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Utilizing Technology to Encourage Healthy Lifestyles

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In our fast paced world, using technology allows us to connect with people and assist them in developing healthier lifestyles within their time limits due to families, work, and other responsibilities. The goal of our project was the development of online, technology-based, nutrition, health, and fitness education challenges using social media as a means of helping consumers develop healthy lifestyle changes. Participants completed preassessments and postassessments to determine overall program impact and to self-report perceptions of knowledge gained and practice/behavior change. Results from the challenges indicated participants gained knowledge on nutrition, health and fitness topics while making strides towards lifestyle changes and adoption of healthy habits. Results revealed healthier eating habits were developed and physical activity was increased with many participants losing weight. Ease of participating was the most reported reason for participating in the challenges. To determine “best practice,” varying lengths of time for the challenges from four, seven, and thirteen weeks allowed the educators to derive implications for future programming, including branding, length of the challenge, frequency, and participant behavior change. To remain relevant and reach a greater diversity of populations, educators need to continue to explore and utilize various social media tools.

Keywords: social media, email challenge, healthy lifestyle, behavior change, health and fitness, nutrition, physical activity, wellness

Introduction

For nearly 100 years, educators with the Cooperative Extension system have been using demonstrations, publications, face-to-face meetings, newsletters, and other methods to deliver programs. However, due to the restructuring of Extension and the need for educators to cover larger geographic areas, the increased use of technology is imperative. Extension educators are

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faced with time, money, and staff constraints that require them to look for new ways to reach established and new audiences. Younger generations have always had technology, computers, and Internet in their lives. To remain relevant and reach these populations, Extension educators must become familiar with and utilize social media tools.

Literature Review

Throughout the United States there are high rates of overweight adults. According to the Centers for Disease Control and Prevention (2011), more than one-third of U.S. adults (35.7%) are obese. With busy families on the go, many consumers report they do not have time to attend face-to-face educational programs, but would like to receive and/or have access to this educational information and encouragement. Thus, providing online, technology-based programming could provide the venue for consumers to obtain educational, research-based nutrition, health, and fitness information and motivation at their convenience.

Opportunities for Extension educators to expand their programming outreach to consumers have significantly increased due to technology over the past several years. Technology has changed the way information is shared. Society is shifting from a face-to-face learning environment (synchronous) to an anytime, online learning environment (asynchronous). According to Purcell (2012), mobile connectivity and social networking are changing the manner in which the general public/consumers access information. Family and Consumer Science Extension professionals need to rethink their delivery strategies by using new technological tools that consumers and students are demanding (Kinsey, 2010).

Approximately 81% of American adults use the Internet (Madden & Zickuhr, 2011), with 92% using it to send or read email (Purcell, 2011). According to a January 15, 2013 Pew report, 72% of adults who use the Internet used it to look for health or medical information (Fox & Duggan, 2013). Nyquist and team found online messages could contribute to increased healthy food consumption and physical activity (Nyquist, Rhee, Brunt, & Garden-Robinson, 2011). Other studies have found email messages can increase the use of nutrition education websites (McNeill, Viswanath, Bennett, Puelo, & Emmons, 2007; Woodall et al., 2007).

Sixty-seven percent of the population used social media sites (Duggan & Brenner, 2013). Eighty-nine percent of young adult women ages 18-29 that are online use social media; and 69% use it every day (Pring, 2012). Eighty percent of active Internet users visit blogs and social media sites (Pring, 2012). Pring (2012) also reports 93% of all U.S. adult Internet users are on Facebook, accounting for 17% of computer time (Nielsen, 2012). With smartphones and tablets, more people are accessing social media through downloaded applications (apps). Seventy-three percent of smartphone owners check social media sites at least once a day (Pring, 2012).

Purpose and Objectives

The purpose of this research study was to assess the utilization of social media including, but not limited to e-mails, Facebook, and blogs as a means of teaching traditional nutrition, health, and fitness subject matter while potentially reaching a greater diversity of nontraditional clientele.

The overall goal of the project was the development of online, technology-based, nutrition, health, and fitness education challenges using social media as a means of helping consumers develop healthy lifestyle changes. Participants completed preassessments and postassessments to determine overall program impact and to self-report perceptions of knowledge gained and practice (behavior) change.

Methodology and Procedures

Upon Institutional Review Board approval, three separate online nutrition, health, and fitness challenges were offered at various times throughout the year in varying lengths of time in an attempt to assess the utilization of social media and to determine the “best practice” for technology-based programming efforts. Consumers 18 years of age or older with access to the Internet completed an informed consent, a preassessment, and a postassessment. The assessments evaluated participant’s overall behaviors collectively vs. individually; a recommended change for future studies. The challenges were designed to educate consumers and encourage them to make healthy lifestyle changes.

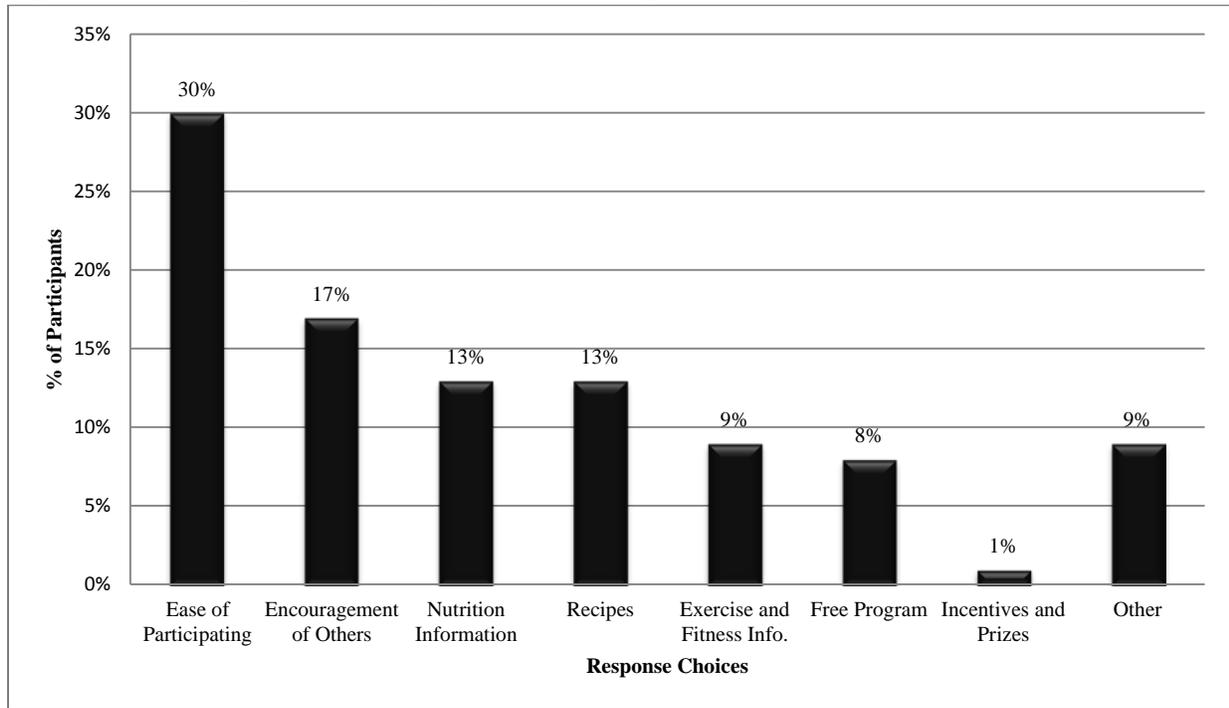
The team of educators experimented with length of online programming from thirteen weeks (January – March, corresponding with Winter Quarter), four weeks (September) and seven weeks (November – January, corresponding with Thanksgiving – New Year’s Day). Participants received two research-based e-mail messages focusing on nutrition, health, and fitness each week. Participants received 26 messages in the thirteen-week challenge, 8 messages in the four-week challenge, and 14 messages in the seven-week challenge.

Basic descriptive statistics were used to summarize demographic information, knowledge gained and behavior/s changed.

Results

Eight hundred and thirty-four consumers representing 59 counties within Ohio and eight other states participated in the online programming efforts. Of the 834 participants in the challenges, 361 completed a postassessment for a 43% response rate. Ninety-four percent were female. Figure 1 on the following page shows participants’ reasons for participating.

Figure 1. Self-Reported Reason for Participating



Results of programming efforts revealed 96% reported learning new information, 95% agree or strongly agree they adopted one or more of the recommendations shared, and 99% would recommend these programs to others. Seventy-five percent of those participating in the thirteen-week challenge reported losing weight, as well as 38% in the four-week challenge, and 42% in the seven-week challenge. Figures 2 and 3 reflect additional postassessment results related to physical activity or exercise and nutrition and dietary intake.

Figure 2. Self-Reported Postassessment Physical Activity or Exercise (N=361)

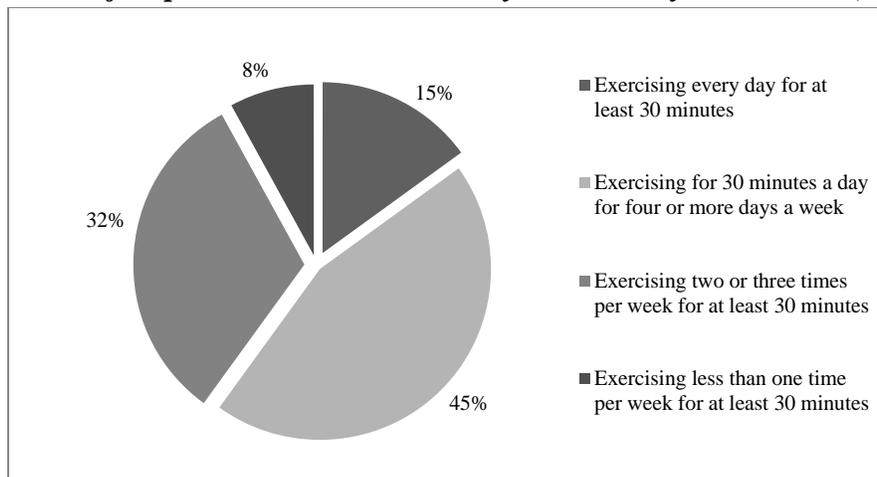
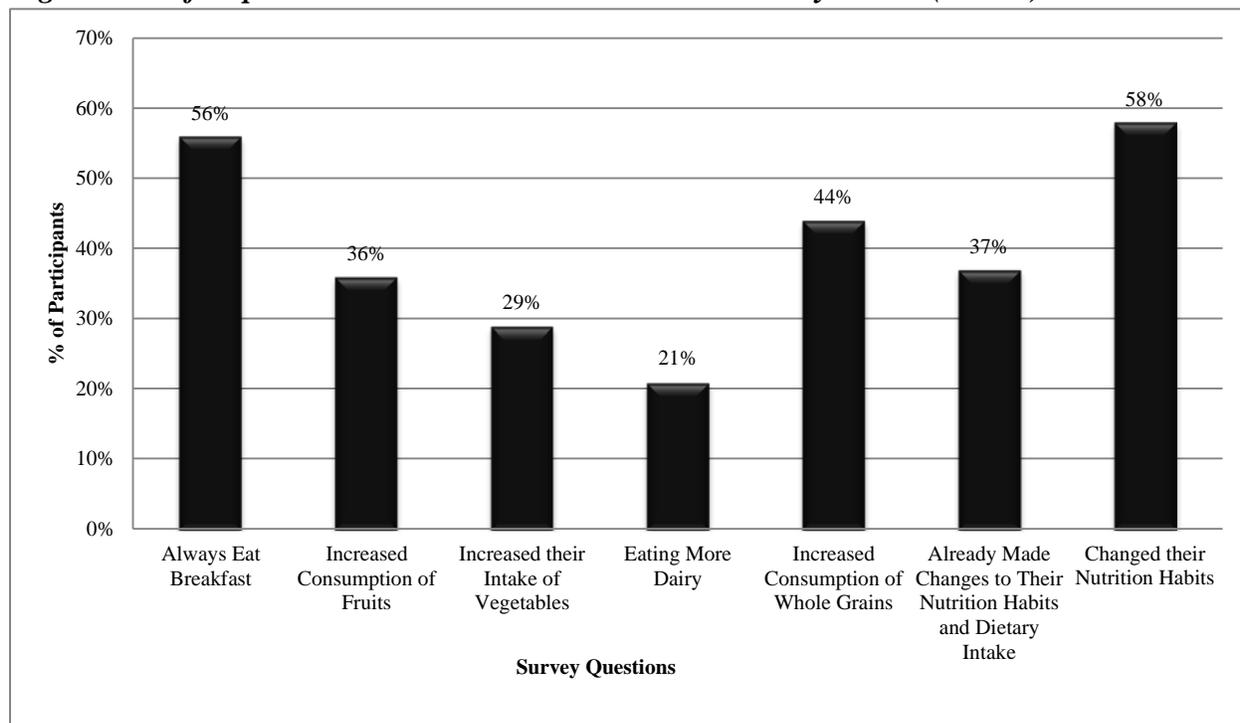


Figure 3. Self-Reported Postassessment Nutrition and Dietary Intake (N=361)

Based on the postassessment, 49% of participants in the thirteen-week program stated they would visit a blog or Facebook page. As a result, participants were encouraged to visit the *Live Healthy, Live Well* blog and subscribe to the feed during the second challenge period, and a Facebook page was developed. There was a steady growth reflecting a 44% increase in the Facebook page during this time, and the blog site views nearly doubled.

Our project aimed to encourage healthier lifestyles through online programming efforts. With 75% self-reporting weight loss, it is likely that lifestyle changes occurred. These results concur with the findings of Nyquist et al. (2011), reinforcing that online messages can contribute to an increase in healthy food consumption and level of physical activity and are a desirable intervention tool for Extension nutrition and health practitioners.

Recommendations and Implications for Extension Programming

For Extension educators interested in implementing similar programming efforts, the team of educators suggests the following recommendations.

Value of Branding

Maddy and Kealy (1998) stated Extension professionals must adopt corporate marketing strategies to be competitive in the information marketplace. Branding creates memorability

preference and loyalty in consumers' minds and a platform to build a relationship between product and user. As more and more Extension professionals and Extension programs become technology-based, it is imperative educators adhere to and adopt industry standards and consistency for technology-based programming.

Although online, technology-based programming is a relatively new program delivery method for Extension educators, it is essential that educators approach technology-based programming similar to face-to-face programs, demonstrations, newsletter studies, and/or direct mailing educational efforts. According to Kelly and Jones (2004), generating awareness about an organization's programs and services takes a branding effort focused on integrating elements of the marketing mix and focusing on clear, core messages that resonate with stakeholders in a consistent way across media. The team of educators would agree with the recommendations of Abrams, Meyers, Irani, and Baker (2010). Their recommendations were that Extension educators and communications practitioners developing strong branding campaigns should focus on the integration of message, image, reputation, and brand name affiliation with the university brand as this seems to be a potentially efficient approach, although more research is needed in this area.

Consent Form

In experimenting with consent forms, mailed, scanned, or faxed vs. online, the online process was much simpler for the participants. Additionally, the online process proved to be a much simplified process of recordkeeping for the educators.

Length of Challenge

Based on experimenting with varying lengths of time for our challenges, the team would recommend at least a seven-week challenge. The seven-week challenge provided the necessary time to adequately address the various nutrition, health, and fitness topics and concerns while allowing participants to make strides towards lifestyle changes and adoption of healthy habits. Fifty-six percent of the seven-week challenge participants completed the postassessment survey, while only 38% of the participants from the thirteen-week challenge completed the survey. With an 18% reduction in the response rate, one could conclude a 13-week challenge is too long to maintain interest and engagement of participants. However, the four-week challenge did not allow adequate time for habits to be formed. Educators would recommend keeping the length of challenge consistent and experimenting with different times of the year to determine if time of year was a factor in participation.

Frequency/Day of Messages

Through an online postassessment survey, participants in the thirteen-week challenge were asked to provide feedback as to how often they would like to receive nutrition, health, and fitness messages. Thirty-eight percent selected twice a week, while 40% suggested only once a week. Although the postassessment results favored a once a week message (with only a 2% differential), the team of educators opted for sending messages twice a week.

The team sent messages on Monday and Thursday, with a different topic/focus for each week. This allowed educators to present the educational content in the first message and to reinforce the content and goal of the week in the second message. Feedback from previous program participants indicated Friday was not a good day.

The time of day for sending emails seems to be somewhat controversial. Bizreport.com (Knight, 2012) and Getresponse (Andrzejewska, 2012) suggest 8–10 a.m. or 3–4 p.m., even though people receive lots of emails, especially in the morning. However, Comm100 (Gao, 2012) does not recommend 8-9 a.m., but around lunch time instead. IBM's (IBM, 2012) report states any time works well with smartphones. Obviously, there are differences in research findings.

Gender Diversity

Men and women appear to use a different rationale for the need to begin a weight loss regimen, according to John Phillip, a Diet, Health, and Nutrition Researcher/Writer (2011). In a study of 1,000 adults, Phillip (2011) found men and women have very different reasons to consider a weight loss program. Forty percent of women indicated their physical appearance was the most important determinant to lose weight, while 27% of men cited “not feeling healthy” as the primary motivation for weight loss.

Ninety-four percent of program participants were female, which presents a challenge as well as an opportunity to reach a more diverse audience. To increase diversity, educators should examine responses from male participants involved in these challenges to determine common reasons for participating, target worksites with a greater male workforce, and/or recruit male wellness enthusiasts to garner support and encourage participation.

Summary and Conclusion

Social media is great for marketing, building your brand, and attracting new clientele. Today's Extension clientele, potential clientele, customers, and stakeholders communicate in a variety of ways. Some prefer social media, Facebook, Twitter, blogs, even direct mail and face-to-face programming. Thus, technology-based programming and face-to-face programming must

coexist to reach the greatest program diversity among participants. This poses both a challenge as well as an opportunity for Extension educators. For Extension to remain relevant and reach a greater diversity of populations, educators need to find ways in which the two can work together. It is vital that Extension educators become familiar with and utilize social media tools.

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