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WELLNESS IN (WIN) THE ROCKIES -
A COMMUNITY-BASED, HEALTH-CENTERED APPROACH TO OBESITY INTERVENTION

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Summary

Obesity among children and adults has reached epidemic proportions and has proven difficult to treat effectively, especially in terms of sustainable weight loss. Therefore, primary prevention is a top priority. However, once obesity is present, treatment efforts should focus on improved health.

Children need supportive environments in order to achieve a healthy adult weight. While family situations are pivotal, school and community environments also have significant impacts. Thus, multidimensional, community-based efforts are needed to curb the obesity epidemic and allow children to grow and mature in a healthy way.

This model project sought to support healthy environments for children in rural communities by working with citizens of all ages to promote a healthy community. While elementary-school children were a targeted intervention group, programs and policies throughout the community were assessed relative to their impacts on physical activity, body image, and food choices. In each project community, interventions were identified and implemented by local citizens.

Communities had access to a number of interventions developed and tested specifically for community-based intervention. Height and weight measurements of fifth- and sixth-grade students helped assess impact of implemented programs and individual changes on overall health and allowed tracking of body mass index percentiles. Cross-sectional surveys were used to help measure and validate changes at the individual level among the community at large. Changes in health measures among a cohort of adults helped substantiate further the impacts of community programs and changes.

Project Description (<http://www.uwyo.edu/WinTheRockies/>)

This project emphasized a health-centered approach in which children and other community citizens could achieve a healthy weight by developing healthy lifestyles related to physical activity, body image, and food choices. Specifically, this project worked with six rural communities - Preston and American Falls, Idaho; Lewistown and Miles City, Montana; and Powell and Torrington, Wyoming. These towns were encouraged and supported to make significant improvements in overall community health and to make the important transition from focusing on health to embracing health as a shared community value.

Objectives and Activities

At the individual and interpersonal/social levels, school children and others in the community were encouraged to: a) improve their physical well-being by improving their food and physical activity habits; b) improve their sense of self-worth, basing it more on healthy eating and physical activity habits and vitality than on body size and shape; and c) become more accepting of people of varying body sizes and shapes.

To address the rising obesity rates, interventions in the targeted communities were progressive,

innovative, and comprehensive. Physical activity goals included fostering a greater sense of joy and pleasure in activity and greater awareness of health benefits from activity. Interventions helped:

- communities increase the amount of scheduled time for physical activity in school curricula;
- communities improve access to safe places for physical activity throughout the community;
- people of all ages recognize that physical activity for health and enjoyment is as important as physical activity for work or sport;
- people of all ages incorporate physical activity into daily routines.

Improving food habits also involved several dimensions, including quantity and quality of food choices, enjoyment of eating, and flexible dietary restraint. Interventions helped people of all ages:

- increase their servings and variety of vegetables and fruits;
- increase their intake of healthful beverages (i.e., water, skim and 1% milk);
- decrease their intake of soft drinks and other sweetened beverages;
- control the sizes of their food and beverage portions, including fewer “super-sizes”;
- increase their appreciation and enjoyment of food;
- increase their mindfulness, attention, or mental presence while eating;
- increase the frequency of meals they eat with family members, including meals eaten at home.

Resources

Examples of resources utilized in the communities include:

- a community portrait tool that allowed assessment of institutional/environmental support for healthy lifestyles in each town;
- WIN Kids lessons on physical activity, body image, and food choices for 10-13-year-old youth;
- tools to help primary care providers begin or expand meaningful dialogue with their patients about healthy and enjoyable lifestyles related to physical activity, body image, and food choices;
- “A New You: Health for Every Body” program for adults that emphasizes healthy living supported by a physically active lifestyle, “making peace” with food, and respecting body size diversity;
- point-of-purchase programs that promote consumption of healthful beverages and appropriate serving sizes;
- information on ways to discourage school policies that promote sales of sweetened beverages, candy, and other high-energy, low-nutrient products;
- guidance on implementation of community walking programs.

While improvement in body mass index percentiles among children were measured, the following indicators also helped document intervention impacts:

- increased hours devoted to physical activity in schools;
- decreased availability of sweetened beverages in schools;
- an increased number of fitness-oriented community activities throughout the year;
- an increased number and/or increased miles devoted to walking/biking paths or routes;
- improved year-round access to safe places to walk or engage in other physical activity;
- increased local sales of 1% and skim milk;
- improved awareness of body-size diversity and the impact of self-acceptance/respect on health;
- improved self-reported health attitudes and behaviors in a youth cohort;
- improved self-reported health attitudes and behaviors and improved health measures (glucose, total and HDL cholesterol, triglycerides, and BMI) in an adult cohort.

Strategy

This project's emphasis on a health-centered (versus a weight-centered) orientation to well-being is a logical approach to a health problem that now impacts over 60% of the adult population and at least 15% of children. Former Surgeon General Dr. David Satcher shares this perspective (DHHS, 2001):

The challenge is to create a multifaceted public health approach capable of delivering long-term reductions in the prevalence of overweight and obesity. This approach should focus on health rather than appearance and empower both individuals and communities to address barriers, reduce stigmatization, and move forward in addressing overweight and obesity in a positive and proactive fashion.

This project tested a health-centered approach to the challenge of obesity. It invested resources into communities and the people who live in them and empowered community leaders and other residents to identify their own strategies for improving community health. The project yielded insights, programs, and approaches that other communities can utilize. Further, it began immediately to integrate approaches into local agencies to assure that each community can sustain and expand the focus on community health well beyond the grant period.

Implementation Risks and Challenges

Community-based research and interventions can be difficult to control in terms of both process and outcome. Since programs and activities occur in "real time," they lack the environmental control available in traditional clinical trials. However, people live in communities, and community-based approaches that build upon existing community interest can be effective. This project benefits from relationships established and an initial database gathered by WIN the Rockies in its two-year research and intervention phase. Sustaining the momentum of positive changes in behavior that have begun to occur in the target communities is essential to project success, and it may be the biggest challenge. Results from ongoing data analyses, communicated effectively to community members, will help maintain enthusiasm for the goal of improved community health.

Publications to date from this project:

Blakely F, Dunnagan T, Haynes G, Moore SA, Pelican S. "Moderate physical activity and its relationship to select measures of a healthy diet." *The Journal of Rural Health*. 2004; 20(2).

Liebman M, Probst K, Moore SA, Pelican S, Holmes B, Wardlaw MK, Melcher LM, Harker JC, Dennee PM, Dunnagan T. "Gender differences in selected dietary intakes and eating behaviors in rural communities in Wyoming, Montana, and Idaho. *Nutrition Research* 2003; 23: 991-1002.

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Eisenmann JC, Milburn N, Jacobsen L, Moore S. "Reliability and convergent validity of the Godin Leisure-time Exercise Questionnaire in rural 5th-grade school children. *J Human Movement Studies*. 2002; 43: 135-149.

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