DARTMOUTH MONTSHIRE INSTITUTE FOR SCIENCE EDUCATION

PROJECT OVERVIEW

Developing a Community Collaboration Model for Teaching Research-based Nutrition Units in Middle Schools

Project Details	
Funder	Dartmouth Center for Clinical and Translational Science
Lead Organization	Hood Center for Children and Families, Dartmouth Medical School.
Outreach budget	$40,000
Total project budget	--
Project dates	11/12008 – 10/31/2009
Related Research Project	--

Principal Investigators and Project Staff

- Meghan Longacre, Scientific Co-P.I., Hood Center for Children and Families, Dartmouth Medical School
- Greg DeFrancis, Outreach Science Education Co-P.I., Montshire Museum of Science
- Mike Fenzel, Curriculum Developer, Montshire Museum of Science

Project Summary

Childhood obesity represents one of the foremost public health concerns in the U.S. today. Few studies have been successful in modifying behaviors associated with risk for overweight, creating a need for innovative approaches toward engaging children and adolescents in risk prevention activities.

This project afforded Dartmouth Hood Center researchers the opportunity to translate findings from their observational studies of environmental risk factors for adolescent obesity to a community setting (i.e., middle schools) by utilizing the curriculum development expertise in science education provided by the Montshire Museum.

Specific Aims

The overarching goal of this proposal was to develop and evaluate the feasibility of a novel middle school science curriculum unit on energy balance and environmental factors that influence adolescent overweight. Specific aims include:

Aim 1: Develop a health science unit for grades 5-8 in predominantly rural schools addressing nutrition, energy balance, and characteristics of the built environment that influence adolescent diet and physical activity;

Aim 2: Provide middle school students with opportunities to participate in their own health science research projects through inquiry-based investigations and action research projects;

Aim 3: Identify the curriculum components which best engage students in activities to increase their understanding of nutritional energy balance;

Aim 4: Evaluate the feasibility and effectiveness of instructional material and student-led research activities in increasing participants' knowledge of basic energy balance concepts and awareness of environmental influences on dietary choices and physical activity;