

THE INSTA-DIET

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ABSTRACT

Consumers are becoming more mindful of their lifestyle choices, finding new avenues for learning about food and nutrition via the internet. In this era of instant information, health messages, whether factually correct or not, are at our fingertips. Social media usage in South Africa is increasing, giving health professionals an opportunity to disseminate public-health messages. But inaccurate and potentially dangerous information also has a wider reach. Social media gives everyone an equal voice, affording an unqualified individual, a celebrity or a healthcare professional the opportunity to communicate directly with the public to influence their behaviour. While most social media platforms have community guidelines to attempt to regulate content, the very nature of these platforms allows anyone to create and publish content. Social media can be used for inspiration and creative ideas; however, it should never take the place of sound medical advice. The popularity and impact of social media in the context of nutrition should ideally require influencers to meet accepted scientifically or medically justified criteria.

Keywords: nutrition, social media, medical advice, influencers, instant information

INTRODUCTION

In this era of instant information, are we becoming more confused about health messages?

With the average person now spending more than two hours a day on various social media platforms,¹ it is only natural that the friends, celebrities and influencers we follow online affect our real-world decisions about our well-being. According to DataReportal, in January 2020 there were 36.54 million internet users (~62% of the population) in South Africa. Twenty-two million South Africans make use of social media, usage that increased by 3.5 million (+19%) between April 2019 and January 2020. Social media penetration in South Africa stood at 37% in January 2020.² Social media users routinely seek health- and nutrition-related information from online sources.³

POSITIVE INFLUENCE

Consumers are becoming more mindful of their lifestyle choices and finding new avenues through which to learn about food and nutrition via the internet. Social media can therefore function as a vital tool for healthcare professionals (HCPs) to inform and educate consumers on all things new in the world of nutrition. Social media provides an opportunity for HCPs to reach and engage with young adults who may not otherwise seek support in more traditional settings.^{4,5} It can act as a platform via which to deliver interventions and health-promotion campaigns, increasing exposure to evidence-based health messages and encouraging participation in and engagement with interventions.⁵

THE DOWNSIDE

In contrast, the vast amount of nutrition misinformation on social media can have a serious impact on medical decisions. Social

media can be problematic because it gives everyone an equal voice – be it an unqualified individual, a celebrity or an HCP with years of training and clinical experience.³ With social media, it is now easier than ever for celebrities, journalists and amateur bloggers to communicate directly with the public in order to influence their knowledge, attitudes and/or behaviours. The current popular nutrition advice online may increase consumer confusion, scepticism and even avoidance of dietary advice.³ As technology develops further, this ability of non-experts to reach the masses will only increase and become more important for us as HCPs to understand.

Pseudoscientific health claims have been with us for a long time and celebrities have often embraced them. Celebrity endorsements, opinions and news coverage can have an influence on a range of health-related behaviours, including dieting, micronutrient supplementation and detoxification diets. Celebrities can write books on health and wellness, diet and nutrition, they introduce health product lines and sell ideas, some of which are backed by poor-quality science, or no evidence at all.³ What they do have is a platform, something most doctors and scientists don't have and few will ever possess. Information emanating from celebrity platforms often distorts or drowns out dry but solid data which may appear boring and unappealing in comparison.

INFLUENCE OF THE SOCIAL MEDIA INFLUENCER

Researchers from the University of Glasgow in the United Kingdom assessed nine leading UK-based social media influencers' weight-management blogs. Inclusion criteria were that influencers were required to have an active weight-

management blog with more than 50% physical activity or nutrition-related content. They were also required to be 'verified' on at least two social media networks and have more than 80 000 followers. Each influencer and each blog were assessed against 12 credibility indicators, under the themes of 'transparency', 'use of other resources', 'trustworthiness and adherence to nutritional criteria' and 'bias'. These were set as yes and no questions, and then reported as a percentage, with an acceptable pass rate of >70% chosen to ensure that those who passed achieved most indicators.⁶ Ten meals from each influencer were evaluated against the National Health Service (NHS) and Public Health England's 'One You' calorie reduction campaign⁷ and the UK Food Standards Agency's 'Traffic Light Scheme'.^{6,8}

Only two of the nine were adequately qualified, and only one had a formal degree in nutrition. This influencer was the only one to go on to pass the checklist, with 83%. Many of the recipes were very high in calories. For example, one influencer had a breakfast of more than 1 062 kcal and an evening meal recipe of more than 1 500 kcal, and in their frequently asked questions (FAQs) stated that this plan would help with weight loss. Five influencers failed to provide evidence-based references for nutrition claims or presented opinion as fact, whereas five failed to provide a disclaimer.⁶

Overall, the study results suggested that social media influencers' blogs are not always credible resources for weight management. These findings were presented at the 26th European Conference on Obesity (ECO) in 2019.⁶

Social media influencers' marketing of both healthy and unhealthy foods has been shown to have an effect on the diets of children. In a recent study, 176 children between the ages of 9 and 11 years were randomly assigned to view mock Instagram profiles of two popular YouTube video bloggers. The profiles featured images of the influencers with unhealthy snacks, healthy snacks or non-food products. Subsequently, participants' ad libitum intake of unhealthy snacks and healthy snacks and their overall intake were measured.⁹

Influencer marketing of unhealthy foods increased children's immediate food intake by approximately 450 kcal overall, of which approximately 390 kcal came from unhealthy foods, whereas the equivalent marketing of healthy foods had no effect. Increasing the promotion of healthy foods on social media may therefore not be an effective strategy for encouraging healthy dietary behaviours in children.⁹

Similarly, Hawkins et al (2020) examined whether Facebook users are more likely to follow whichever food habits they see more often on social media. Researchers recruited 369 college students and asked them to report their perceptions of how many people in their Facebook feeds were eating fruit, vegetables, energy-dense snacks and sugar-sweetened beverages. Then they were asked to note their own consumption habits.¹

When these were cross-referenced, the study showed that the participants' perception of their Facebook friends' food-consumption habits also significantly predicted the participants' habits. If the study participants' Facebook friends posted more

about junk food, the participants were likely to consume junk food more often. If the study participants' Facebook friends posted healthier foods, the participants were likely to consume healthy foods more often.¹⁰

DANGERS OF ONLINE NUTRITIONAL ADVICE

Concerns have been raised about the impact that diet, detox and cosmetic surgery content can have on young people, their mental health and body image. For people with a history of disordered eating, seeing calorie counts, food swaps and food-judgement-based posts can be triggering. They may feel guilt or shame about their current habits or fall back into a pattern of disordered eating.¹¹

An analysis of the video-sharing social media site YouTube found that one-third of anorexia-related videos are pro-anorexia ('pro-ana') and these videos were more likely to receive higher viewer ratings than 'informative' videos such as those highlighting the health consequences of eating disorders.¹² Comparing one's self to others, which is easily done through social media platforms such as Facebook, is associated with greater disordered eating and body dissatisfaction.^{13,14,15}

A strong and consistent association between social media use and eating concerns was found in 1 765 young adults aged 19–32 years in the United States. This association was apparent regardless of whether social media use was measured as volume or frequency.¹⁵

SOCIAL MEDIA PLATFORMS

TIKTOK

The social media app TikTok is one of the most popular in the world, with more than 800 million users² – 41% of those users being between the ages of 16 and 24.¹⁶ It has recently come under fire for potentially encouraging unhealthy relationships with food and may trigger people who have suffered eating disorders. There are concerns that some of the content glamorises eating disorders such as anorexia and bulimia.¹⁷

Whereas the app's community guidelines ban videos with 'content that supports pro-ana or other dangerous behaviour to lose weight', the nature of the app allows anyone to create and publish content.¹⁸ Users can therefore promote whatever dietary or weight-loss advice they like, including that which promotes anorexia nervosa (pro-ana) and bulimia (pro-mia). Videos that show people uncritically displaying or joking about these behaviours are rife.¹⁷

TikTok's For You page is a limitless feed of videos recommended by an algorithm based on the user's interactions.¹⁸ What separates For You from Instagram or Twitter's main feeds is that the algorithm will serve videos from anyone on the platform and not just accounts followed by the user. The way the algorithm of the app works, content can be suggested for a user despite their not actively searching for that content. This means that if someone curiously watches a 'pro-ana' video, they are then supplied with more weight-loss tips and 'thinspo' (content to inspire a person to lose weight).¹⁹

TikTok's owner ByteDance has taken some steps to stop harmful eating-disorder content. TikTokers who use well-known

pro-anorexia search terms – including #proana or #anorexia – are instead directed to a support page titled ‘Need Help?’ But common misspellings of these terms still return examples of harmful eating-disorder videos.¹⁸

INSTAGRAM

Tech giant Instagram, which has more than one billion active users on its platform, has made changes to protect young people by regulating the selling and promotion of weight-loss products and cosmetic procedures on social media. From 18 September 2019, Instagram began rolling out a new policy that prohibits users who are younger than 18 years old from viewing posts relating to detox pills, diet pills and a host of other weight-loss or cosmetic procedures. In an additional policy move, any content that makes a miraculous claim about diet or weight-loss products will be banned, therefore any influencers’ posts about how a diet tea or tablets has worked wonders for them in losing weight will be removed for violating the new community guidelines.²⁰

In addition, the platform has said that any content making claims about a diet or a weight-loss aid, and which is linked to a commercial offer such as a discount code or an incentive to buy, or includes a price, would now be removed from Instagram.²⁰

POSITIVES AND NEGATIVES OF SOCIAL MEDIA

Social media is here to stay and, as HCPs, we need to understand the positives and negatives and adapt to using this platform for health education accordingly.

The positives include:

- The reach that social media and the internet provides facilitates the widespread dissemination of information on

health products and helpful information.

- Social media has largely taken the place of resources such as cookbooks for recipes, physical videos for at-home workouts and old medical encyclopaedias for answers to health questions.
- Social media can provide a platform for establishing legitimate support groups.

Some of the negatives are:

- Social media can promote false ‘experts’ and advertise unhealthy products.
- Taking health advice from influencers whose only qualification is a massive following may come with harmful consequences.
- Whereas a newsfeed of fruits and veggies can inspire nutritious choices, regular exposure to junk food might normalise an unhealthy eating pattern.
- Popular social media influencers’ promotion of food may affect children’s food intake.
- Social media may have a negative impact on users with disordered eating.

CONCLUSION

Social media can be used for inspiration and creative ideas, however, it should never take the place of medical advice. The popularity and impact of social media in the context of nutrition should ideally require influencers to meet accepted scientifically or medically justified criteria.

DECLARATION OF CONFLICT OF INTERESTS

The author declares no conflict of interests.

This article has been peer reviewed.

REFERENCES

1. Statista. <https://www.statista.com/statistics/433871/daily-social-media-usage-worldwide> (accessed August 2020).
2. Dataportal. <https://datareportal.com/reports/digital-2020-south-africa> (accessed August 2020).
3. Ramachandran D, Kite J, Vassallo AJ, et al. Food trends and popular nutrition advice online – implications for public health. *Online J Public Health Inform.* 2018;10:e213. <https://doi.org/10.5210/ojphi.v10i2.9306>.
4. Shaw JM, Mitchell CA, Welch AJ, et al. Social media used as a health intervention in adolescent health: A systematic review of the literature. *Digit Health.* 2015;1:2055207615588395. <https://doi.org/10.1177/2055207615588395>.
5. Radez J, Reardon T, Creswell C, et al. Why do children and adolescents (not) seek and access professional help for their mental health problems? A systematic review of quantitative and qualitative studies. *Eur Child Adolesc Psychiatry.* 2020. <https://doi.org/10.1007/s00787-019-01469-4>.
6. Sabbagh C, Boyland E, Hanket, et al. Using social-media influencer techniques for effective online public health advocacy: A best practice framework. Abstract presentation at Obesity Action Scotland and University of Glasgow. Presentation at the 26th European Conference on Obesity (ECO) 2019.
7. NHS. <https://www.nhs.uk/oneyou/for-your-body> (accessed August 2020).
8. FSA. <https://www.food.gov.uk/safety-hygiene/check-the-label> (accessed August 2020).
9. Coates A, Hardman CA, Halford JC, Christianson P, Boyland EJ. Social media influencer marketing and children’s food intake: a randomized trial. *Pediatrics.* 2019;143:e20182554. <https://doi.org/10.1542/peds.2018-2554>.
10. Hawkins L, Farrow C, Thomas JM. Do perceived norms of social media users’ eating habits and preferences predict our own food consumption and BMI? *Appetite.* 2020;149:104611. <https://doi.org/10.1016/j.appet.2020.104611>.
11. Turner PG, Lefevre CE. Instagram use is linked to increased symptoms of orthorexia nervosa. *Eat Weight Disord.* 2017;22:277-84. <https://doi.org/10.1007/s40519-017-0364-2>.
12. Syed-Abdul S, Fernandez-Luque L, Jian WS, et al. Misleading health-related information promoted through video-based social media: anorexia on YouTube. *J Med Internet Res.* 2013;15:e30. <https://doi.org/10.2196/jmir.2237>.
13. Smith AR, Hames JL, Joiner TE Jr. Status update: maladaptive Facebook usage predicts increases in body dissatisfaction and bulimic symptoms. *J Affect Disord.* 2013;149:235-240. <https://doi.org/10.1016/j.jad.2013.01.032>.
14. Fardouly J, Vartanian LR. Negative comparisons about one’s appearance mediate the relationship between Facebook usage and body image concerns. *Body Image.* 2015;12:82-88. <https://doi.org/10.1016/j.bodyim.2014.10.004>.
15. Sidani JE, Shensa A, Hoffman B, Hanmer J, Primack BA. The association between social media use and eating concerns among US young adults. *J Acad Nutr Diet.* 2016;116:1465–1472. <https://doi.org/10.1016/j.jand.2016.03.021>.
16. Globalwebindex, 2019. www.globalwebindex.com (accessed August 2020).
17. Harris K. TikTok is proof that we can’t outrun toxic diet culture. *The Queen’s Journal.* 2020: July, 27. <https://www.queensjournal.ca/story/2020-07-27/lifestyle/tiktok-is-proof-that-we-cant-outrun-toxic-diet-culture/> (accessed October 2020).
18. TikTok. <https://www.tiktok.com/community-guidelines?lang=en> (accessed August 2020).
19. TikTok. <https://newsroom.tiktok.com/en-us/how-tiktok-recommends-videos-for-you/> (accessed October 2020).
20. Instagram. <https://help.instagram.com> (accessed August 2020).