

Nutrition Education Houston



Global Health Challenge

Currently, it is estimated that 30% of adults and 10% of children in the U.S. are obese, rates that have been steadily increasing over the past few decades. In general, obesity disproportionately affects low-income groups, due in part to a lack of accessible, affordable and healthy food options. In Houston, Texas, a city affected by high rates of both obesity and poverty, nearly 1/3 of all children are overweight. Unfortunately, being overweight as a child drastically increases the risk of being overweight as an adult, and of developing chronic conditions such as diabetes, heart disease, sleep apnea, and depression. Due to the difficulty and expense of treating obesity and its effects, health education can be a useful tool for preventing unhealthy lifestyle habits.

Appropriate Solution

The Hester House is a community center dedicated to educating and empowering families in the Fifth Ward in Houston and supports many youth-development activities. To promote healthy eating, the Hester House built a community garden to make fresh produce more accessible, but not many of the children participate, partly due to a lack of knowledge on the importance of nutrition. To address this issue, the design team of BIOE 260: Introduction to Global Health Issues, created a series of lesson plans to cover the importance of nutrition, the effects of obesity, and simple gardening technique. The lessons, designed for middle school children, each include a 15-minute didactic portion, followed by an interactive game to reinforce the concepts. Students begin by learning about the food pyramid and how to eat a balanced diet. This is followed by lessons about specific micro and macronutrients and the role of each in the human body. Then they learn about why people gain weight, how it effects the body and the conditions it can lead to, including hypertension and diabetes. Assistance and guidance were provided by Dr. Rebecca Richards-Kortum, Richard Schwarz, Allison Lipper, and Jennifer Holmes.

Current Status

The activities were implemented at the Hester House and a local elementary school in May 2009.

BEYOND TRADITIONAL BORDERS



Rice University
6100 S. Main St. - MS142
Houston, TX 77005

Ph: 713-348-4549
Fax: 713-348-5877

E-mail: beyondtraditionalborders@rice.edu



Team Hester House
Kristina Carrillo-Bucaram
Katelyn Ostendorf
Kate Edwards

HHMI
HOWARD HUGHES MEDICAL INSTITUTE

This initiative is made possible by a grant to Rice University from the Howard Hughes Medical Institute through the Undergraduate Science Education Program.

An initiative for the advancement of appropriate, high-value innovations in global health biotechnology

BEYOND TRADITIONAL BORDERS