

## EXECUTIVE SUMMARY

### Problem

The prevalence of obesity in childhood continues to increase throughout the world (Miller, 2004). In the United States of America, the childhood obesity rate has more than doubled for preschool children (aged 2-5 years), and adolescents aged 12-19 years, and it has more than tripled for children aged 6-11 years over the past three decades (JAMA, 2008, IOM, 2005). Approximately nine million children over 6 years of age that are considered obese (IOM, 2005), and obesity is the second-leading cause of preventable death, after cigarette smoking. If our children continue to gain weight at the current rates, obesity will soon become the leading cause of death in the United States.

In Florida, approximately 14% of the children 10-17 years old are considered overweight in 2003 (YRBSS, 2003). Nearly one in three (32.5%) of children and youth ages 10 to 17 living in Florida are overweight or obese and approximately 20% are trying to lose weight ([www.childhealthdata.org](http://www.childhealthdata.org)).

Escalating overweight and obesity among children is a well documented problem. Findings of earlier studies point to the interplay among personal attributes, psychosocial, and environmental factors in the development of obesity in childhood and adolescence (Goran, 2006, Lob-Corzilius, 2007, Huang, Ball, & Franks, 2007, Booth, Wilkenfield, Pagnini, Booth, & King, 2008). Concern over this rise centers on the link between obesity and increased health risks that translate into increased medical care and costs (Huff, 2005).

In the United States, the culture of thinness and the negative connotation associated with excess weight have been instilled at an early age, resulting in obese individuals being stigmatized. These negative messages are in turn being internalized and making it likely that obese people feel badly about their physical appearance, a clear evidence of poor body image (Schwartz and Brownell, 2004).

The emotional and social impact of childhood overweight and obesity includes eating disorders, low self-esteem, negative body, depression and experiences of bullying and teasing. The combination of the physical, emotional and psychological consequences of childhood obesity then drives them to socially unacceptable group behavior such as violence, drugs, sexually inappropriate behavior, STIs, HIV and sometimes the criminal systems.

Risk factors for altered body image include the degree of overweight, being female, and binge eating, with some evidence of risk increasing with early age of onset of obesity, race, and several additional factors (Schwartz and Brownell, 2004).

Over the past decade, the distorted body image phenomenon has resulted in an increasingly popular, but expensive and sometimes dangerous psychological activities such as eating disorders, as well as invasive and non-invasive cosmetic and medical treatments. The explosion in popularity can be attributed to the increased mass media attention, and the greater willingness of individuals to undergo cosmetic procedures as a means to enhance physical appearance (Sarwer and Crerand, 2004, 2008).

Many teenagers especially girls of average weight think they are overweight and are not satisfied with their bodies. Having extreme weight concerns — and acting on those concerns — can harm their social, physical and emotional growth. Actions such as skipping meals or taking diet pills can lead to poor nutrition and difficulty learning. For some, extreme efforts to lose weight can

lead to eating disorders such as anorexia or bulimia. For others, the pressure to be thin can actually lead to binge eating disorder: overeating that is followed by extreme guilt. What's more, girls are more likely to further risk their health by trying to lose weight in unhealthy ways, such as smoking, illegally using stimulants and other appetite suppressants and the increase use of steroids and exercise.

According to researchers at Bradley Hospital (2006), adolescents with negative body image concerns are more likely to be depressed, anxious, and suicidal than those without intense dissatisfaction over their appearance, even when compared to adolescents with other psychiatric illnesses (*ScienceDaily (June 6, 2006)*).

The study found that one third of inpatient adolescents had problematic body image concerns, and that these patients were more severely ill than other adolescent inpatients in a number of important domains. Specifically, those with BDD and shape/weight preoccupations had significantly higher levels of depression, anxiety, and suicidality than other patients with no body image concerns. Those with eating disorders had significantly higher rates of depression than those without body image concerns. Even in the absence of an eating disorder, the study finds that body image concerns can be impairing, preoccupying and distressing for teens, taking up a great deal of mental energy and detracting from their quality of life.

### **Purpose and Scope**

The purpose of this randomized, controlled study is to determine the effects of differentiated teaching strategies (**Targeted Peer Teaching (TPT)**, **School-Based Teaching (SBT)**, **Mother-Daughter Learning (MDL)**, and **Self-Directed Learning (STL)**) on eating practices and physical activity habits among at-risk mothers and children.

### **Goal**

The primary goal of this study is to develop a cost-effective and efficient modality for learning evidence-based strategies to improve healthy eating practices and increase the activity level of at-risk mothers and their children through enhanced parenting skill, empowerment of mothers as primary health care resources, and direct engagement of mothers and their children in healthy eating practices and culturally focused, dance-based physical activity.

### **Objectives**

The objectives of this study are consistent with the two overarching goals of *Healthy People 2010* (USDHHS, 2001): 1) to increase the quality and years of healthy life for both mother and child; and 2) to eliminate health disparities based on gender, race, socioeconomic status, and geography. In addressing the Challenge Area *Prevention of Chronic Diseases in Disparity Populations*, this study will focus on nutrition and overweight, as well as physical activity and fitness of mothers and their children 6-17 years old. This study will utilize a sample comprised largely of African-American and Hispanic women and their families living in Southeast Florida.

### **Plan**

The researchers will utilize the USADA - BodyWorks program that is designed to help parents and caregivers of adolescents improve family eating and activity habits. The program focuses on parents as role models and provides them with hands-on tools to make small, specific behavior changes to prevent obesity and help maintain a healthy weight

Phase One: Selected individuals from your community will be trained in a one-day session to implement this program and learn to train others to do the same. Very basic knowledge of

nutrition and healthy living and a commitment to improving the health of families is the most important requirement.

Phase Two: The program cycle runs between two and four months, depending on your community's needs and availability. Once you've been trained, you can then

- a) Facilitate the Body Works program with parents/caregivers and
- b) train other trainers.
- b) Each intervention session for the children will be approximately 60-90 minutes one day/evening per week for about 6 weeks.

#### **Requirements from Facility/Congregation**

- I. Patients/Members who are willing to be trained to train others
- II. Mothers and their children 6-17 years old
- III. Patients/Mothers who will act as peer trainers

#### **Outcomes and Results**

1. Decreased in the incidence and prevalence of obesity
2. Improve body image
3. Reduce in physical, psychological and social health problems
4. Overall improve health