001** |
| Always | 13 (81.3%) | 3 (18.8%) | 16 (100.0%) | |
| Frequently | 85 (85.9%) | 14 (14.1%) | 99 (100.0%) | |
| Sometimes | 172 (62.3%) | 104 (37.7%) | 276 (100.0%) | |
| Rarely | 49 (37.4%) | 82 (62.6%) | 131 (100.0%) | |
| Never | 13 (27.7%) | 34 (72.3%) | 47 (100.0%) | |
| Total | 332 (58.3%) | 237 (41.7%) | 569 (100.0%) | |
| **The reliability of weight loss information on social media** | | | | **< 0.001** |
| Unreliable | 111 (47.4%) | 123 (52.6%) | 234 (41.1%) | |
| Fairly reliable | 204 (65.6%) | 107 (34.4%) | 311 (54.7%) | |
| Very reliable | 16 (80.0%) | 4 (20.0%) | 20 (3.5%) | |
| Accurate | 1 (25.0%) | 3 (75.0%) | 4 (0.7%) | |
| Total | 332 (58.3%) | 237 (41.7%) | 569 (100.0%) | |
| **Check the reliability of weight loss information** | | | | **< 0.001** |
| Always | 58 (56.9%) | 44 (43.1%) | 102 (100.0%) | |
| Frequently | 108 (71.1%) | 44 (28.9%) | 152 (100.0%) | |
| Sometimes | 101 (58.7%) | 71 (41.3%) | 172 (100.0%) | |
| Rarely | 37 (44.6%) | 46 (55.4%) | 83 (100.0%) | |

| | | | | |
|---|---|---|---|---|
| **Association between perception of benefits and risks of social media use and using social media to find ways for weight loss** | | | | |
| Never | 28 (46.7%) | 32 (53.3%) | 60 (100.0%) | |
| Total | 332 (58.3%) | 237 (41.7%) | 569 (100.0%) | |
| **How check the reliability** | | | | **0.071** |
| By asking family member | 24 (57.1%) | 18 (42.9%) | 42 (7.4%) | |
| By asking a friend | 37 (72.5%) | 14 (27.5%) | 51 (9.0%) | |
| Reliable online source (e.g., Ministry of Health) | 97 (58.8%) | 68 (41.2%) | 165 (29.0%) | |
| By health professional (e.g., dietitian) | 108 (52.2%) | 99 (47.8%) | 207 (36.4%) | |
| I don’t check the reliability | 66 (63.5%) | 38 (36.5%) | 104 (18.3%) | |
| Total | 332 (58.3%) | 237 (41.7%) | 569 (100.0%) | |
| **Weight loss information in social media help in weight loss** | | | | **< 0.001** |
| Always | 17 (65.4%) | 9 (34.6%) | 26 (100.0%) | |
| Frequently | 87 (78.4%) | 24 (21.6%) | 111 (100.0%) | |
| Sometimes | 186 (59.2%) | 128 (40.8%) | 314 (100.0%) | |
| Rarely | 38 (40.0%) | 57 (60.0%) | 95 (100.0%) | |
| Never | 4 (17.4%) | 19 (82.6%) | 23 (100.0%) | |
| Total | 332 (58.3%) | 237 (41.7%) | 569 (100.0%) | |
| **Weight loss information in social media help in improve overall health** | | | | **< 0.001** |
| Always | 27 (67.5%) | 13 (32.5%) | 40 (100.0%) | |
| Frequently | 89 (71.8%) | 35 (28.2%) | 124 (100.0%) | |

| | | | | |
|---|---|---|---|---|
| **Association between perception of benefits and risks of social media use and using social media to find ways for weight loss** | | | | |
| Sometimes | 181 (58.8%) | 127 (41.2%) | 308 (100.0%) | |
| Rarely | 33 (40.2%) | 49 (59.8%) | 82 (100.0%) | |
| Never | 2 (13.3%) | 13 (86.7%) | 15 (100.0%) | |
| Total | 332 (58.3%) | 237 (41.7%) | 569 (100.0%) | |
| **Social media is an excellent source for weight loss information** | | | | **< 0.001** |
| Always | 28 (73.7%) | 10 (26.3%) | 38 (100.0%) | |
| Frequently | 96 (70.6%) | 40 (29.4%) | 136 (100.0%) | |
| Sometimes | 169 (59.1%) | 117 (40.9%) | 286 (100.0%) | |
| Rarely | 33 (39.8%) | 50 (60.2%) | 83 (100.0%) | |
| Never | 6 (23.1%) | 20 (76.9%) | 26 (100.0%) | |
| Total | 332 (58.3%) | 237 (41.7%) | 569 (100.0%) | |
| **Social media is an excellent source for increase awareness to weight loss** | | | | **< 0.001** |
| Always | 50 (69.4%) | 22 (30.6%) | 72 (100.0%) | |
| Frequently | 144 (66.4%) | 73 (33.6%) | 217 (100.0%) | |
| Sometimes | 123 (52.8%) | 110 (47.2%) | 233 (100.0%) | |
| Rarely | 12 (33.3%) | 24 (66.7%) | 36 (100.0%) | |
| Never | 3 (27.3%) | 8 (72.7%) | 11 (100.0%) | |
| Total | 332 (58.3%) | 237 (41.7%) | 569 (100.0%) | |

| Association between perception of benefits and risks of social media use and using social media to find ways for weight loss | | | | |
|---|---|---|---|---|
| **Social media is an easily acceptable way to obtain weight loss information** | | | | **< 0.001** |
| Always | 74 (66.7%) | 37 (33.3%) | 111 (100.0%) | |
| Frequently | 154 (65.8%) | 80 (34.2%) | 234 (100.0%) | |
| Sometimes | 94 (52.2%) | 86 (47.8%) | 180 (100.0%) | |
| Rarely | 10 (28.6%) | 25 (71.4%) | 35 (100.0%) | |
| Never | 0 (0.0%) | 9 (100.0%) | 9 (100.0%) | |
| Total | 332 (58.3%) | 237 (41.7%) | 569 (100.0%) | |
| **Use of weight loss information on social media could affect my health** | | | | **0.025** |
| Always | 22 (66.7%) | 11 (33.3%) | 33 (100.0%) | |
| Frequently | 78 (65.0%) | 42 (35.0%) | 120 (100.0%) | |
| Sometimes | 178 (59.7%) | 120 (40.3%) | 298 (100.0%) | |
| Rarely | 39 (46.4%) | 45 (53.6%) | 84 (100.0%) | |
| Never | 15 (44.1%) | 19 (55.9%) | 34 (100.0%) | |
| Total | 332 (58.3%) | 237 (41.7%) | 569 (100.0%) | |
| **Weight loss information on social media negatively affect my weight** | | | | **0.040** |
| Always | 5 (38.5%) | 8 (61.5%) | 13 (100.0%) | |
| Frequently | 48 (63.2%) | 28 (36.8%) | 76 (100.0%) | |

| | | | | |
|---|---|---|---|---|
| **Association between perception of benefits and risks of social media use and using social media to find ways for weight loss** | | | | |
| Sometimes | 124 (61.1%) | 79 (38.9%) | 203 (100.0%) | |
| Rarely | 114 (61.0%) | 73 (39.0%) | 187 (100.0%) | |
| Never | 41 (45.6%) | 49 (54.4%) | 90 (100.0%) | |
| Total | 332 (58.3%) | 237 (41.7%) | 569 (100.0%) | |
| **Weight loss information on social media could be misleading** | | | | **0.038** |
| Always | 11 (61.1%) | 7 (38.9%) | 18 (100.0%) | |
| Frequently | 95 (50.3%) | 94 (49.7%) | 189 (100.0%) | |
| Sometimes | 182 (64.3%) | 101 (35.7%) | 283 (100.0%) | |
| Rarely | 36 (58.1%) | 26 (41.9%) | 62 (100.0%) | |
| Never | 8 (47.1%) | 9 (52.9%) | 17 (100.0%) | |
| Total | 332 (58.3%) | 237 (41.7%) | 569 (100.0%) | |
| **Weight loss information on social media could be scientifically incorrect** | | | | **0.007** |
| Always | 7 (46.7%) | 8 (53.3%) | 15 (100.0%) | |
| Frequently | 120 (51.9%) | 111 (48.1%) | 231 (100.0%) | |
| Sometimes | 161 (66.5%) | 81 (33.5%) | 242 (100.0%) | |
| Rarely | 38 (58.5%) | 27 (41.5%) | 65 (100.0%) | |
| Never | 6 (37.5%) | 10 (62.5%) | 16 (100.0%) | |
| Total | 332 (58.3%) | 237 (41.7%) | 569 (100.0%) | |

| Association between perception of benefits and risks of social media use and using social media to find ways for weight loss | | | | |
|---|---|---|---|---|
| **Weight loss information on social media could be for marketing and financial purpose purely** | | | | **0.303** |
| Always | 40 (57.1%) | 30 (42.9%) | 70 (100.0%) | |
| Frequently | 188 (59.9%) | 126 (40.1%) | 314 (100.0%) | |
| Sometimes | 89 (58.2%) | 64 (41.8%) | 153 (100.0%) | |
| Rarely | 14 (53.8%) | 12 (46.2%) | 26 (100.0%) | |
| Never | 1 (16.7%) | 5 (83.3%) | 6 (100.0%) | |
| Total | 332 (58.3%) | 237 (41.7%) | 569 (100.0%) | |

Table 8
multivariable logistic regression

| Variable | Adjusted OR (ExpB) | 95% CI | p-value |
|---|---|---|---|
| Applying weight-loss information (Yes vs No) | 0.166 | 0.108–0.256 | < 0.001 |
| Trust in weight-loss information (High vs Low) | 0.423 | 0.270–0.661 | < 0.001 |
| Daily social media use (> 4 hours vs ≤ 4 hours)* | 0.536 | 0.347–0.826 | 0.005 |
| Gender (Male vs Female)* | 0.461 | 0.293–0.725 | 0.001 |
| Age (per year increase) | 1.037 | 1.016–1.058 | 0.001 |
| Perceived scientific incorrectness (Yes vs No) | 0.733 | 0.420–1.281 | 0.275 |
| YouTube use (Yes vs No) | 1.025 | 0.689–1.524 | 0.904 |

A multivariable logistic regression model identified independent predictors of using social media for weight-loss information. Applying weight-loss information (aOR 0.166, 95% CI: 0.108–0.256, p < 0.001) and trusting available information (aOR 0.423, 95% CI: 0.270–0.661, P < 0.001) were independently associated with the use of social media for weight-loss purposes after adjusting for age, gender, and daily social media exposure, indicating that participants who did not apply the information were significantly less likely to report social media use for weight-loss purposes compared to those who applied it. Daily social media use, gender, and age were also significant predictors. Perceived scientific incorrectness and YouTube use were not independently associated with the outcome. The final model

demonstrated acceptable fit (Hosmer–Lemeshow p = 0.109) and no evidence of multicollinearity (all VIF values < 2). The model explained approximately 56.5% of the variance (Nagelkerke $R^2$ = 0.565).

# Discussion

The study examined the use of social media platforms as a source of information on weight loss in young adults. It also explained the connection between behavioral and cognitive factors exhibited in its use. The results show that social media is a common source of medical knowledge, as more than half of the participants reported using it for weight reduction, which is consistent with findings from a study of the Saudi Population (2022) (4) that reports social media as an essential source of such information, irrespective of demographic background. While education, income, and residency had no significant association with the results, gender, especially females, along with those who use social media daily with greater screentime, were more likely to search for weight loss information.

The presence of image-centered content on social media platforms may influence women's perception of their body image. This could then encourage them to seek more weight-related information, which may align with findings from a 2022 study: "Influence and effects of weight stigmatisation in media." (15).

Although YouTube showed a significant association in bivariate analysis, this association did not remain significant after adjustment in the multivariable model. The Saudi study (2022) (4) found that users perceive and interact with weight-related information differently across platforms, supporting the value of interactive, content-driven platforms. Exercise and diet were reported as the most frequently searched topics, and the majority of participants reported putting the information to use, with a significant number of individuals reporting consistent positive results. This approach to accessing, assessing, and responding to information is supported by research on the STOP Method (2025) (9).

Additionally, the results showed that social media is perceived as an interactive environment shaped by perceptions of credibility, usefulness, and risk. Although participants recognized that the information may be scientifically misleading, higher engagement frequency was perceived to be significantly associated with greater perceived benefits and reliability. This dual comprehension reflects the findings of the STOP Method study conducted in 2025 (9), which highlighted the presence of accurate content and misinformation on the same media platforms, as well as the challenges users face in distinguishing between them. In addition, the 2022 systematic review (15) on the impact of social media on weight stigmatization discussed how weight-related information can influence an individual's perceptions and cognitions, even when the individual is aware of the risk factors. In the multivariable analysis, behavioral engagement and trust of social media information on weight loss emerged as the strongest independent predictors of using social media for weight-loss information. The association between applying weight-loss information and social media use suggests a strong behavioral engagement component, although the direction of association reflects the defined reference category in the regression model. Similarly,

higher trust in available information was independently associated with social media use for weight-loss purposes, highlighting the role of perceived credibility in shaping engagement patterns.

Daily social media exposure, gender, and age also remained independently associated with the outcome. Greater daily use was linked to higher engagement with weight-loss content, likely reflecting increased exposure to algorithm-driven health information. Age demonstrated a modest positive association, while gender differences may reflect sociocultural influences related to body image and health behaviors. In contrast, perceived scientific incorrectness of information and specific platform use were not independently associated after adjustment, suggesting that behavioral patterns and trust mechanisms may play a more influential role than platform preference or awareness of misinformation.

There are several other possible explanations to keep in mind. People who are already motivated to lose weight might simply be more likely to search for information online, which means their personal motivation could come first and actually drive their exposure to this content. The positive outcomes they report might also be linked to other lifestyle changes happening at the same time, rather than being caused by social media itself.

Greater daily exposure to social media may increase the likelihood of encountering weight-related content, which could influence engagement with such information. This is also related to the social environment, which contributes, particularly through cultural factors regarding body image, as presented in the review on weight stigmatisation (2022) (15).

Clinically, these results indicate that many patients seek social media advice on weight loss before consulting a physician. Medical practitioners should therefore enquire about the types of weight-related material patients encounter online and the strategies they have already tried.

For that, we should begin helping individuals to take advantage of social media and develop critical thinking abilities regarding the information they encounter, rather than discourage its use, as this act will help them use evidence-based methods and avoid any risky practices.

For future research, we recommend using longitudinal designs to assess the relationships among social media content exposure, information experimentation, and outcomes. To assess changes in weight, it is essential to employ objective methods alongside self-reported data. It's also crucial to examine how stigma, trustworthiness, and digital literacy affect willingness to pursue alternative weight-loss strategies, particularly among individuals who come from different cultural backgrounds.

**Limitations of the study**:

1. The study's cross-sectional design has limited the ability to determine any causal relationship between social media usage and weight loss behaviors.
2. The data were collected via an online self-administered tool, which is susceptible to self-selection bias and may exclude individuals with limited internet access or inadequate digital literacy.

3. Self-reported measures, such as usage time, trust, applicability, and long-term effects, may be subject to recall bias and social desirability bias.
4. The use of convenience and partial snowball sampling may have introduced selection bias, potentially overrepresenting individuals with higher digital engagement. The predominance of female participants may limit generalizability to the broader Palestinian population. Additionally, the online nature of the survey may have excluded individuals with limited internet access or lower digital literacy.
5. There were no objective clinical measures, like weight and BMI, used to back up the long-term good results.
6. We did not measure psychological and behavioral factors like initial motivations, body-image issues, and past failed weight-loss attempts.
7. The research assessed perceptions of content credibility instead of the objective accuracy of social media content from a scientific perspective.
8. Although internal consistency analysis demonstrated acceptable reliability for the perceived benefits and risk domains, composite scores were not constructed, as the study aimed to evaluate each perception variable independently. The low internal consistency observed among trust-related items supports the conceptual distinction between trust, perceived reliability, and verification behavior in the digital health context.
9. Reverse causation cannot be excluded due to the cross-sectional design

## Conclusion

Social media has been a major source of weight-loss information among adults in Palestine, with more than half of participants reporting its use for this purpose. Females and those with extensive daily time use of social media were more likely to seek and encounter this information online. YouTube was the most frequently reported platform for weight-loss searches in descriptive analysis, although platform preference did not remain independently associated after adjustment.

Although many people viewed social media as helpful, accessible, and beneficial for raising awareness, a significant number also recognized the risks of misleading and scientifically inaccurate information. Trust and reliability seemed to be closely linked with the use of social media, and Trust and engagement behaviors were closely linked with the reported use of social media for weight-loss information. These findings may suggest that some users approach social media as a practical source of weight-related information.

Generally, Social media represents both a widely accessible source of weight-loss information and a potential channel for misinformation. These findings suggest the importance of strengthening digital health literacy initiatives and promoting evidence-based weight-loss content within online environments, alongside the importance of educating the public in Palestine on how to assess the credibility of online health information. Integrating digital health literacy into national health promotion strategies may help mitigate misinformation-related risks and improve informed decision-making among social media users.

## Declarations

### Ethics approval and consent to participate

Ethical approval for this study was obtained from the Institutional Review Board (IRB) of the Arab American University (AAUP), Palestine (Approval number: J-2025/A/58/N). All procedures were conducted in accordance with the Declaration of Helsinki. Informed consent was obtained electronically from all participants before participation by selecting the statement “I agree to participate in this study.” Participation was voluntary and anonymous.

### Consent for publication

Not applicable.

# Competing interests

The authors declare that they have no competing interests.

# Authors’ contributions

MAA contributed to study conception, data collection, statistical analysis, and manuscript drafting. MSA contributed to data collection, literature review, and manuscript preparation. RHS contributed to data collection and interpretation of findings. MA supervised the study, contributed to study design, data analysis, critical revision of the manuscript, and approved the final version. HI contributed to study supervision and critical revision of the manuscript. All authors read and approved the final manuscript.

# Assistant Professor of Mahdi Aljamal MD

Dr. Mahdi Aljamal, MD, is an Assistant Professor of General Surgery and the Head of the Department at the Faculty of Medicine, Arab American University (AAUP), Palestine. His research interests include surgical outcomes research, public health, digital health behavior, and clinical epidemiology.

# Funding

This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

# Author Contribution

MAA contributed to study conception, data collection, statistical analysis, and manuscript drafting. MSA contributed to data collection, literature review, and manuscript preparation. RHS contributed to data collection and interpretation of findings. MA supervised the study, contributed to study design, data analysis, critical revision of the manuscript, and approved the final version. HI contributed to study supervision and critical revision of the manuscript. All authors read and approved the final manuscript.

# Acknowledgement

The authors would like to thank all participants who voluntarily completed the survey. We also acknowledge the Arab American University for providing a supportive academic environment for student research.

# Availability of data and materials

The datasets generated and/or analyzed during the current study are available from the corresponding author upon reasonable request.

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# Figures

**Figure 1: flow diagram for patient selection**

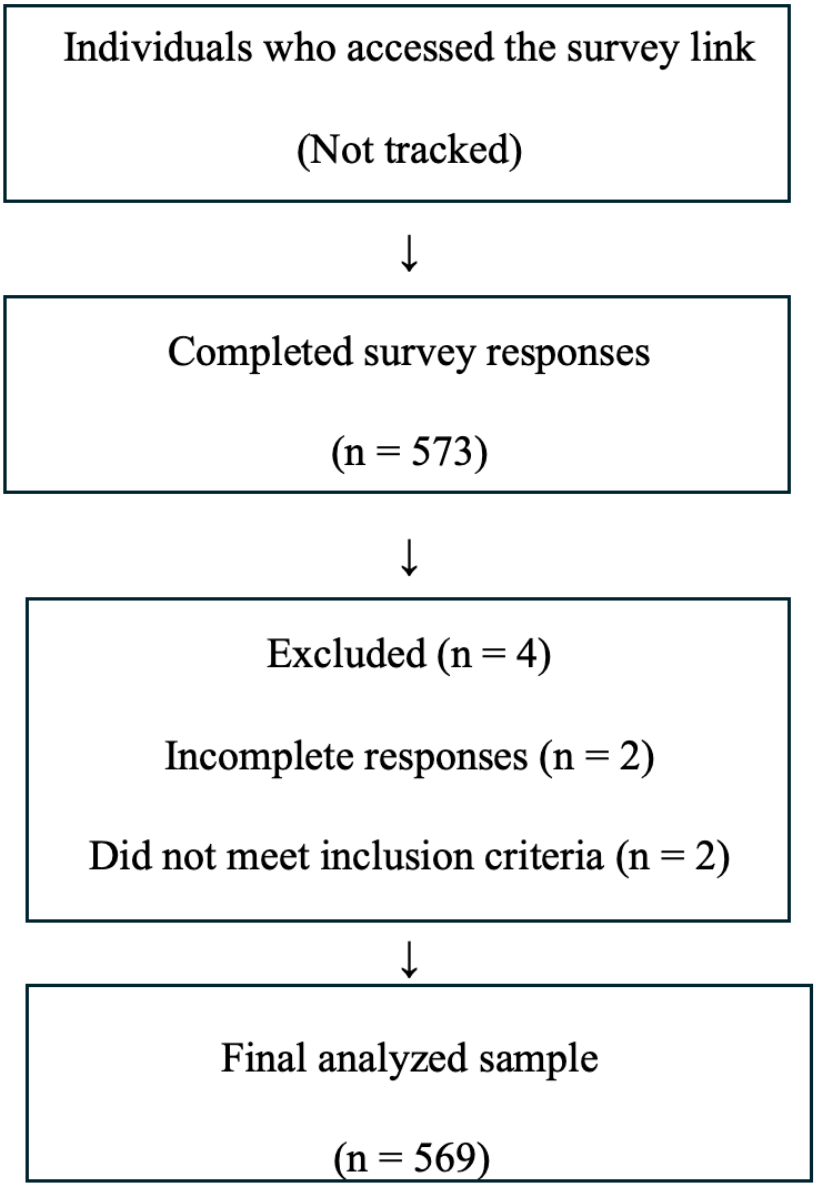



**Figure 1**

See image above for figure legend.

## Supplementary Files

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