

The self-reported influence of social media on food choices of young adults at a tertiary institution in South Africa

M Kreft^{a*} , C Lombard^b and N Koen^a

^aDivision of Human Nutrition, Faculty of Medicine and Health Sciences, Stellenbosch University, Stellenbosch, South Africa

^bDivision of Epidemiology and Biostatistics, Faculty of Medicine and Health Sciences, Stellenbosch University, Stellenbosch, South Africa

*Correspondence: mgnkrft@gmail.com



Objective The accuracy of user-generated content on social media (SM) is unclear, raising concerns about misinformation and the influence of marketing on food choices. This study aimed to determine the self-reported influence of SM use on food choices through investigating different types on nutrition information, sources of influence and platform usage.

Design A cross-sectional descriptive study with an analytical component was conducted by a self-administered electronic survey ($n = 1\ 434$).

Setting Tertiary institution in Western Cape, South Africa.

Participants 1 434 registered undergraduate and postgraduate students aged 18–35 years, who were SM users.

Results The majority (64%) used SM for health and nutrition-related content, with 89% of participants reporting it influenced their food choices. Females (70%, $n = 693$) were more likely than males (52%, $n = 228$) to use social media for nutrition information ($p < 0.0001$). Daily engagement was highest on Instagram (64%). Participants rated their level of influence of SM on their food choices for diets, supplements, food products and recipes; using a four-point Likert scale (no influence, slight influence, moderate influence, high influence). Participants mostly reported 'no influence' of diets (41%) and supplements (49%) on food choices, while a 'slight' level of influence was reported for food products (46%) and recipes (44%). The majority (61%) reported trying to convince others to try food products, supplements, recipes or diet trends seen on SM.

Conclusion SM was used to access nutrition-related content and had a self-reported impact on food choices. Food products, recipes, and friends and family were most influential.

Keywords food choices, misinformation, nutrition, public health, social media

Introduction

Social media (SM) is a source of nutrition information amongst young adults.¹ SM is defined as an internet based-interactive platform where users can create and share content online and includes platforms like Instagram, Facebook and YouTube.² Due to its abundance, nutrition information on SM is often unintentionally viewed and engaged with.³ The accuracy and reliability of such information are often uncertain, given the prevalence of user-generated content and the lack of regulation or monitoring.^{4–8} There is also an increasing use of SM for marketing purposes, which has been seen to impact the beliefs and attitudes of users. Distinguishing intentional marketing from personal statements by influencers can be difficult.^{9–11} Understanding the influence of different forms of nutrition information on food choices is an important public health issue due to the abundance of misinformation.^{4–8}

Registered dietitians are uniquely qualified to communicate and promote evidence-based information.⁸ Healthcare professionals (HCPs) have been reluctant to engage with misinformation due to the ethical consideration of SM usage such as blurring of boundaries with patients, maintaining patient confidentiality and upholding the public image of their profession.¹² Moreover, research investigating dietitians' usage of SM in South Africa has identified barriers to SM usage including factors such as time constraints, technical knowledge and poor engagement.¹³ Understanding how SM users implement nutrition information can assist in guiding dietitians and other HCPs in utilising SM platforms for health-promotional activities.

This study aimed to determine the self-reported influence of SM use on food choices among young adults at a tertiary institution in the Western Cape, South Africa. The hope is to strengthen the current SM guidelines and support provided to dietitians and other HCPs, enabling them to share and engage with more relevant content resulting in better reach and impact on SM. This aligns with making better use of SM for health-promotion activities and creating an enabling environment for healthy food choices on SM.

Methodology

The objectives were to determine the types of nutrition and health information that were influential including recipes, food products, supplements and diets, as well as the sources of this information such as friends, family, celebrities, influencers and HCPs and, lastly, the SM platforms used to access this information such as Instagram, Facebook, YouTube and TikTok. The secondary objective was to investigate the differences between genders, level of physical activity and time spent online.

Study design and sampling

This was a cross-sectional descriptive study with an analytical component. The study population included all registered undergraduate and postgraduate students from a tertiary institution in the Western Cape, South Africa (approximately 32 000 at the time of data collection) using a self-administered online survey.¹⁴ Young adults were the target population due to their SM usage and the change in dietary behaviours

experienced during this time period.¹⁵ The inclusion criteria applied to survey responders were adults between the age of 18 and 35 years, who were SM users, had a university email address, and had access to the internet and provided consent. The final sample was a non-random convenience sample.

Methods of data collection

Ethical approval was obtained from the Health Research Ethics Committee of Stellenbosch University (HREC) (S23/09/217) and institutional approval was obtained from Stellenbosch University. The eight ethical principles from Emanuel were fulfilled for this research study.¹⁶

Data collection was done using a self-administered online survey. The survey was developed based on previous literature^{17–19} and the research objectives and disseminated using SUNSurveys, facilitated by the tertiary institution. The survey was in English and consisted of 46 questions comprising different question formats including Likert scales, multiple-choice questions and open-ended questions, which took 15–20 minutes to complete. The scale of influence was reported using a four-point Likert scale with 1 indicating 'no influence', 3 indicating 'slight influence', 3 indicating 'moderate influence' and 4 indicating a strong level of influence. Additionally, there was a qualifying question at the start of the questionnaire to exclude all non-SM users as well as participants not within the required age group and participants were restricted to one submission. The survey was content validated through two experienced dietitians within the field of survey-based research and SM, respectively, as well as a psychologist. Face validity was assessed through a pilot study consisting of nine conveniently selected first-year students in May 2024. This was done to

ensure the quality and comprehension of the survey and that there were no technical issues when completing the survey. There were no changes required to the survey following the pilot study.

An email was sent to all prospective participants in May 2024, with a reminder two weeks later to provide them with more information about the survey and to invite them to take part. The survey closed after six weeks. Participants had to provide informed consent before completing the survey and were able to download a copy of the informed consent document. Additionally, they were able to take part in a lucky draw to receive one of four Takealot vouchers; this was done by means of a separate link. The electronic survey collected the results automatically and the data were collated electronically and coded in Microsoft Excel (Microsoft Corp, Redmond, WA, USA) for analysis, interpretation and evaluation.

Sample size

The sample size is illustrative of the expected number of eligible respondents. The sample size was calculated to compare an ordinal outcome such as a Likert scale with five levels (i.e. ordinal categories of influence) between two groups (i.e. gender, exercise level) using ordinal logistic regression with a significance level of 5% and power of 90%. Based on previous research¹⁷ conducted using a similar sample strategy, a study with 832 participants (416 per group) will have 90% power to detect a difference between the response proportions (strongly disagree, disagree, neutral, agree, strongly agree) of 0.1, 0.1, 0.2, 0.3, 0.3 in the one group and 0.069, 0.074, 0.165, 0.301, 0.391 in the second group.

Statistical analysis

The data were exported from SUNSurveys to MS Excel, and the statistical package SPSS (Version 29.0.2.0; IBM Corp, Armonk, NY, USA) and Stata 16 (StataCorp LLC, College Station, TX, USA) were used for analysis. The descriptive component was analysed by means of summary statistics. Percentages are rounded to the nearest whole number. Open-ended responses were read and re-read to gain understanding, then grouped into themes. This was also used to enrich the researchers' interpretation of the data. For the analytical component, comparisons between categorical independent variables (gender) were analysed by chi-square tests.

Ordinal logistic regression was used to evaluate the strength of the relationship between independent variables (gender, age in years, exercise category) and dependent variables (type of information used). Odds ratios were estimated with 95% confidence intervals as the statistical measure of association in the ordinal logistic regression models. A statistical significance of $p < 0.05$ with 95% confidence intervals was used.¹⁸

Results

Of the 2 551 participants who started the survey, 1 434 participants met the inclusion criteria. The average age of the study participants was 22.19 ± 3.9 years. Table 1 presents a summary of the sociodemographic and lifestyle characteristics of the sample.

Social media usage: time spent online

The modal time spent online per day as reported by participants was two hours (22%, $n = 322$) (range 1–24 hours), with a median of three hours spent online (IQR 3–5 hours). Females (70%, $n =$

Table 1: Sociodemographic and lifestyle characteristics of participants ($n = 1\ 434$)

Item	Category	n (%)
Gender	Male	438 (30%)
	Female	986 (69%)
	Other	10 (0.7%)
Study/work status (More than one answer allowed)	Study full time	1 300 (91%)
	Study part-time	110 (7%)
	Work full time	116 (8%)
	Work part-time	85 (6%)
	Work casually	60 (4%)
	Other	7 (0.5%)
Priority of physical activity amongst participants	Yes	1 071 (75%)
	No	363 (25%)
Physical activity (hours per week)	0–3	629 (44%)
	3–5	445 (31%)
	5–7	246 (17%)
	> 7	114 (8%)
Social media accounts of participants	Facebook	777 (54%)
	Instagram	1 283 (90%)
	YouTube	1 190 (83%)
	Pinterest	891 (62%)
	Twitter	411 (29%)
	TikTok	769 (54%)
	LinkedIn	689 (48%)

693) were more likely than males (52%, $n = 228$) to use social media for nutrition information ($\chi^2 = 49.79$, $p < 0.0001$).

Daily engagement was highest on Instagram (64%, $n = 913$) followed by YouTube (39%, $n = 558$) and TikTok (35%, $n = 506$). The platforms with the least engagement included Twitter (78%, $n = 1124$), LinkedIn (59%, $n = 847$) and Facebook (55%, $n = 789$). Some 64% ($n = 921$) of participants reported using SM for health- and nutrition-related information; 89% ($n = 1\ 269$) of participants reported that SM had an influence on their food choices (including options 'slight', 'moderate' and 'high' level of influence). The option of 'slight influence on food choices' was selected by most of the participants (47%, $n = 668$).

Factors influencing food choices

The majority of participants did not have a medical condition or preferences that influenced their food choices (77%, $n = 1\ 100$). The medical conditions/preferences included: allergies (6%, $n = 82$), gut-related issues (8%, $n = 107$), chronic disease of lifestyle (2%, $n = 27$), nutritional deficiency (5%, $n = 73$), followed a specific diet like vegan or vegetarian (5%, $n = 65$) and other (8%, $n = 120$). 'Other' included reports such as PCOS, religious reasons, polycystic kidney disease, eating disorder history, endometriosis and reports of wanting a high-protein diet for sports reasons. Responses related to sources of dietary advice regarding medical conditions included: 'Doctors/Professionals, but Google also helps', 'TikTok, IG, Google', 'Nutritionists', 'Parents', 'TikTok has a lot of dietitians sharing their knowledge and advice', 'Food blogs'. An interesting response included 'So tired of misinformation, avoid SM food advice'.

As seen in Table 2, participants reported a strong level of agreement for purchasing (55%, $n = 795$) and consuming (65%, $n = 929$) a product because they enjoy the product. Additionally, the majority of participants agreed with purchasing products after recommendations from friends (62%, $n = 892$) and family (56%, $n = 808$). Participants agreed with following dietary recommendations on SM from registered dietitians (81%, $n = 938$), HCPs (65%, $n = 925$), family (61%, $n = 874$) and friends (48%, $n = 706$). Participants disagreed with following recommendations from celebrities (86%, $n = 1\ 223$) and from influencers (74%, $n = 1\ 065$) on SM. The majority of participants have tried to convince friends or family to buy or try out a food or nutrition product, supplement, recipe or diet trend that they saw on SM (61%, $n = 879$).

Use of nutrition and health information seen online

Participants were asked to select the frequency of use of recipes, food products, supplements and diets from what they see on SM; this is displayed in Table 3. Fitted ordinal logistic regression was used to compare frequency of use for each type of nutrition information amongst age, gender and activity level from participants who reported using SM for nutrition information. The regression estimates are summarised in Table 4. Some 40% ($n = 575$) of participants reported making use of recipes from SM 2–3 times per month. Females used recipes from SM significantly more than males, OR = 2.2 (95% CI: 1.6–2.9, $p < 0.0001$). The majority of participants reported not using diets (62%, $n = 892$) or information regarding supplements (53%, $n = 753$) as seen on SM. There was a difference amongst age groups, with older participants using diets from SM more often (OR = 1.04; 95% CI: 1.01–1.06, $p = 0.019$). Males used supplementary information from SM more than females (OR = 0.6; 95% CI: 0.5–0.8, $p < 0.0001$). Participants who prioritised physical activity reported using supplementary information from SM more than

participants who did not prioritise physical activity (OR = 1.6; 95% CI: 1.2–2.2, $p = 0.002$). Older participants made use of food products from SM less than younger participants (OR 0.96; 95% CI: 0.93–0.99, $p = 0.011$).

Participants were asked to report the level of influence, choosing among no influence, slight influence, moderate influence or high influence, that SM had on their food choices for different nutrition categories. The results are shown in Figure 1.

In all, 44% ($n = 633$) of participants agreed with implementing dietary advice on weight loss from SM while 18% ($n = 258$) were in strong agreement. Most of the participants strongly disagreed with implementing different types of diets (45%, $n = 638$) or dietary advice for medical conditions from SM (44%, $n = 633$). Most of the participants (41%, $n = 587$) were in strong agreement with implementing sports performance advice from SM.

Types of nutrition information obtained on social media

Recipes with the most usage included 30-minute meals (52%, $n = 752$), high-protein meals (47%, $n = 672$) and recipes with minimal ingredients (46%, $n = 656$). Most people did not make use of supplements seen on SM (60%, $n = 858$) and of those who did, the most used supplements from recommendations and/or adverts on SM were vitamin and mineral supplements such as multivitamins (27%, $n = 380$). The most reported food products used from recommendations and/or adverts on SM were convenience snacks (31%, $n = 449$). This is summarised in Table 5.

Self-reported influence of social media on food choices

The majority of participants (61%, $n = 879$) reported trying to convince a friend or family member to buy or try out a food or nutrition product, supplement, recipe or diet trend that they saw on SM. Participants were asked to recall specific purchases or implementation of different nutrition information (recipes, food products, supplements and diets) obtained from SM and provide details on the platform and sources of this information. In total, 44% ($n = 628$) of the participants reported purchasing a food product because they saw it on SM. The highest reported frequency was monthly (22%, $n = 319$) and the most recalled platform was Instagram (32%, $n = 461$) with influencers being the most reported source of this information (16%, $n = 230$). Examples of food products recalled included: 'Checkers – Oh my goodness bars', 'Woolworths ready-made meals', 'Kefir, Herbal teas, parasitic cleanses', 'Protein bars', 'UCook'. The majority of participants used recipes (82%, $n = 1\ 175$); this mostly happened monthly (45%, $n = 648$). The most reported SM platforms used for recipes were Instagram (55%, $n = 782$) and TikTok (32%, $n = 459$) with influencers (29%, $n = 412$) and random people (34%, $n = 490$) as the highest sources of this information. Examples of specific recipes recalled included: 'TikTok feta pasta', 'overnight oats', 'meal prep recipes', 'easy pasta', 'quick dinners'. The majority did not report purchasing supplements (73%, $n = 1\ 050$) or following diets (85%, $n = 1\ 224$) from SM. Examples of supplements recalled included: 'Collagen powder', 'Vitamins', 'Weight-loss pills', 'Metabolism protein powder', 'Probiotics' and examples of diets recalled included: 'Banting', 'Keto', 'Intermittent fasting', 'High calories', 'Vegetarian', 'Vegan'.

Table 2: Summary of factors influencing food choices of participants (n = 1 434)

Question	Option	Strongly disagree n (%)	Disagree n (%)	Agree n (%)	Strongly agree n (%)
I choose to consume a food product because it is ...	Affordable	19 (1%)	66 (5%)	680 (47%)	669 (47%)
	Easy to find/buy	25 (2%)	109 (8%)	735 (51%)	565 (39%)
	Something I enjoy to eat	9 (< 1%)	23 (2%)	473 (33%)	929 (65%)
	Easy to prepare	15 (1%)	97 (7%)	682 (48%)	640 (45%)
	Fits a specific macronutrient profile (low-carb/high-protein/high-fibre/low-fat)	181 (13%)	461 (32%)	547 (38%)	245 (17%)
	Makes me feel better (happier, more calm, feel good about myself)	123 (9%)	347 (24%)	640 (45%)	324 (37%)
	It is available to me such as something prepared by my family, partner or residence	114 (8%)	195 (14%)	574 (40%)	551 (38%)
I make food choices/purchases based on ...	Recommendations from friends	91 (6%)	303 (21%)	892 (62%)	148 (10%)
	Recommendations from family	54 (4%)	189 (13%)	808 (56%)	383 (27%)
	Advertisements that appear in my social media feed from someone I follow	233 (16%)	518 (36%)	598 (42%)	85 (6%)
	Advertisements that appear in my social media feed from someone I don't follow	375 (26%)	632 (44%)	375 (26%)	52 (4%)
	I saw a local celebrity I follow uses it	670 (47%)	538 (38%)	198 (14%)	28 (2%)
	I saw an international celebrity I follow uses it	698 (49%)	516 (36%)	194 (14%)	26 (2%)
	Local sports person	615 (43%)	513 (36%)	279 (20%)	27 (2%)
	International sports person	633 (44%)	470 (33%)	292 (20%)	39 (3%)
	Company/organisations	540 (38%)	584 (41%)	289 (20%)	21 (1.5%)
	Someone on my feed recommend it	346 (24%)	449 (31%)	578 (40%)	61 (4.3%)
	It was on special in the shops (Perhaps: It was on promotion at retail outlets)	96 (7%)	214 (15%)	768 (54%)	356 (25%)
	A healthcare professional I follow recommended it	249 (117%)	371 (26%)	590 (41%)	224 (16%)
	An influencer I follow recommended it	486 (34%)	522 (36%)	380 (27%)	46 (3%)
	Someone in the health and nutrition niche who doesn't have a health sciences degree	500 (35%)	588 (39%)	319 (22%)	57 (4%)
	I enjoy it and felt like eating it	17 (1%)	36 (3%)	586 (41%)	795 (55%)
I follow dietary advice or recommendations from the following people on social media ...	Friends	265 (19%)	462 (32%)	603 (41%)	103 (7%)
	Family	227 (16%)	333 (23%)	634 (44%)	240 (17%)
	Celebrities	610 (43%)	613 (43%)	290 (13%)	21 (2%)
	Sportsperson	467 (33%)	494 (34%)	419 (29%)	54 (4%)
	Influencer	560 (39%)	505 (35%)	331 (23%)	38 (3%)
	Registered dietitian	228 (16%)	258 (18%)	624 (44%)	324 (37%)
	Healthcare professional	216 (15%)	293 (20%)	625 (44%)	300 (21%)

Discussion

The main aim of the study was to investigate the self-reported influence of SM on food choices. The study found that young adults make use of SM to access health- and nutrition-related information, with the most popular types of information

being recipes and food products. Implementation of nutrition information on SM was more common from Instagram. Moreover, females used SM more so than males and were also more likely to make use of recipes seen online. Supplements were most likely to be used by males and those who are

Table 3: Frequency of use of different health and nutrition information from social media including the total sample (n = 1 434) and participants who use SM for nutrition information (n = 921).

Type of information	Never		Rarely (less than once a month)		Sometimes (2–3 times per month)		Often (at least once a week)	
	n = 1 434	n = 921	n = 1 434	n = 921	n = 1 434	n = 921	n = 1 434	n = 921
Recipes	121 (8%)	30 (3%)	460 (32%)	299 (25%)	575 (40%)	418 (45%)	278 (19%)	244 (27%)
Diets	892 (62%)	477 (52%)	321 (22%)	254 (28%)	158 (11%)	136 (15%)	63 (4%)	54 (6%)
Supplements	752 (52%)	387 (42%)	366 (26%)	277 (30%)	201 (14%)	157 (17%)	115 (8%)	100 (11%)
Food products	433 (30%)	196 (21%)	447 (31%)	304 (33%)	383 (27%)	287 (31%)	171 (12%)	134 (15%)

Table 4: Estimates of odds ratios from the ordered logistic regression to show effect of sex, age and physical activity on the search frequency of four nutritional elements in participants who reported using SM for nutrition information ($n = 921$)

Outcome variable	Independent variable	OR	95% CI	p-value
Recipes	Females compared with males	2.2	1.65–2.93	< 0.001
	Age ¹	1.0	0.98–1.03	0.648
	Physical activity ²	0.95	0.70–1.28	0.735
Diets	Females compared with males	1.2	0.90–1.61	0.205
	Age	1.03	1.01–1.06	0.109
	Physical activity	0.93	0.69–1.26	0.642
Supplements	Females compared with males	0.6	0.46–0.80	< 0.001
	Age	1.0	0.98–1.04	0.397
	Physical activity	1.6	1.19–2.18	0.002
Food products	Females compared with males	0.92	0.70–1.21	0.579
	Age	0.96	0.93–0.99	0.011
	Physical activity	1.10	0.82–1.48	0.510

¹Age: Odds ratio for a 1-year difference in age of participants.

²Physical activity: Odds ratio comparing participants who prioritise physical activity compared with those who did not.

more active. Friends and family were found to be sources of influence for the purchasing of products, although adverts and recommendations seen online were also reported to be influential sources of information. Surprisingly, influencers had a mixed impact on food choices and celebrities and sportspeople seemingly did not have an influence on food choices.

Social media usage

This study found that SM was used as a source of nutrition- and health-related information and that this information had an influence on food choices. These findings are consistent with the World Health Organization's statement on the influence of the digital food environment on people's food choices.²⁰ Interestingly, this study found that the time spent on SM had no effect on whether SM was used to access nutrition information. This is meaningful, because SM users, no matter how active, are all bound to view and engage with nutrition information online. It is also well established that SM has an abundance of misinformation, and implementing this information could be harmful.^{4,8} This highlights the complex and difficult nature of navigating information on SM, specifically, the importance of ensuring credible information on SM. Users should have more control over what they are viewing online, and measures should be put in place to reduce misinformation and highlight credible sources of information online.

The popularity of Instagram and YouTube could be described by the platforms' unique characteristics, with users being able to view and engage with images, videos, shoppable links, live videos and the chat function. Users have described their interactions on Instagram as fun, entertaining and interactive.²¹ Different SM platforms may be used for different advertising campaign outcomes; this process can be used when designing effective health-promotion campaigns on SM.^{21,22} In this case, Instagram could be used for nutrition- and health-related

campaigns when wanting to reach this population. This also applies to types of nutrition information as described below.

Types of nutrition information accessed online

The usage of recipes is consistent with previous research that has demonstrated the use of SM to access recipes.^{23–25} This can be explained by the inspirational component of SM.²⁶ Additionally, females used recipes more than males, which could be linked to the fact that females are typically the cooks of the household. Previous research has demonstrated that young adults are highly influenced by influencers' product recommendations seen on SM, which correlates with the findings of the current study.²⁷ This information can guide dietitians to the types of information to share on SM for this population group. Importantly, HCPs will need to remain relatable for users to implement recommendations made online. This element is also key for the effectiveness of health-promotion campaigns on SM. An example could be a campaign showcasing how to incorporate nutritious food ingredients into tasty recipes while sharing the nutrition information regarding the benefits of including such products, which also allows for practical implementation for viewers.

Sources of influence from social media

Sources of influence were mixed and conflicting in the current study. Friends and family were identified as main sources of influence; this correlates with previous research that highlighted the influential impact of peer support on health behaviours and the role of SM in messaging amongst friends.³ Contrary to previous research, influencers were not reported as sources of influence; however, the results were conflicting as influencers were still the most recalled sources of influence when participants made use of recipes or food products.^{28,29} This inconsistency could be explained by the fact that, in general, SM users are not impacted by influencers, but when wanting to purchase specific products or follow a specific recipe, the influencers seem to hold greater impact. A Dutch study revealed that influencers had the ability to impact purchasing behaviour through endorsements, largely due to the sense of social identification, which resulted in brand commitment and purchasing of the items being endorsed.²⁷ Explanations for the current findings could be that influencers are more relatable so their information is followed, or it could be that their content is more memorable and therefore participants are able to recall it better.

Notably, recommendations from HCPs and registered dietitians were also followed. Interestingly, an Australian research study found nutritional professionals to be considered as more trustworthy and authentic than social media influencers.³⁰ These are promising findings, as it shows the potential influence of registered dietitians on SM. The American Dietetic Association has highlighted that dietitians are uniquely qualified to share nutrition-related information on SM and should be encouraged to do so.⁸ However, research investigating the usage of SM by South African dietitians found specific barriers to SM usage, namely time available to post and engage on SM, familiarity with platforms and technical knowledge, rate of engagement and maintaining confidentiality online.¹³ Another Australian study investigating dietitians' use of SM recommended that dietitians should be upskilled to make better use of SM.³¹ It is therefore recommended that more focus should be put on developing the dietetic curriculum and providing workshops for dietitians to improve their confidence and use of SM to facilitate the growth and impact of their respective SM profiles.

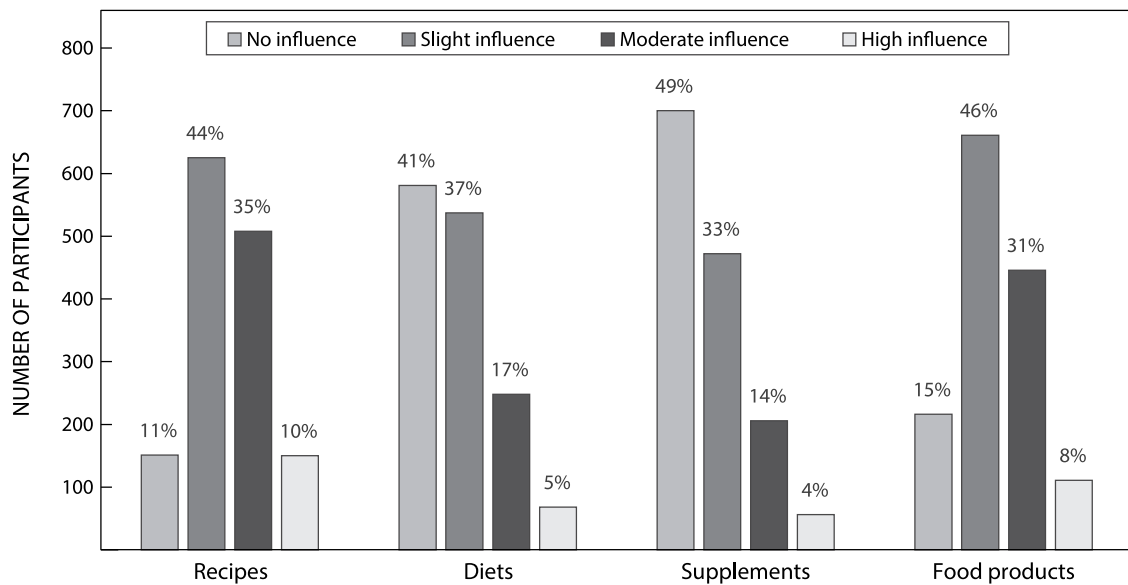


Figure 1: The self-reported influence of different health and nutrition information from social media ($n = 1\,434$).

Feed content still had a reported influence on purchasing behaviours. Previous research has highlighted that nutrition content viewed online is often not actively sought after.^{1,3,17} Research has shown how SM food marketing can be masked as regular content. Often, paid marketing posts or gifted content are not disclosed on SM; moreover, the general population who share product information are unlikely to be being paid to do so and are unlikely to be doing it for marketing purposes, yet can still be influential in influencing food choices.³² This is specifically relevant due to the high exposure of nutrition-related information on SM.^{1,17} HCPs also need to be mindful of abiding by marketing codes and ethical standards when sharing product information on SM to ensure transparency and integrity, as outlined in the 'Guidelines for Good Practice in Healthcare Professions: Ethical and Professional Rules of the Health Professions Council of South Africa' and the 'Social Media and Communication Guidelines' published by the Association for Dietetics in South Africa.³³ Given the use of SM it would be beneficial to have updated clear guidelines for dietitians with regard to providing nutrition information online and working with health brands when advertising or providing information concerning products or supplements on their profiles as the existing guidelines are largely outdated. Furthermore, more focus should be put on developing the dietetic curriculum and providing workshops for dietitians to improve their confidence and use of SM to facilitate growth and the impact of their respective SM profiles. This should be done to empower dietitians to share and engage with nutrition information online and amplify credible sources of nutrition information.

Strengths of the study

The sample size of the study was sufficient to conduct the secondary objectives of the study. Additionally, the data collection tool was well constructed and was content- and face-validated, which strengthens the reliability and validity of the tool, allowing for more accurate responses to be collected. Accounting for factors such as gender, physical activity and SM platform usage allowed for the evaluation of associations of these variables with the influence of different nutrition information on SM. This enabled more enriched interpretation of the results.

Limitations of the study

Due to the nature of data collection, specifically being self-reported data, the results are not generalisable. Moreover, the sample population was mainly females and of a young age as well as registered university students, which needs to be taken into consideration when interpreting the results. The questionnaire was conducted online, so additional information or clarification was not possible. The participants involved in the pilot study were not specifically excluded.

Conclusion

SM had a self-reported impact on food choices in eligible respondents. Recommendations from friends and family had the most impact on food choices, although influencers were the most recalled source of information from SM. Instagram was the most used SM platform and had the highest recall as a source of information, and recipes and food products were the most used types of nutrition information from SM.

A team approach should be adopted to develop guidelines and solutions to combat misinformation online, including ways to support HCP in sharing both nutrition and health information online and marketing legislation. This team should include dietitians, policy-makers, public health professionals, marketing specialists, SM influencers and SM platforms.

Future research should aim to include a probability-based representative cross-sectional and cohort sample to explore the complex dynamics of SM and its impact on food choices, with the aim of future intervention studies to evaluate the effectiveness of different health communication strategies on SM platforms to improve food choices and health outcomes.

Acknowledgements – The authors would like to thank Dr Nelene Koen and Prof Lombard for their support and expertise as well as the participants for their time and honesty.

Disclosure statement – No potential conflict of interest was reported by the authors.

Table 5: Summary of the types of nutrition information obtained online (n = 1 434)

Question	Options	n (%)
What type of recipes do you use from recommendations and/or adverts on social media? (You can choose more than one)	High protein	672 (47%)
	Low fat	232 (16%)
	Low calories	389 (27%)
	Ready in 30 minutes	752 (52%)
	Minimal ingredients	656 (46%)
	Desserts or sweet things	595 (42%)
	Savoury snacks	314 (22%)
	Trendy recipes such as baked feta pasta, tortilla fold hack, one-pot mac and cheese, cottage cheese eggs	478 (33%)
	I don't use recipes from social media	155 (11%)
What type of supplements do you use from recommendations and/or adverts on social media? (You can choose more than one)	Other	78 (5%)
	Vitamins and minerals (multivitamin, iron supplement, probiotics)	380 (27%)
	Herbal supplement (hormone balance, gut health)	171 (12%)
	Sports supplements (creatine, pre-workout, fat burners, gels)	190 (13%)
	Dietary supplement (protein powder)	200 (14%)
	I don't use supplements recommended/advertised on social media	858 (60%)
What type of food products do you buy from recommendations and/or adverts on social media? (You can choose more than one)	Other	18 (1%)
	Microwave/frozen ready-made meals (pastas, curries etc.)	280 (20%)
	Grab-and-go foods (sandwich, wraps, salads etc.)	385 (27%)
	Convenient snacks (snack bar, dried fruit, nuts, biltong etc.)	449 (31%)
	Beverages (sparkling water, juice, cooldrinks, coffee)	443 (30%)
	Sports products for performance (bars, gels, electrolyte mixes, sports drinks)	214 (15%)
	I don't use food products recommended/advertised on social media	588 (42%)
	Other	38 (3%)

ORCIDM Kreft  <http://orcid.org/0000-0003-3869-6229>**References**

- Goodyear VA, Armour KM, Wood H. Young people and their engagement with health-related social media: new perspectives. *Sport Educ Soc.* 2015;24(7):673–688. <https://doi.org/10.1080/13573322.2017.1423464>
- Kietzmann JH, Hermkens K, McCarthy IP, et al. Social media? Get serious! Understanding the functional building blocks of social media. *Bus Horiz.* 2011;54(3):241–251. <https://doi.org/10.1016/j.bushor.2011.01.005>
- Friedman VJ, Wright CJC, Molenaar A, et al. The use of social media as a persuasive platform to facilitate nutrition and health behavior change in young adults: web-based conversation study. *J Med Internet Res.* 2022;24(5):e28063. <https://doi.org/10.2196/28063>
- Wang Y, McKee M, Torbica A, et al. Systematic literature review on the spread of health-related misinformation on social media. *Soc Sci Med.* 2019;240:112552. <https://doi.org/10.1016/j.socscimed.2019.112552>
- Zhang Y, Sun Y, Xie B. Quality of health information for consumers on the web: a systematic review of indicators, criteria, tools, and evaluation results. *J Assoc Inf Sci Technol.* 2015;66(10):2071–2084. <https://doi.org/10.1002/asi.23311>
- Chen Y, Conroy NJ, Rubin VL. News in an online world: the need for an 'automatic crap detector.'. *Proc Assoc Inf Sci Technol.* 2015;52(1):1–4.
- Barton CC. Critical literacy in the post-truth media landscape. *Policy Futur Educ.* 2019;17(8):1024–1036. <https://doi.org/10.1177/1478210319831569>
- Wansink B; American Dietetic Association. Position of the American dietetic association: food and nutrition misinformation. *J Am Diet Assoc.* 2006;106(4):601–607. <https://doi.org/10.1016/j.jada.2006.02.019>
- Pilgrim K, Bohnet-Joschko S. Selling health and happiness how influencers communicate on Instagram about dieting and exercise: mixed methods research. *BMC Public Health.* 2019;19(1):1–9. <https://doi.org/10.1186/s12889-019-7387-8>
- Papasolomou I, Melanthiou Y. Social media: marketing public relations' new best friend. *J Promot Manag.* 2012;18(3):319–328. <https://doi.org/10.1080/10496491.2012.696458>
- Wathen CN, Burkell J. Believe it or not: factors influencing credibility on the web. *J Am Soc Inf Sci Technol.* 2002;53(2):134–144. <https://doi.org/10.1002/asi.10016>
- Grobler C, Dhali A. Social media in the healthcare context: ethical challenges and recommendations. *South Afr J Bioeth Law.* 2016;9(1):22. <https://doi.org/10.7196/SAJBL.2016.v9i1.464>
- Visser J, van Niekerk E, Marais ML, et al. Social media and electronic communication usage by South African dietitians. *South Afr J Clin Nutr.* 2024;37(3):97–105. <https://doi.org/10.1080/16070658.2024.2322297>
- Discover Stellenbosch University [Internet]. Available from: <http://www.sun.ac.za/english/about-us/Why-SU>
- Chau MM, Burgermaster M, Mamykina L. The use of social media in nutrition interventions for adolescents and young adults – A systematic review. *Int J Med Inform.* 2018;120:77–91. <https://doi.org/10.1016/j.ijmedinf.2018.10.001>
- Emanuel EJ, Wendler D, Killen J, et al. What makes clinical research in developing countries ethical? The benchmarks of ethical research. *J Infect Dis.* 2004;189(5):930–937. <https://doi.org/10.1086/381709>
- Kreft M, Smith B, Hopwood D, et al. The use of social media as a source of nutrition information. *South Afr J Clin Nutr.* 2023;36(4):162–168. <https://doi.org/10.1080/16070658.2023.2175518>
- Brennan L. Final NHMRC Phase 1b start of block: explanatory statement EXPLANATORY STATEMENT [Internet]. Available from: <https://www.monash.edu/medicine/base/about/clinics/nutrition-clinic> (accessed 29 May 2025)
- Brennan L, Chin S, Molenaar A, et al. Beyond body weight: design and validation of psycho-behavioural living and eating for health segments (LEHS) profiles for social marketing. *Nutrients.* 2020;12(9):2882. <https://doi.org/10.3390/nu12092882>
- WHO. Digital food environments factsheet WHO European office for the prevention and control of noncommunicable diseases. 2021.
- Lou C, Taylor CR, Zhou X. Influencer marketing on social media: how different social media platforms afford influencer – Follower relation and drive advertising effectiveness. *J Curr Issues Res Advert.* 2023;44(1):60–87. <https://doi.org/10.1080/10641734.2022.2124471>
- Klassen KM, Douglass CH, Brennan L, et al. Social media use for nutrition outcomes in young adults: a mixed-methods systematic review. *Int J Behav Nutr Phys Act.* 2018;15(1):1–18. <https://doi.org/10.1186/s12966-018-0696-y>

23. Law R, Jevons EFP. Exploring the perceived influence of social media use on disordered eating in nutrition and dietetics students. *J Hum Nutr Diet.* 2023;36(5):2050–2059. <https://doi.org/10.1111/jhn.13212>
24. Nelson AM, Fleming R. Gender differences in diet and social media: an explorative study. *Appetite.* 2019;142:104383. <https://doi.org/10.1016/j.appet.2019.104383>
25. Vaterlaus JM, Patten EV, Roche C, et al. #Gettinghealthy: the perceived influence of social media on young adult health behaviors. *Comput Human Behav.* 2015;45:151–157. <https://doi.org/10.1016/j.chb.2014.12.013>
26. Goerke K, Ng AH, Trakman GL, et al. The influence of social media on the dietary behaviors of young Australian adults: a mixed methods exploration. *Mental Health Sci.* 2024;2(1):21–26. <https://doi.org/10.1002/mhs2.46>
27. Croes E, Bartels J. Young adults' motivations for following social influencers and their relationship to identification and buying behavior. *Comput Human Behav.* 2021;124:106910. <https://doi.org/10.1016/j.chb.2021.106910>
28. Kucharczuk AJ, Oliver TL, Dowdell EB. Social media's influence on adolescents' food choices: a mixed studies systematic literature review. *Appetite.* 2022;168:105765. <https://doi.org/10.1016/j.appet.2021.105765>
29. Djafarova E, Rushworth C. Exploring the credibility of online celebrities' Instagram profiles in influencing the purchase decisions of young female users. *Comput Human Behav.* 2017;68:1–7. <https://doi.org/10.1016/j.chb.2016.11.009>
30. Jenkins EL, Ilicic J, Molenaar A, et al. Strategies to improve health communication: can health professionals be heroes? *Nutrients.* 2020;12(6):1861. <https://doi.org/10.3390/nu12061861>
31. Probst YC, Peng Q. Social media in dietetics: insights into use and user networks. *Nutr Diet.* 2019;76(4):414–420. <https://doi.org/10.1111/1747-0080.12488>
32. van der Bend DLM, Jakstas T, van Kleef E, et al. Adolescents' exposure to and evaluation of food promotions on social media: a multi-method approach. *Int J Behav Nutr Phys Act.* 2022;19(1):1–15. <https://doi.org/10.1186/s12966-022-01310-3>
33. Association for Dietetics in South Africa. ADSA SOCIAL MEDIA AND COMMUNICATION GUIDELINE electronic communication, social media and ethics [Internet]. 2023. Available from: www.blog.com (accessed 29 May 2025)

Received: 1-07-2025 Accepted: 12-01-2026