

Obesity Reduction to Prevent Diabetes

Nairobi Huff





ABSTRACT

Obesity has reached epidemic levels in the United States. It is a major risk factor for diabetes, premature mortality, and morbidity. The purpose of this study was to show a docuseries intervention for college students using Web 2.0 technology. The use of Web 2.0 technology is increasing as its content can be generated and published by users. This technology includes social media sites, blogs, podcasts, and YouTube. Students were recruited from a freshman critical thinking class. This docuseries was written, produced, and directed by a Fisk University alumni and former Student Health Ambassadors specifically for YouTube. Using the Transtheoretical Model of Behavior Change, each video addresses one or more of the stages as a journey to wellness throughout the video series. Students learned about healthy practices and behaviors to reduce instances of obesity and hopefully future occurrences of diabetes and other comorbidities. YouTube is an application that is very popular among college-aged individuals and being used every day. New opportunities for teaching and learning on YouTube occur both in and out of the classroom and are becoming standard.

PURPOSE AND BACKGROUND

The purpose of this study was to show a docuseries written and produced by a former Fisk University Student Health Ambassador and alumni as a health intervention targeted at African American college-aged students attending a historically Black institution using Web 2.0 technology, YouTube. Type 2 diabetes mellitus is a long-term medical condition in which the body is unable to properly utilize insulin. Over time, this build-up of glucose can result in additional comorbidities—such as cardiovascular disease, kidney disease, diabetic neuropathy, and many other complications. Furthermore, when obesity is paired alongside diabetes the effects can be very detrimental to one's health and in some cases, fatal.

METHODS AND PROCEDURE

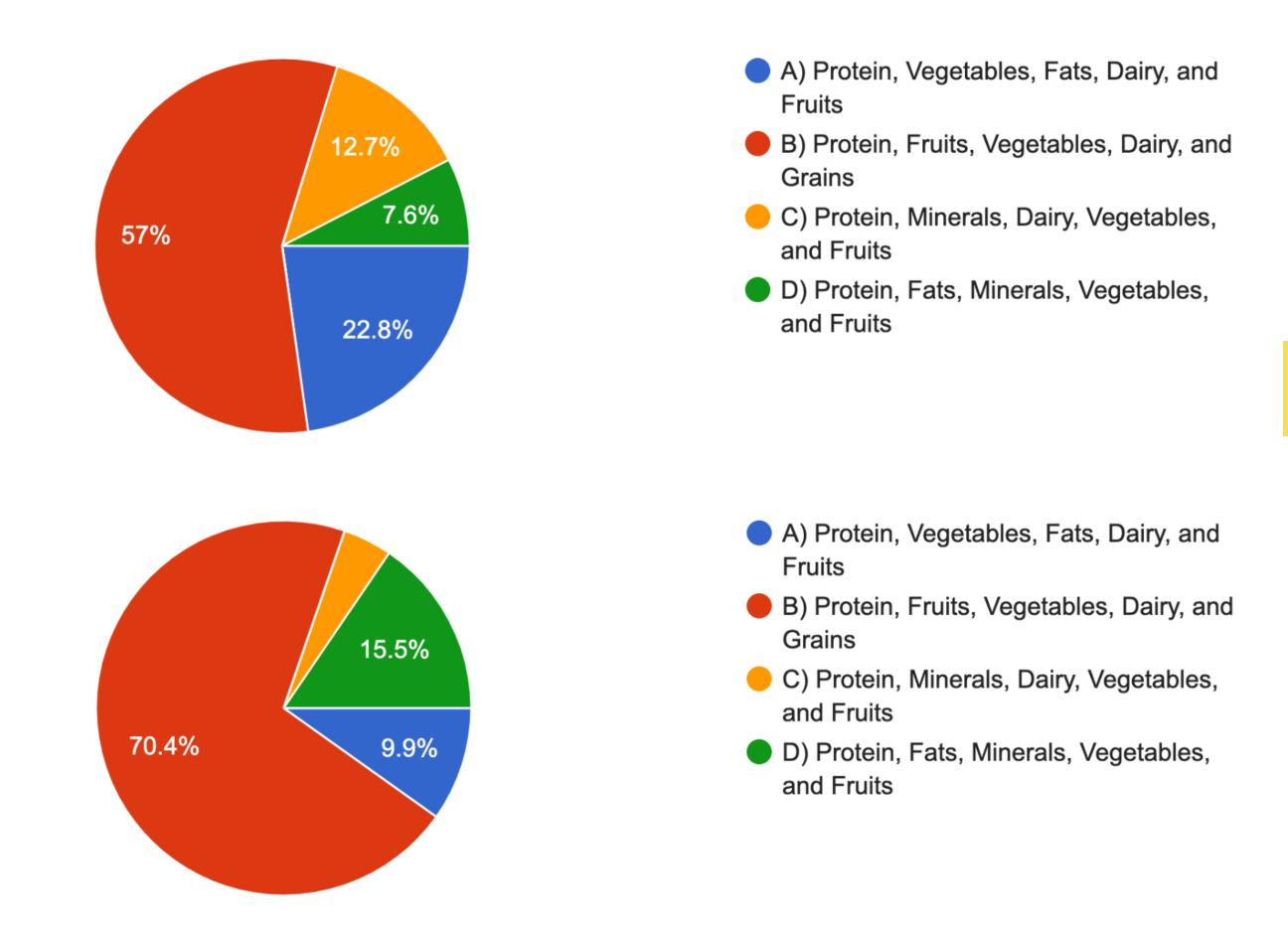
The video series was uploaded to the YouTube Channel, "Fiskically Fit." First, a partnership was formed with a professor of a freshman-only course at historically Black institution, Fisk University. Next, the initiative was conducted in person. Subsequently, a pre-test was administered to freshman participants via Google Docs. Then, they watched the 3-part docuseries over approximately 25 minutes that addressed a variety of health and wellness topics including but not limited to: healthier food options in college cafeterias, exercise, nutrition, sleep habits, portion control, and counseling. Additionally, the information on the videos was presented by a variety of professionals including: a Meharry Medical College physician, a registered nutritionist, Fisk University nurse, and a personal trainer. After watching the docuseries, a post-survey was administered to find if there was a change in knowledge, attitude, and awareness amongst the students... Furthermore, to ensure that participants' pre and post surveys were properly matched, yet, refraining from collecting identifying information, individuals were asked to type the street portion of their address and their initials (first, middle, and last) on both surveys. Lastly, participants played a health trivia game and five students won a \$10 gift card.

OUTCOMES

The outcomes of this project are as follows:

- 1) Seventy-nine (79) females and males participated in the initiative.
- 2) All participants ranged between the ages of eighteen to nineteen (18-19) and attend Fisk University.
- 3) There was a nine percent (9.1%) increase of knowledge when participants were asked, "What is sleep hygiene?"
- 4) There was an approximate fourteen percent (14%) increase of knowledge when participants were asked, "What food groups should you incorporate into your meals according to ChooseMyPlate.gov?"
- 5) There was an approximate five percent (5%) increase of knowledge when participants were asked, "Following the serving size on nutrition labels can help with portion control, prevent overeating, and help you save money?"

What food groups should you incorporate into your meals according to ChooseMyPlate.gov?



DISCUSSION

Overall, the initiative proved to be a valid instrument to utilize to ultimately educate the target population, a freshman class of students at Fisk University, on Obesity Reduction to Prevent Diabetes. In comparison to the initial time the initiative was completed in 2021 via Zoom, this time the initiative took place in person and the research participants appeared to be more attentive and enthusiastic to participate. Further, the pre and post surveys functioned as an accurate measurement of initial and subsequent knowledge. After completing the initiative, it is concluded that there was an evident increase of knowledge of obesity, health, and wellness information.

REFERENCES

Chou, W.-y. S., Prestin, A., Lyons, C., & Den, K.-y. (2013, January). Web 2.0 for Health Promotion: Reviewing the Current Evidence. American Journal of Public Health, 103(1), 9-18.

Nelson, T. F., Gortmaker, S. L., Subramanian, S., Cheung, L., & Samp; Wechsler, H. (2007). Disparities in Overweight and Obesity Among US College Students. American Journal of Health Behavior, 31(4), 363-373.

ACKNOWLEDGEMENTS

Fisk University
Meharry Medical College
TN-MMC HBCU Wellness Project
Rutherford County Health Department
Bri'Anna Baber

Brooklyn Sims