

BENEFITS – OBESITY AND PHYSICAL ACTIVITY

THE PROBLEM

Failure to address the development of regular exercise behaviors and good nutrition at an early age has major health and economic consequences:

- 300,000 deaths a year caused by obesity (cigarette smoking is 400,000)
- \$117 billion in 2000 – health costs attributed to obesity

(The Surgeon General's Call to Action to Prevent and Decrease Overweight and Obesity, 2001) In addition to premature death and disability and health care costs, the negative impacts of obesity manifest in lost productivity and social stigmatization.

Most experts believe that physical inactivity is responsible for excessive caloric intake and the ensuing prevalence of overweight and obesity.

- 40% of adults – no exercise
- 33% of adults meet 30 min./day – 5 days a week exercise standard
- 35% of adolescents report 20 min./day – 3 days a week exercise but no national data on Federal recommendation of 60 min./day – 6 days a week exercise standard (The Surgeon General's Call to Action to Prevent and Decrease Overweight and Obesity, 2001)
- Only one state, Illinois, mandates daily physical education for school children K-12 (AAHPERD, 1997).
- Daily enrollment in physical education classes dropped from 42% to 25% among high school students between 1991 and 1995 (Physical Activity and Health: A Report of the Surgeon General, 1996)

The result, according to the Surgeon General's Call To Action to Prevent and Decrease Overweight and Obesity (December, 2001):

- 1999 -
61% of U.S. adults are overweight

13% of children aged 6-11 are overweight

14% of adolescents aged 12 to 19 are overweight

- during last 20 years - % of children overweight has doubled (7 to 13%) % of adolescents overweight has tripled (5 to 14%)
- overweight and obesity higher in females, racial and ethnic minority populations
- women of lower socioeconomic status are about 50 percent more likely to be obese than better-off counterparts.

WHY AN EXERCISE APPROACH TO OBESITY?

- Most experts agree that changing behaviors related to food consumption is extraordinarily difficult because of family, cultural, socio-economic and environmental factors and emotion-laden relationships to food.
- Given adequate levels of physical activity and caloric output, food consumption and caloric intake becomes less problematic.
- While wellness is advanced by a balanced and nutritious diet, it cannot be achieved without adequate levels of physical activity.
- Research shows that as physical activity levels increase, overweight and obesity decreases.
- Approaching food choices as optimizing fuel requirements of fitness avoids many of the emotional issues associated with food.
- The combination of diet and exercise has been shown to be superior to diet alone in treating obesity in children.

WHY YOUTH PHYSICAL ACTIVITY AND NOT GENERAL POPULATION PHYSICAL ACTIVITY?

- Preventing the onset of overweight and obesity is more effective than reversing its course.
- Sports and fitness participation increases confidence and self-esteem which are inversely related to being overweight and obesity. Increased physical activity results in increased self-esteem for pre-adolescents.
- From the perspective of the general public, youth physical activity and obesity is a more critical issue than adult physical activity and obesity. We care more about our children than ourselves.

WHY IS THE WOMEN'S SPORTS FOUNDATION FOCUSING ON THE YOUTH OBESITY ISSUE?

- Girls are underserved by existing sports and physical activity programs and, as a result are more likely to be sedentary and at higher risk for obesity. For instance, according to a study by the Center for the Study of Sports in Society (CSSS), girls in the Boston urban area have one-sixth the sports opportunities that girls in the suburbs have.
- Research demonstrates that early exposure to sports and physical activity increases the likelihood of continued participation. For example, if girls do not participate in sport by the age of 10, there is less than a 10% chance that they will be participating at age 25.
- Daily physical education in primary school appears to have a significant long term positive effect on exercise habits in women. They are more active as they age.
- Female athletes are more likely to try to lose weight; and are more likely than non-athletes to use dieting and exercise to do so.
- In all grade levels, girls get significantly less activity than boys, yet 75% of them feel they get enough exercise.
- Researchers from Penn State say exercise may be more important than calcium consumption for young women to ensure proper bone health as they get older.

They studied 81 young women, aged 12 to 16, beginning in 1990. When the girls reached 18, the researchers found no relationship between calcium consumption and bone mineral density. However, there was a strong link between physical activity and bone mineral density (BMD). The researchers found that consistent activity, rather than fitness or exercise intensity, was the best predictor of healthy levels of BMD.

- Fewer high school girls meet the standards for vigorous physical activity and strengthening exercises than boys. The gender difference for vigorous physical activity is 18.8% (72.3% vs. 53.5%). There is also a decline in physical activity with increasing age. This trend is more dramatic for girls than for boys. For example, between 9th and 12th grades the percentage of boys meeting the vigorous physical activity standard set by the President's Council on Physical Fitness and Sports (activities that cause sweating and hard breathing for at least 20 minutes on three or more of the days preceding the survey) declines by 10%, but for girls the decline is 23%.

CURRENT SITUATION

While consensus exists on the need to reduce childhood obesity and the important role of exercise in addressing this issue, there are numerous unanswered questions related to the efficacy and economic viability of youth physical activity delivery systems. Physical activity programs that result in weight loss exist, but there has been no analysis of whether such programs are replicable, scalable and sustainable and if so, at what cost. Further, there has been no integrated analysis of the projected impact of related and supporting programs that might increase the likelihood of physical activity program success and sustainability, such as:

- local, state and federal laws and policies
- individual and institutional incentives
- media and public education initiatives
- role of fitness testing and effectiveness of various measurement systems
- role and delivery of nutrition information

This lack of a comprehensive assessment of the relative costs and effectiveness of various approaches to increasing youth physical activity levels inhibits the development of a strategic plan that can be used by educators, foundation funders, responsible corporate citizens, public officials and other interested parties to determine their appropriate roles and actions. Further, potential resource providers (corporations, government, foundations, trade associations and national education, nutrition, sports and physical activity-related non-profit organizations) for such a physical activity initiative would be more likely to invest in such a program if they were assured that their investment would achieve an intended result and they were able to estimate the return on their investment.

KEY QUESTIONS THAT MUST BE ADDRESSED

DESIRED OUTCOME

Effectively reduce childhood obesity across the target population group in a way that is replicable, scalable and sustainable.

KEY QUESTIONS:

- What is the target audience and why?

- What assessment of overweight and obesity will be used, what is the baseline data and how often will progress be assessed?
- What standards will be used to determine whether the outcome is sustainable?
- What is the rank order of the cost efficiency and effectiveness of various strategic elements and the minimum elements required to produce the primary impact, the initial and continuing costs of such elements, and the likely sources of sustainable revenues to support such programs?

DESIRED OUTCOME

Create a sustained increase in daily physical activity among children in target population groups.

KEY QUESTIONS:

- What is the research supported standard of physical activity (minutes per day/days per week and or fitness assessment measures) that should be adopted?
- What is a baseline level for “success” vs. what is ideal?
- Who are the mass providers of physical activity programs and what are the current physical activity levels of the populations they serve?
- What are the policy, legal and other incentives that could be implemented to increase physical activity levels to the desired standard and the cost of implementing such incentives (i.e., promulgating mandatory physical education laws, required testing, intrinsic or extrinsic incentive systems for participants, teachers and program providers, reduced insurance rates for corporations providing fitness programs, etc.)?
- Who are the model program providers that have already demonstrated the ability to produce desired physical activity levels and reductions in overweight and obesity; what are the economic costs of such programs, the possibilities of reducing the costs of such programs, and the feasibility and costs of replicating and sustaining such programs on a broad scale?
- What are the most likely sources of financial support for physical activity program delivery (i.e., state taxes on soft drinks or food products with high fat or sugar levels used to support physical activity programming, web centric collection and analysis of physical activity or fitness data, etc.) and are the sources sufficient to expand and sustain delivery at desired levels?

DESIRED OUTCOME

Create positive attitudes among children and their parents toward daily physical exercise.

KEY QUESTIONS:

- What are the most cost efficient and effective communications mechanisms that will reach the target population and their parents?
- How and how often will attitudes be measured and baselines established?
- What is the cost of launching and sustaining the initiative and the most likely sources of initial and long-term revenues? Is there a “fad” effect to the communications programming and if so, how will it be overcome?
- Who really needs a change in outlook? Can success come with kids only? What is the role of parents, school teachers and administrators and non-school program leaders?

DESIRED OUTCOME

Create greater nutritional awareness, knowledge and behaviors among the target population and nutrition providers.

KEY QUESTIONS:

- How and when will nutrition knowledge, awareness and behavior of members of the target population be measured and baselines established?
- How and when will nutrition knowledge, awareness and behavior of members of the nutrition provider population be measured and baselines established?
- What are the policy, legal and other incentives that could be implemented to increase nutrition awareness, knowledge and behaviors to the desired standard and the cost of implementing such incentives (i.e., promulgating policies and laws related to public school cafeteria and vending machine offerings, product packaging, intrinsic or extrinsic incentive systems for participants, teachers and program providers, etc.)?

DESIRED OUTCOME

Create a sustainable collaborative of organizations, individuals, private and public foundations and corporate partners with the necessary commitment to execute the national strategy.

KEY QUESTIONS:

- What groups are already organized and committed to addressing this issue?
- What are the risks and probabilities of long-term commitment by the individuals and organizations that are needed for sustainability?

- Who are the “champions” necessary to take lessons learned to scale and who can bring a coordination and unity among participating groups and organizations to successfully execute the strategic plan?
- Who is necessary to cause a shift in the existing paradigm and is it desirable for one or more food industry leaders to see that this happens?
- What are the specific opportunities of interest and benefit to the food, beverage and fast food industries that might encourage their financial or advertising support of such an initiative and the risks, benefits and costs of such opportunities?
- What is the optimum plan for the roll out of such an initiative? Do elements need to be pilot tested and efficacy demonstrated on a large scale (i.e., one or two states via a preliminary next stage grant)?