

Title of Intervention: The Kahnawake Schools Diabetes Prevention Project

Website: <http://www.ksdpp.org/>

Intervention Strategies: Group Education, Campaigns and Promotions, Environments and Policies, Supportive Relationships

Purpose of the Intervention: To improve eating habits and physical activity patterns among Kahnawake children ages 6 to 12 years old

Population: Kahnawake children ages 6 to 12 years old

Setting: Elementary school-based program reinforced by supporting community programs in a native community in Canada; school-based, community-based

Partners: Kahnawake Education System, community hospital, recreational and political sector stakeholders, media

Intervention Description:

- **Group Education:** Health education programs were created for children in grades 1-6. The curriculum contained sections on nutrition, fitness, diabetes, understanding the human body and healthy lifestyles. There were ten, 45-minute lessons per school year for each grade. Lessons included story telling, games, food tasting, experiments, puppet shows, crafts and audiovisual presentations. Traditional foods were used in education and food tastings.
- **Campaigns and Promotions:** Local media was used to increase community awareness of and improving attitudes toward healthy lifestyles. Media outlets included regular, half-page advertisements and press coverage of events and activities in the local newspaper, public service announcements and talk shows on the local radio and frequent use of posters in public locations.
- **Environments and Policies:** Walking and bike paths were built for the community. Schools enforced the offering of healthy foods in the canteen as well as extra physical education classes.
- **Supportive Relationships:** Community and parents were integrated into program components to provide positive reinforcement to children.

Theory: Social Learning Theory, PRECEDE-PROCEED model

Resources Required:

- **Staff/Volunteers:** Three intervention staff, one evaluation planner, data collection staff, teachers, registered dietitian, community health nurses
- **Training:** Teacher training to learn how to use curriculum
- **Technology:** Not mentioned
- **Space:** Not mentioned
- **Budget:** Not mentioned
- **Intervention:** Incentives for teachers to incorporate physical activities in the classroom, curriculum, craft supplies, newspaper advertisement, radio messages, posters, puppets, taste test supplies, audiovisual presentations, walking path construction materials
- **Evaluation:** Body composition assessment tools, questionnaires

Evaluation:

- **Design:** Quasi-experimental
- **Methods and Measures:**
 - Children completed a one-mile run/walk as part of the fitness assessment.
 - Body composition was assessed through six different anthropometric measurements.
 - Questionnaires assessed eating habits, physical activity patterns, self-efficacy and perceived parental support.

Outcomes:

- Short Term Impact: Not measured
- Long Term Impact: Children participating in the intervention had less increase in skinfold thickness. There was not a significant change in body mass index or healthy eating behaviors.

Maintenance: Not mentioned

Lessons Learned: Due to the holistic approach of the Kahnawake group, total population interventions appear more supportive of the culture, traditions and value systems. Native communities value the methods in participatory research because it ensures cultural relevance, creates local knowledge, builds skills and allows participation in decisions for action, based on the results.

Citation(s):

Macaulay, A. C., G. Paradis, et al. (1997). "The Kahnawake Schools Diabetes Prevention Project: intervention, evaluation, and baseline results of a diabetes primary prevention program with a native community in Canada." *Prev Med* 26(6): 779-90.

Jimenez, M. M., O. Receveur, et al. (2003). "Comparison of the dietary intakes of two different groups of children (grades 4 to 6) before and after the Kahnawake Schools Diabetes Prevention Project." *J Am Diet Assoc* 103(9): 1191-4.

McComber, A. M., A. C. Macaulay, et al. (1998). "The Kahnawake Schools Diabetes Prevention Project: community participation in a diabetes primary prevention research project." *Int J Circumpolar Health* 57 Suppl 1: 370-4.