Healthy habits and Instagram: A Cross - Sectional study

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Abstract

Social media could be considered as an interesting complementary tool to the public health domain. Although the literature has studied in detail the efficacy of some of these platforms, it is unclear whether *Instagram*® can play a role in the adoption of long-term healthy habits. A healthy food Instagram account called the "ChefTaste" was created to assess both the impact of this platform and the time needed for it to exert influence on its followers. After six months, a cross-sectional study was conducted. Out of 493 candidates, 171 did not follow any healthy food account, 204 followed "ChefTaste" account and 118 followed other healthy food accounts. Users who followed any healthy food account had a higher probability of not just eating better [OR=1.50 (1.03,2.18) p=0.036] but also indulging in more exercise [OR=1.46 (1.00,2.13) p=0.048] and were more cautious about what they were eating [OR=1.67 (1.13, 2.46) p=0.01]. Furthermore, on comparing the results of "ChefTaste" followers with those of other healthy accounts, we found there were no statistically significant differences with respect to healthy eating and weekly exercise. These findings demonstrate the effectiveness of Instagram® which could be explained by its social support and simplicity. Authors, therefore, believe that Instagram® could play a potential tool in improving the lifestyle of individuals. Clin Ter 2021; 172 (3):2215-217. doi: 10.7417/CT.2021.2317

Key Words: Communication, Healthy habits, Instagram, Nutrition, Social Media

Dear Editor,

Social media can be an appealing complementary tool to public health given its cost-effectiveness and its ability to disseminate information amongst the general population rather easily. (1,2) Although there are studies examining the efficacy of *Twitter*®, and *Facebook*® (2,3), it is unclear whether *Instagram*®, the most popular image-sharing platform, can play an important role in the adoption of long term healthy habits. (4)

We created a health account on *Instagram*® called the "*ChefTaste*" and shared different healthy recipes with their

macronutrient information regularly from this account. This project involved a multidisciplinary team of two medical students (AM, JPSP), one political science student (ELaM), and two social media communication designers (DT, MG). The objective of the account was to promote healthy habits within the population and provide the community with high-quality content that was easy to use and share. The account aimed to develop a creative interface that could not only spread our messages faster but also clearly to our viewers. To assess the efficacy of "ChefTaste" and evaluate how fast a new account could influence the community, a cross sectional-study was organized from the 4th to the 26th June 2020. At that time, "ChefTaste" had 602 followers and 73 posts and had been active for six months.

A Google Form online survey was conducted and disseminated through the "ChefTaste" account and other social media accounts on different platforms (WhatsApp®, Twitter®, and Facebook®). The initial sample comprised of 504 individuals. Of these, 11 candidates refused to participate in the study. The final cohort had 493 candidates. 171 of these individuals did not follow any healthy food account, 204 followed "ChefTaste" account and 118 followed other healthy food accounts. The association between following any Instagram® healthy food account and presenting healthy life habits was analysed. In our cohort, users who followed any healthy food account had a higher probability of not just eating better [OR=1.50 (1.03,2.18) p=0.036] but also indulging in more exercise [OR=1.46 (1.00,2.13) p=0.048] and were more frequently cautious about what they were eating [OR=1.67 (1.13, 2.46) p=0.01]. (Table 1)

When the results from "ChefTaste" followers were compared to those of other healthy food accounts we found there were no statistically significant differences with respect to healthy eating and weekly exercise. (Table 2) These findings demonstrate the ease of communication and dissemination of information through Instagram®, which helped "ChefTaste" achieve similar results to other such accounts in a relatively short time.

But how did *Instagram*® manage to obtain these outcomes so fast? These results could be explained by the social

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Table 1. Following any Instagram® healthy food account and presenting healthy life habits

Characteristic	Not follower, N = 171 ¹	Follower, $N = 322^1$	p-value ²
Weekly Exercise			0.048
Low sport regiment	102 (60%)	162 (50%)	
High sport regimen	69 (40%)	160 (50%)	
Weekly Vegetable Consumption			0.036
Low Vegetable consumption	104 (61%)	164 (51%)	
High vegetable consumption	67 (39%)	158 (49%)	
Cautious eating frequency			0.01
Not regularly	69 (40%)	93 (29%)	
Regularly	102 (60%)	229 (71%)	

¹Statistics presented: n (%)

Table 2. Differences between "ChefTaste" followers and the other healthy food accounts followers

Characteristic	Followers of other healthy accounts, $N = 118^{1}$	ChefTaste follower N = 204¹	p-value ²
Weekly Exercise			0.542
Low sport regiment	62 (53%)	100 (49%)	
High sport regimen	56 (47%)	104 (51%)	
Weekly Vegetable Consumption			0.061
Low Vegetable consumption	52 (44%)	112 (55%)	
High vegetable consumption	66 (56%)	92 (45%)	
Cautious eating frequency			< 0.001
Not regularly	17 (14%)	76 (37%)	
Regularly	101 (86%)	128 (63%)	

¹Statistics presented: n (%)

support *Instagram*® offers to its users who feel like a part of a community that allows them to share and interact with other members pursuing similar goals. (4,5) Besides that, the simplicity in use and immediacy in language may have also played an important role in the dissemination of information, especially when addressing a young audience like ours (4,6). Moreover, as it has previously been proven on *Twitter*®, the employment of audio-visual content enhances the dissemination of a message. (7) This phenomenon is clearly reinforced with *Instagram*®, being the most popular image-sharing platform on the Internet. (3)

As a consequence of the extensive use social media have, these platforms could be considered as a central force in people's lives. (8) In virtue of this, it is relevant to highlight the role *Instagram*® may play in public health as it constitutes a simple, direct, user-friendly, and easily accessible tool to

disseminate ideas. Nonetheless, the veracity of the information shared on social media should always be considered. Indeed, it is important to underline that the content on social platforms is subject to the public's ability to distinguish between valid and invalid information. (9) This is why social media must be a companion tool to the professional figure and not a replacement for them. Anyway, we would fail in our public health duties if we did not recognize them as such and ensure that not only are they not harmful, but they offer information, programs, and policies that promote the public's health. (8)

In conclusion, the results of this study support *Insta-gram*® becoming a possible tool for improving the lifestyle of individuals. Our findings however need confirmation in future studies

²Statistical tests performed: chi-square test of independence

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Conflicts of interest

Authors declare that there is no conflict of interest. Funding Information

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