



5-A-DAY  
HIGH 5 PROGRAM  
IMPLEMENTATION MANUAL



## **WELCOME TEAM!**

**Thank you for your interest in offering the 5 A Day - High 5 or 5 FOR 5 programs in your district or school!** **High 5** and **5 FOR 5** are innovative programs to encourage students to eat more fruits and vegetables! The programs are designed for fourth and fifth grade students and each include a fun, eight-week classroom curriculum, food service changes, and family involvement. The goal of each classroom curriculum is to build students' skills and motivation for eating fruits and vegetables and to give students experience preparing and eating fruit and vegetables snacks in a supportive classroom environment. The curricula also incorporate student goal setting and tracking of their intake of fruits and vegetables at lunch over the eight-week curriculum period. The food service component links the school cafeteria to the classroom, making the cafeteria a "learning laboratory" for classroom activities. The food service component supports the curriculum by providing the food and materials for the classroom taste testing and by encouraging students to choose and eat fruits and vegetables at lunch. Students are offered more choices of fruits and vegetables at lunch, and fruits and vegetables are promoted using characters from the classroom curriculum. The family involvement component of the program provides information and activity packets that are sent home with students to do with their parents. This component encourages fruit and vegetable consumption at home and reinforces the classroom and food service components.

## **PLAN AND IMPLEMENT**

Implementing the **High 5** and/or the **5 FOR 5** programs will involve several steps. You may expect to spend time planning, recruiting and training teachers and food service staff, preparing and distributing materials, and supporting the program implementation. Once it has been taught, you'll want to evaluate your efforts and identify changes that need to be made before teaching the program again. **This manual will outline the steps and provide the materials you'll need to plan and implement these effective nutrition education programs.**

### **Acknowledgements**

The 5 A Day Power Plus Program, including the High 5 and 5 FOR 5 curricula, were produced by the Minnesota Department of Health and the University of Minnesota with grant support from the National Cancer Institute (R01 CA59805; Donald B. Bishop, principal investigator, Cheryl L. Perry, co-principal investigator).

The 5 A Day High 5 Implementation Manual was produced with funds from the Minnesota Department of Education as part of a USDA Team Nutrition Training Grant, which provided funds to the Minneapolis Public Schools. The project was a collaborative effort of the Minneapolis Public Schools, the Minnesota Department of Health, and the University of Minnesota Extension Service of Hennepin County.

Special thanks to our partners at the St. Paul Public Schools, especially Carole Snyder, Curriculum Director, Jean Ronnei, Food Service Director, district curriculum and kitchen staff, and the principals, teachers, and food service staff from the 26 St. Paul schools involved in developing and testing the Power Plus program in the research phase. Thanks also to Pam Lindberg, Curriculum Specialist and Stella Thomas, Food Services Site Manager, Minneapolis Public Schools, and Sueling Chan, Food Stamp Nutrition Education Coordinator, University of Minnesota Extension Service for their work offering the Power Plus program in the Minneapolis schools and in writing the implementation manual.

## **Step One: Background and Rationale**

Increasing consumption of fruits and vegetables to 5 or more servings a day is a national health promotion goal (1). Although fruits and vegetables are widely available, American children eat far fewer servings of fruits and vegetables than are needed every day for good health. Research shows that only 16% of children aged 6-11 years eat the recommended five servings daily (2). Eating a diet high in fruits and vegetables reduces the risk for future development of cancer, heart disease and stroke, the three leading causes of death in America. It also provides important nutrients need for growth and development, provides needed fiber, and helps students develop a low fat eating pattern. Improving the eating patterns of American children to include more fruits and vegetables is of critical importance.

**The Power Plus program** was developed and tested with grant funds provided by the National Cancer Institute to the Minnesota Department of Health and the University of Minnesota, School of Public Health as one of nine national research studies funded by NCI's **5 A Day for Better Health Program**. The research goal was to develop and test the effectiveness of a program aimed at increasing fruit and vegetable consumption among fourth and fifth grade children in public schools. The program was extensively tested in a randomized field trial of 20 elementary schools in St. Paul, Minnesota.

Program development was guided by social learning theory and prior research on changing children's eating behaviors. The program incorporates the elements that are known to be needed to produce eating behavior change (3). The program is focused on changing a specific eating behavior (eat five or more servings of fruits and vegetables daily) versus focusing on a board nutrition message (i.e. eat a healthy diet); it includes behavioral strategies to increase student's skills in incorporating more fruits and vegetables into their daily diet; and it is theoretically based. It also allows students adequate time and intensity of exposure to the 5 a day message and activities, and it allows student to track their progress towered their goal. Finally, it includes parental involvement and provides linkages to and support from the school cafeteria and broader community. It incorporates many elements of learning, including reading, writing, math, oral presentation and goal setting. After extensive testing, the program was shown to be effective in increasing fruit and vegetable consumption among elementary school children.

**The following handout provides information about the 5 A Day Power Plus - High 5 (fourth grade) and 5 FOR 5 (fifth grade) programs for encouraging children to eat more fruits and vegetables.**

### **References**

1. US Department of Health and Human Services. Healthy People 2010. Washington, DC: Government Printing Office, Public Health Service, 2000.
2. Krebs-Smith SM, Cook A, Subar A, Cleveland L, Friday J, Kahle LL, "Fruit and vegetable intakes of children and adolescents in the United States. Arch Pediatr Adolescent Med 1996; 150:81-86.
3. Contento I, Birch LL, Brunner YL, Lytle LA, Maloney SK, Olson CM, Swadener SS. The effectiveness of nutrition education and implications for nutrition education policy, programs and research: A review of research. J Nutr Educ 1995;27(6):298-311.
4. Perry CL, Bishop DB, Taylor G, Murray DM, Mays RW, Dudovitz BS, Smyth M, Story M. Changing fruit and vegetable consumption among children: the 5-A-Day Power Plus Program in Saint Paul, Minnesota. Am J Public Health 1998;88:603-609.

**5 A Day-High 5 Program  
Session Overview**

<b>Session</b>	<b>Lesson</b>	<b>Weekly Student Materials*</b>	<b>8 Snacks</b>	<b>5 Home Highlights</b>
Session 1	Find Your Flyer Puzzle	1 Flyer Puzzle Piece/team	Cooked broccoli with cheese sauce	No Home Materials
Session 2	Lunch Letters	1 Piece of Stationary/student 1 Postcard/team	Fruit salad with yogurt pudding dip	Home Highlights #1
Session 3	Cooking up Combos	1 Combos Direction Sheet/team	Pineapple Fruit Salsa with Tortilla Chips	Home Highlights #2
Session 4	Food in a Flash	1 Flyer Note/team 1 Coach's Kitchen Directions Sheet/team	Raw broccoli and cauliflower with dip	Home Highlights #3
Session 5	Training for 5-A-Day	1 Goal Worksheet/student	Mini baked potatoes with topping	Home Highlights #4
Session 6	Making a Play	1 Role Play Directions Sheet/team or per pair of students	Raw jicama and pea pods with dip	Home Highlights #5
Session 7	Goal Checks, 5-A-Day Fans	1 Ad Project Directions Sheet/team	Fruit kabobs with dip	No Home Materials
Session 8	Planning a Victory Party	1 Victory Party Directions Sheet/team 1 Grand Tally Worksheet/team	Fruit juice with mineral water, and baby carrots with dip	No Home Materials