



Be Active Kids® 2007 Program Evaluation Executive Summary

Currently, more than one in four children between the ages of 2 and 5 are overweight or at risk of becoming overweight (Ogden et al. 2006). In response to the issue of childhood overweight, Be Active Kids® (BAK) was created as an early intervention program to educate four and five year olds on nutrition, physical activity and food safety. This study was designed to assess the effectiveness of the BAK program for trainers, child care providers, four and five-year-old children and their parents.

Evaluation Design

This evaluation took place from December 2005 to June 2007. Trainers were recruited from a one-day train-the-trainer session conducted by the BAK Manager. Sixty-seven trainers agreed to participate in this evaluation by filling out a 10-minute survey before and after the training and 23 trainers participated in a follow-up survey. A total of 168 BAK providers completed pre and post training (baseline) assessments and 56 of these providers completed the 10-week follow-up survey. Ninety-eight control providers supplied baseline data and 69 completed the 10-week follow-up survey. For parents and children, 11 BAK centers (18 classrooms) and 11 control centers (19 classrooms) from across the state were recruited and enrolled in the study. We obtained baseline and follow-up survey and interview information from a total of 110 intervention children and their parents and 97 control children and their parents.

Assessment of trainers and child care providers, included:

- Knowledge, attitudes and self-efficacy to teach nutrition, physical activity and food safety. These were assessed before and after training as well as at the 10-week follow up.
- Child care providers' own diet and physical activity behaviors.

Assessment of parents and preschool children, included:

- Knowledge, attitudes and behaviors relative to nutrition, physical activity and food safety. These were evaluated before and after exposure to the BAK curriculum.

Results

Trainers

- The results demonstrated that overall, the train-the-trainer model is effective. The train-the-trainer session was well-received by participants, and trainers' knowledge, self-efficacy and some attitudes about physical activity, nutrition and food safety increased significantly from pre to post training.
- Trainers' knowledge, attitude and self-efficacy scores were also maintained at follow-up, after they had held their first provider training.

Providers

- After being trained on the curriculum, BAK providers' scores around knowledge, self-efficacy, and attitude showed significant improvements. No significant improvements were shown for control providers for the same variables.
- There were no significant improvements for BAK or control providers with respect to providers' diet or level of physical activity (behavior). An important finding was that providers' behaviors related to diet and physical activity were poor, both at baseline and at 10-week follow-up.
- The main recommendation from the provider evaluation is the addition of a provider health component to the curriculum that gives providers themselves guidelines on how to improve their eating habits and level of physical activity.

Parents

- The BAK curriculum may have a positive affect on parents' knowledge and attitudes about physical activity, nutrition and food safety, but there were no significant increases in behavior scores.
- Both control and BAK parents' diets were significantly correlated with their children's diets at baseline for frequency of soda consumption, sugar sweetened beverage consumption, intake of potato chips, milk consumption, fruit servings per day and vegetable servings per day. This data confirms expectations that, at preschool age, parents are the gatekeepers for food choices in the home and children are eating the same kinds of foods as their parents.
- Currently, the only part of the BAK curriculum designed specifically for parents is the parent newsletter, and based on the results of the evaluation, less than half of BAK parents received the newsletter from the provider.
- The primary recommendation for how the BAK curriculum could impact parents would be to improve the availability of the parent newsletter.

Children

- The results demonstrate that there is a link between the BAK curriculum and improving children's knowledge scores around nutrition and physical activity. One example of the impact of the BAK curriculum is that after exposure to BAK, BAK children were able to identify more correct "healthy" food choices in contrast to the control group who showed a significant decrease in their food identification score.

Discussion

Nutrition: There was a significant improvement in the number of BAK children who consumed skim or low-fat milk, and no improvement among control children. There was also a significant increase in the number of BAK children who had 3 or more servings of vegetables, although a similar significant increase was also noted for control children. Thirdly, there was an increase in the number of children who had no sugar sweetened beverages daily, but the increase was only significant for the control children and not the BAK children.

Physical Activity: For children's physical activity, the results were varied. There were no significant changes in physical activity among BAK or control children, but there was a significant improvement for BAK children with respect to television viewing. We could also make the assumption from the results that BAK children are learning to be more active outside through the curriculum, but that active indoor pursuits need more focus in the curriculum.

Food Safety: There were no significant improvements on BAK children's ability to answer the food safety questions, and both BAK and control children showed no significant differences for answering the hand-washing question. More work is needed to develop better tools to measure the food safety component. It would also be helpful to conduct focus groups with teachers that have used the curriculum to discover which lesson plans they have used, which they like and which they would change.

Conclusion

Overall, this study demonstrates that BAK is an effective tool for teaching nutrition, physical activity and food safety to four and five year olds and that the training methods for the dissemination of the information are also effective.