

Million Hearts: Key to Collaboration to Reduce Heart Disease

Abstract

Extension has taught successful classes to address heart disease, yet heart disease remains the number one killer in the United States. The U.S. government's Million Hearts initiative seeks collaboration among colleges, local and state health departments, Extension and other organizations, and medical providers in imparting a consistent message when educating the public about heart disease. Extension plays a key role in conveying this message and promoting cultural adaptations related to food preferences and meal preparation that will help people make necessary behavior changes. Partnering around the same message could improve Extension's ability to reduce the risk of heart disease and stroke in communities nationwide.

Patricia Brinkman

Assistant Professor,
Extension Educator
Ohio State University
Extension
Washington Court
House, Ohio
brinkman.93@osu.edu

Introduction

Heart disease, despite decades of research and awareness building, remains the number one cause of death for both men and women in the United States (Centers for Disease Control and Prevention [CDC], 2014). Medical conditions such as diabetes, overweight or obesity, high blood pressure, and high cholesterol as well as physical inactivity and poor diet have increased people's risk for heart disease (CDC, 2014). Medications are beneficial when people take them correctly and adopt heart-healthy habits. However, recent research has shown that many people taking statins to control their cholesterol do not change their nutritional habits and continue to eat foods they should avoid (Sugiyama, Tsugawa, Tseng, Kobayashi, & Shapiro, 2014). Therefore, the need remains for programming to assist people in developing and maintaining healthful lifestyles and understanding how they should eat and which foods they need to limit.

Method

Over the last decade, in response to the identified need for programming aimed at the prevention of heart disease, many Extension educators have begun addressing heart disease through educational programs on diabetes, weight reduction, and nutrition. However, although research-based and effective, these efforts offer little cross-program consistency that might lead to a common, more easily digestible message for participants. The following question was asked: Could the use of a national initiative program increase the impacts of our heart disease reduction and prevention programming?

In 2011, the U.S. Department of Health and Human Services (2014a, 2014b) launched the national initiative Million Hearts (<http://millionhearts.hhs.gov/index.html>) to prevent 1 million heart attacks and strokes by 2017. Million Hearts promotes research-based factors shown to reduce the risk. Million Hearts refers to these factors as the "ABCS":

- A—appropriate aspirin therapy, if needed;
- B—blood pressure control;
- C—cholesterol management; and
- S—smoking cessation.

With many health departments, universities, federal agencies, and health care providers collaborating on the Million Hearts initiative, use of the Million Hearts "ABCS" could provide a focus for Extension programming and collaboration with community health partners and health care providers. Anderson, Nixon, and Woodard (1998) noted on the basis of their heart disease programming that the role of Extension provides opportunities for Extension professionals to work with health professionals to deliver quality education. With Extension educators in nearly every community across the nation, the dissemination of a consistent health initiative message, in partnership with trusted health professionals, could produce huge dividends. Program providers would all be focusing on the same information, increasing the potential impact on individuals and aggregated impact on communities.

Many universities have promoted Million Hearts health screenings in order to lower their health insurance premiums by identifying workers who could benefit from treatment. Through a grant, Ohio State University Extension has partnered with The Ohio State University College of Nursing to provide health screenings and programming on Million Hearts across Ohio. A peer-reviewed curriculum that addresses the "ABCS" is being used to increase knowledge and promote behavior change. The classes emphasize disease prevention, and the curriculum includes PowerPoint presentations and hands-on activities, such as label reading, food preparation, sample tastings, and stress reduction practice. Participants become aware of how to change their eating habits, reduce stress, stop smoking (if needed), and increase their physical activity—behaviors that should help improve their blood pressure and cholesterol levels. Participants also learn how to implement changes at home and when eating out.

Results

Programming using the Million Hearts curriculum began relatively recently in Ohio. However, preliminary program evaluation has begun. After approval from the university's institutional review board was obtained, surveys were conducted. Pre- and postprogram survey results from three classes showed that knowledge increased and behavior changes occurred. In particular, more than half of the respondents had increases in knowledge about sodium levels and the DASH diet, which involves dietary approaches to stop hypertension (Figure 1). Moreover, about a quarter to half of respondents had increases in knowledge about heart-healthy foods, the effects of fats on cholesterol, and positive ways to cope with stress (Figure 1). Behavior changes occurred relative to using more herbs and spices instead of salt, using heart-healthy oils, and reading nutrition fact labels when making food choices (Figure 2). Responses also indicated that participants had made changes to reduce their sodium intakes (Figure 2). These behavior changes could positively affect

participants' risk of developing heart disease.

Figure 1.
Knowledge Increase (*n* = 29)

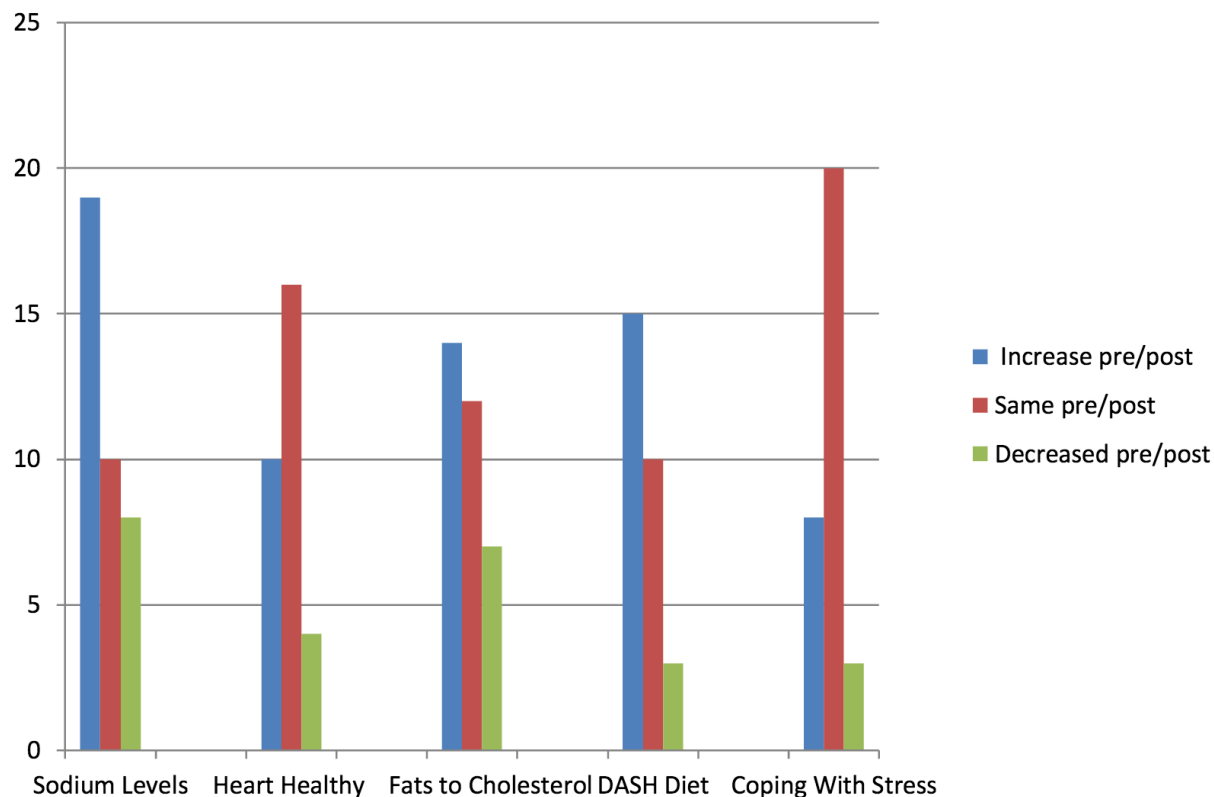
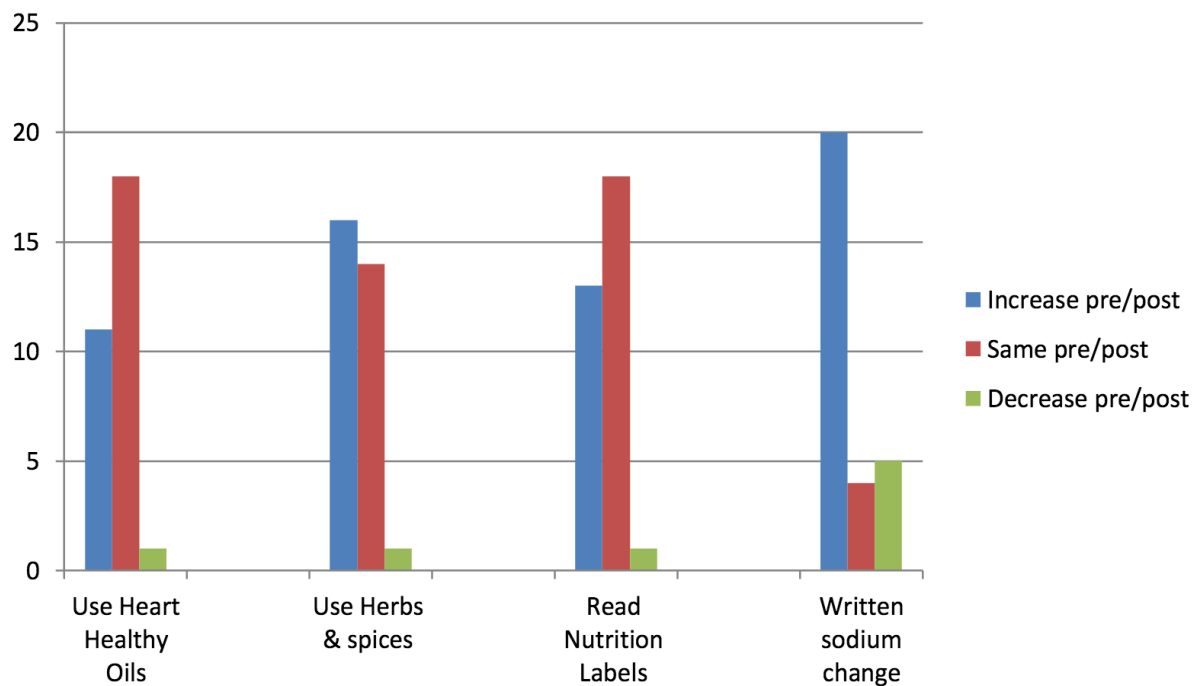


Figure 2.
Behavior Change (*n* = 29)



Implications for Extension

In many rural communities, low-income populations lack nutritional knowledge and understanding of how to implement behavior change. Successful Extension programming can provide appropriate interventions and changes in nutrition and health (McClelland, Jayaratne, & Bird, 2013). Extension is capable of reaching individuals with limited resources and minimal health-care coverage who otherwise may not receive any nutrition education related to cardiovascular disease (Francis, 2012). Extension's outreach in communities can provide information, influencing behavior change.

Cultural and regional food preferences influence food-related choices and decisions. By making adaptations related to cultural meal preparation and knowledge of heart disease risk factors, Enslé and Beaumont (2006) saw improvement in knowledge and eating behaviors among Latino seniors participating in a program on heart disease. Extension is equipped to incorporate the Million Hearts recommendations in classes and make cultural and regional variations for food preferences, thereby helping people accept the need for and ultimately make behavior changes. With many ethnic populations lacking health-care information (Grunau, Ratner, Galdas, & Hossain, 2009), Extension could play a key role in providing intervention programming in heart disease reduction (Siewe, 2001). Although Extension professionals may lack medical knowledge related to all the "ABCS," they could address the relationship of nutrition to blood pressure ("B") and cholesterol ("C") and the relationship of physical activity to each of these factors. By addressing the effects of smoking ("S") and the benefits of quitting smoking, Extension professionals could assist people in understanding the strong relationship between smoking and heart disease. Also, some information about the "ABCS" could be included in nutrition and diabetes classes.

Could an effort involving the Million Hearts initiative and partnerships with others across states help change behaviors? Partnerships can be developed to assist in assessments, tracking, and providing health services to needed populations. By working together through partnerships and using their relevant strengths and skills, Extension professionals can make a difference (Morgan & Fitzgerald, 2014) in the health of communities, states, and the United States as a whole. As noted by Morgan and Fitzgerald (2014), "Extension has the framework and infrastructure to play a significant role in the health of all Americans" ("Conclusion"). By becoming involved in partnerships centered on the Million Hearts initiative, Extension can play an important role in reducing the risk of heart disease and stroke in U.S. communities, thereby reducing the number one killer in most of the United States.

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