

Fun & Fit Program

Speaker: Dr. Keith King, Professor of Health, University of Cincinnati

Dr. King's presentation discussed the Fun & Fit Program, a collaborative project with Cincinnati Children's Hospital Medical Center and the University of Cincinnati.

The school-based health education curriculum focuses on healthy eating and physical activity. It includes six 45-minute lessons delivered over six weeks and was piloted in 2007 and 2008. It is currently running in the Norwood City schools.

Fun & Fit Background

The program works on changing children's behavior through an approach based on the health belief model and social learning theory. The health belief model is a psychological model that tries to explain and predict health behaviors. It focuses on the attitudes and beliefs of individuals. Social learning theory focuses on the learning that occurs in a social context. Self-efficacy, or how confident a person feels, is an important factor in this type of learning.

Dr. King explained that while we know that the rates of being overweight and obese have been increasing in children and adolescents, the research is also clear that to change children's behavior, you have to start with their knowledge, their attitudes, and their self-efficacy before behavior can be addressed. Once they engage in one healthy behavior, however, they are more likely to get involved in another one.

The healthy behaviors the Fun & Fit Program focuses on are from the 2007 Childhood Obesity Action Network guidelines:

- having kids eat breakfast everyday
- having regular family meals 5-6 times a week
- limiting portion sizes
- limiting or eliminating sugar sweetened drinks
- eating at least 5 servings of fruits and vegetables a day
- limiting TV time to no more than 2 hours a day
- moving the TV out of the bedroom
- engaging in moderate to vigorous physical activity for at least an hour a day

Fun & Fit Program and Assessment of the Program

The program is designed to make changing behaviors fun, so it includes hands-on activities. In Session 1 the program covers some of the benefits and the barriers to healthy eating and physical activity. Session 2 covers basic nutrition with hands-on

practice for creating balanced meals. Session 3 goes over physical activity. In Session 4 the participants learn how to set goals and create a personal action plan. Session 5 covers strategies for making behavior changes, and Session 6 consists of a game show recap of the information from the previous sessions.

To assess the effectiveness of the program in terms of whether or not the participants' perceptions about the benefits of healthy eating and physical activity changed because of the program, the researchers gave the participants a pre-test questionnaire at the beginning of Session 1. They also gave the participants a post-test questionnaire during the final session. To assess whether or not these perceptions continued to have an effect over time, the researchers followed up three months later with a survey.

Of the 607 children involved in the pilot study who took both the pre-test and post-test, 321 responded to the survey. The researchers found that the knowledge scores from pre- to post-tests changed from 16.89 out of 23 points to 18.55 out of 23 points on the post-test, which is a statistically significant difference. Attitudes and confidence levels about being able to implement healthy behaviors were affected positively as well.

Finally, behaviors were positively affected. The researchers found that when they looked at self-reported behaviors about how long the participants exercised each day, the number went from 35 minutes in the pre-test to 39 minutes in the post-test. The number of days exercised went from 4.3 in the pre-test to 4.71 in the post-test. These numbers were not sustained at the three-month period, but the number of fruits and vegetables participants reported eating did increase in both the post-test and at the three-month follow up.

Conclusion

Given the obesity epidemic seen in public health, programs like Fun & Fit strive to prevent the problem before it happens by arming children with the information they need to make healthy informed decisions.

Next steps for the researchers include gathering more data, conducting a case control study which would include a control group, and adding follow ups at 6, 9 and 12 months. Although the program is not a breast cancer specific at this point, healthy eating and physical activity levels are related to breast cancer risk and the program could be tailored for young females to include this information.