Image Features and Image Popularity: Analysis of Instagram Food Posts

Muna Sharma, University of Georgia¹ Yilang Peng, University of Georgia²

With the spectacular increase in the use of social media, food images have become an inevitable part of our visual culture. Instagram has emerged as a popular platform for circulating food images. Nonetheless, studies characterizing visual features and nutritional information that are embedded on the Instagram posts are scant. Combining computational analysis of visual features and calorific content of Instagram posts, this study explores how aesthetic features of images and calorific value of food in the images influence audience reactions. In addition, the study also examines how the effects of visual aesthetics differ among the calorific content of posts. Results revealed that people liked and commented more on medium and high-calorie images as compared to the low-calorie images. Aesthetic characteristics such as arousing colors, edge density, and edge distribution were associated with the number of likes and comments received on images, and their influence was more prominent in low-calorie images. Health practitioners and policymakers can implement strategies to receive more audience engagement and nudge people towards healthy eating through social media.

¹ Muna Sharma (ms71343@uga.edu), PhD Student, Department of Financial Planning Housing and Consumer Economics

² Yilang Peng (yilang.peng@uga.edu), Assistant Professor, Department of Financial Planning, Housing and Consumer Economics