

# Hearts N' Parks—Report of 2003 Magnet Center Performance Data

National Recreation and Park Association

In cooperation with the:
National Heart, Lung, and Blood Institute
National Institutes of Health
U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES





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# I. Report Summary

Hearts N' Parks is a national, community-based program supported by the National Heart, Lung, and Blood Institute (NHLBI), of the National Institutes of Health (NIH) and the National Recreation and Park Association (NRPA). This program is designed to reduce the growing trend of obesity and the risk of coronary heart disease in the United States by encouraging Americans of all ages to aim for a healthy weight, follow a heart-healthy eating plan, and engage in regular physical activity while taking part in local park and recreation department programs.

These goals are especially important because the number of overweight children and adolescents, as well as obese adults, in the United States has more than doubled over the past two decades. According to the 1999–2000 National Health and Nutrition Examination Survey, approximately 65 percent of adults are overweight or obese. In addition, approximately 10 percent of preschool children and approximately 15 percent of school-age children and adolescents are considered overweight. Both overweight and obesity acquired during childhood or adolescence may persist into adulthood and increase an individual's risk of developing heart disease and other conditions later in life.

In 2002, 56 sites were selected to implement the national Hearts N' Parks program. Sites were selected from the following 11 States: Arizona, Florida, Georgia, Illinois, Indiana, Maryland, Michigan, Missouri, New Mexico, Nevada, and Ohio, as well as 6 U.S. Marine Corps bases. Known as Magnet Centers, their selection was based on the risk level of cardiovascular disease in their areas, whether they served special populations (e.g., seniors or racial/ethnic minority groups), the level of park and recreation agency interest, and program capability.

To build program sustainability, Magnet Center sites were required to make a 3-year commitment to Hearts N' Parks and to undertake specific responsibilities, such as expanding heart-healthy programming efforts each consecutive year, measuring program performance by administering pre- and postquestionnaires to participants, and sharing their data with NHLBI via a Web-based tracking and reporting system. As previously discussed in the "Report of 2002 Magnet Center Performance Data," all 56 Magnet Center sites were expected to initiate Hearts N' Parks with one youth and one adult program. Four sites that were unable to meet their Hearts N' Parks commitments were replaced. Magnet Center sites in this second program year were expected to implement 2 youth and 2 adult programs over a 6–8 week period with a minimum of 25 participants. In addition, the sites were encouraged to target "hard to reach" groups, such as adolescents and adult males, as part of their programming efforts.

Annual training sessions were held for Magnet Center personnel and local program partners. In 2003, the focus of the second year of trainings shifted from how to implement Hearts N' Parks to building on the previous year's success. In addition to sharing success stories and challenges, the Magnet Center sites received supplementary nutrition education, resources, and tools for local implementation; instructions on how to improve the data submission process; and information on how to use the performance outcomes for enhanced public visibility at the local level.

Magnet Center sites implemented Hearts N' Parks programs throughout 2003. The majority of the sites implemented two to four programs. The size of the programs ranged from 5 to nearly 400 participants, with an average of 26 participants. As in 2002, most of the 2003 child and

adolescent programs consisted of summer camps and after-school programs. Children's programs lasted an average of 7 weeks, while adolescent programs lasted closer to 8 weeks. As in 2002, adult Hearts N' Parks programs consisted of senior programs, city employee programs, general park and recreation programs, and one aquatics program for disabled adults. These programs averaged approximately 10 weeks in length.

Performance evaluation began with the administration of questionnaires by Magnet Center staff to all participants at the beginning of the programs (pretest), and again at the completion of the programs (posttest). These questionnaires were designed to assess participants' knowledge, self-reported attitudes, and behavior related to heart-healthy eating, overweight/obesity, and physical activity. Questionnaires for adults also addressed knowledge of high blood pressure and high blood cholesterol. They were created from a collection of previously validated and refined performance instruments used in programs such as the Child and Adolescent Trial for Cardiovascular Health (CATCH), and surveys such as the CDC Youth Risk Behavior Surveillance System (YRBSS) and the Behavioral Risk Factor Surveillance System. As in 2002, Magnet Center staff entered their participants' pretest and posttest questionnaire responses into spreadsheet templates, uploaded the spreadsheets into the Web-based tracking and reporting system, and received a quick, basic analysis of their programs.

# Overall

- A total of 48 Magnet Center sites submitted pre- and posttest data for analysis. On average, the sites submitted three programs each, rather than the four programs that were encouraged. Data were submitted for 142 programs: 60 child, 21 adolescent, and 61 adult programs.
- A total of 3,716 children, adolescents, and adults participated in Hearts N' Parks programs based on the number of questionnaires received. Of these, approximately 2,800 participants completed both the pretest and posttest.

The quality of the data varied between the Magnet Center sites. Project staff cleaned, processed, and merged the submitted data into separate child, adolescent, and adult SAS databases, and conducted a comprehensive analysis.

Based on the results of the 142 programs, Hearts N' Parks was clearly a success in 2003. Of the approximately 2,800 participants who completed the pretest and posttest, significant improvements were demonstrated from pre- to posttest in virtually all indicators of heart-healthy eating knowledge, self-reported attitude and behavior, and physical activity.

#### Children

- A total of 60 children's programs with 2,140 participants were implemented; of these, 1,735 participants completed both pre- and posttests.
- Results indicated significant improvement by children in all areas of heart-healthy eating, which included knowledge, self-reported behavior, and intention—suggesting increased

ability and willingness of children to identify and choose healthy foods over less healthy ones.

- Scores in physical activity attitude also increased significantly, suggesting an increase in children's interest in various kinds of physical activities while participating in Hearts N' Parks programs.
- Children reported learning a wide range of new activities during the programs—an average of five per child—and a majority of children said they "got better" at such hearthealthy activities as basketball, various exercises and games, jump rope, soccer, and swimming.
- Most children reported higher numbers of activities that they "got better at" and "want to play again" after their programs than they reported as activities that they "had done in the past week" and "wanted to learn" before the programs. This suggests that their interest in various kinds of physical activities grew while participating in Hearts N' Parks programs.
- The significant improvements observed in children's programs apply to the older group of 10–11-year-olds, but are more pronounced among younger children (9 years and younger). This is a good indication that Hearts N' Parks program content is able to connect with children even at an early age.
- Observed independently, both boys' and girls' results are positive but show little difference from each other.
- Across the 2-year period (2002–2003), children showed improvement in every section of the questionnaires (excluding "Things I Like and Things I Do" and "Things I Learned and Did Last Summer," which cannot be analyzed for pretest to posttest change). Children's improvement in "Heart-Healthy Eating Knowledge" was significantly greater in 2003 than in 2002.
- The standout program sites in 2003 were Las Vegas (NV), "Kids Kamp/Camp Odyssey," Prince George's County (MD), "Summer Camp," Oldsmar (FL), "Summer Camp," and Adrian (MI), "Summer Playground," which posted impressive results in almost every section, showing better than average pretest-to-posttest improvement. Children at the Tamarac (FL), program "Summer Shape Up," reported the highest numbers of any program regarding activities they "got better at" (10), "learned" (12), and "would like to play again"(12).

# **Adolescents**

- A total of 21 adolescent programs with 446 participants were implemented; of these, 367 participants completed both pre- and posttests.
- Magnet Centers succeeded in following the recommendations of the 2002 report by increasing the number of adolescent programs from 8 to 21.

- The 21 adolescent programs with pre- and posttest data showed significant improvement in 6 of the 7 performance areas, most notably in the categories of "Heart-Healthy Eating Behavior" and "Heart-Healthy Eating Intention," as in 2002.
- In contrast to 2002, boys scored better than girls in most areas.
- Adolescents (14 years and older) earned higher scores in most knowledge, attitude, and self-reported behavior areas, and demonstrated more improvement from pre- to posttest than younger adolescents, 12–13 years of age.
- Overall, adolescents' scores in 2003 showed significantly greater improvement than in 2002 in the areas of "Heart-Healthy Eating Knowledge" and "Overweight/Obesity Attitude." Scores in 2002 improved significantly more than 2003 scores in "Heart-Healthy Eating Attitude." Over the 2-year period, significant pretest-to-posttest improvements were demonstrated in knowledge, attitude, intention, and self-reported behavior regarding "Heart-Healthy Eating," as well as "Overweight/Obesity Knowledge."
- The Gary (IN), "Come Out and Play," Roswell (GA), "Youth Baseball 2," and Prince George's County (MD), "Soccer Teams" programs posted the most significant gains in performance out of the 21 adolescent programs.

## Adults

- A total of 61 adult programs with 1,130 participants were implemented; of these, 818 participants completed both pre- and posttests.
- Adult program participants—69 percent female (down from 78 percent in 2002)—demonstrated similar results to those of 2002. In general, they finished their programs with more knowledge about heart-healthy nutrition, overweight/obesity risks, engaging in proper physical activity, causes of high blood pressure, and controlling high blood cholesterol.
- Posttest scores suggest far healthier attitudes toward overweight/obesity, eating habits, and physical activity; a significant increase in how frequently adults report making healthy food choices; and significantly increased time reported doing moderate physical activity.
- Adults over 60 years of age posted better scores in self-reported attitude and behaviorrelated sections, while adults 60 and younger demonstrated better knowledge in most areas of heart health and physical activity.
- Adults without college education showed significantly greater improvement than those with some college education.
- The only two sections where 2003 improvements significantly exceeded those of 2002 were "High Blood Pressure Knowledge" and "Cholesterol Knowledge." Participants'

improvement in 2002 was greater than 2003 in "Physical Activity Attitude" and self-reported "SIT Score." Within all individual sections, however, there was consistent improvement over the 2-year period.

- In keeping with the goal of increasing adult male participation, the percentage of men participating in Hearts N' Parks adult programs grew from 22 percent in 2002 to 31 percent in 2003.
- Among single sites, the Springfield (MO), "Cox Healthy Lifestyles," and Prince George's County (MD), "Morning Milers," demonstrated significant posttest improvement in most areas of heart health.

Although improvements in data collection were achieved in 2003, program personnel should continue to be trained on the importance of proper data collection and submission methods, increasing the number of participants who complete both the pre- and posttest questionnaires, and engaging more adult men and adolescents in Hearts N' Parks programs.

Overall, performance results confirm that the second full year of Hearts N' Parks was an unequivocal success, and included specific improvements over the 2002 program:

- The number of programs that submitted data grew overall from 68 to 141, an average of 3 per Magnet Center.
- The number of participants measured for pretest-to-posttest analysis increased from approximately 1,200 in 2002 to 2,800 in 2003.
- Sites continued to meet performance objectives, increasing the number of areas in which statistically significant improvement was made for all age groups.
- Program personnel made progress in correcting data collection and program recruitment disparities (i.e., unmatched data, low adult male and adolescent participation).

The results of the first 2 full years of Hearts N' Parks demonstrate the ability of community-based organizations such as park and recreation departments to positively impact heart-healthy knowledge and behavior changes among residents of all ages. The success of the programs is in large part due to the dedication of park and recreation professionals who are committed to educating the community about the principles of heart-healthy eating and physical activity. Many have become role models for heart-healthy behavior and have worked tirelessly to engage their communities in this effort.

# II. Introduction

# **Project Overview**

Hearts N' Parks is a national, community-based program supported by the National Heart, Lung, and Blood Institute (NHLBI), of the National Institutes of Health (NIH), and the National Recreation and Park Association (NRPA). This program is designed to reduce the growing trend of obesity and the risk of coronary heart disease in the United States by encouraging Americans of all ages to aim for a healthy weight, follow a heart-healthy eating plan, and engage in regular physical activity while taking part in local park and recreation department programs.

The specific performance objectives of Hearts N' Parks are:

- Increase the percentage of children, adolescents, and adults who engage in heart-healthy behaviors (heart-healthy eating and physical activity) to prevent the development of cardiovascular disease (CVD) risk factors
- Increase children's, adolescents', and adults' knowledge of nutrition and healthy eating habits
- Improve children's, adolescents', and adults' attitudes toward healthy eating and physical activity

These goals and objectives are especially important because the numbers of overweight children and adolescents, as well as obese adults in the United States have more than doubled over the past two decades. According to the 1999–2000 National Health and Nutrition Examination Survey, approximately 65 percent of adults are overweight or obese. In addition, approximately 10 percent of preschool children and approximately 15 percent of school-aged children and adolescents are considered overweight. Both overweight and obesity acquired during childhood or adolescence may persist into adulthood, increasing the individual's risk of developing heart disease and other conditions later in life.

In 2002, 56 sites were selected to implement the National Hearts N' Parks program. Sites were selected from the following 11 States: Arizona, Florida, Georgia, Illinois, Indiana, Maryland, Michigan, Missouri, New Mexico, Nevada, and Ohio, as well as 6 U.S. Marine Corps bases. Known as Magnet Centers, their selection was based on the level of risk of CVD in their areas, whether they served special populations (e.g., seniors or racial/ethnic minority groups), the level of park and recreation agency interest, and program capability.

To build program sustainability, Magnet Center sites were required to make a 3-year commitment to Hearts N' Parks, beginning in 2002, in which they would:

- Attend annual trainings for Hearts N' Parks
- Measure program performance by administering pre- and postquestionnaires to participants and by submitting data to NHLBI via a Web site/database system

- Evaluate annually the program's sustainability and growth by tracking additional markers related to the 5 P's of Hearts N' Parks
- Report progress annually
- Utilize an extranet/listsery to communicate to other sites
- Serve as ambassadors/trainers for other sites interested in Hearts N' Parks
- Initiate Hearts N' Parks with one youth and one adult program in the first year and expand heart-healthy programming efforts each consecutive year

In exchange for participating in Hearts N' Parks for 3 years, Magnet Center sites received the following types of support from NHLBI and NRPA: stipends to travel to trainings; NHLBI materials including the "Hearts N' Parks Community Mobilization Guide," videotape, and other educational information for the community; press releases to use for the annual FunFit Festival; program support and technical assistance from project staff; a listserv to be used as a tool to communicate with other sites; an electronic newsletter containing heart health and program information; and access to a Web-based system to submit performance data and obtain basic results.

In keeping with the 3-year commitment to program sustainability, in 2003, the Magnet Center sites were expected to increase the number of implemented programs from two to four. Additionally, Magnet Centers were encouraged to administer two adult programs and two youth programs (child or adolescent), and to target "at risk" or "hard to reach" participants such as male adults and adolescents. Four sites that were unable to meet their Hearts N' Parks commitments in 2002 were replaced and the new sites were invited to the annual training sessions.

# 2003 Magnet Center Trainings

In 2003, the focus of the second year of trainings shifted from how to implement Hearts N' Parks to building on the previous year's success. In addition to sharing success stories and challenges, the Magnet Center sites received supplementary nutrition education, resources, and tools for local implementation; instructions on how to improve the data submission process; and information on how to use the performance outcomes for enhanced public visibility at the local level. The four new sites that participated in 2003 trainings were given instructions on the use of performance measures through PowerPoint slides and additional technical assistance from project staff prior to, or immediately after the trainings.

# Report Format

The analysis of pretest and posttest data from Hearts N' Parks sites is provided in three chapters. Chapter IV presents the results for the entire program, subdivided by child, adolescent, and adult data, including demographic data, performance scores, significance test results, and interpretation. Chapter V presents the results for each individual program at the Magnet Centers. Chapter VI provides an analysis comparing 2002 and 2003 Hearts N' Parks results.

The report concludes in chapter VII with an overall assessment of the program based on each level of analysis, a comparison of 2002 and 2003 results, and a description of which age groups and Magnet Center sites achieved the greatest success in meeting the performance objectives stated in the introduction. The conclusion also includes a discussion of ways to improve data collection and quality, and recommendations for improving the program's performance in the future.

Finally, an appendix at the end of the report details the overall scores for each question answered in each of the three questionnaires in both pretest and posttest. For each individual item within each pre- and posttest questionnaire, the appendix lists the total number of participants who responded to that item (whether they completed both pretest and posttest), the average score of that item, and the standard deviation of the scores.

# III. Methodology

# Data Collection

Data collection methods and instruments remained the same in 2003. The three different participant questionnaires used to assess program performance were included as reproducible pages in the "Hearts N' Parks Community Mobilization Guide" that was provided to each Magnet Center. The questionnaires applied specifically to child, adolescent, and adult programs, and were administered before and after participants completed their programs (i.e., as pretests and posttests). All questionnaires focused on heart-healthy eating and physical activity. The adolescent and adult questionnaires also contained questions related to knowledge and attitude regarding the risks of overweight and obesity, which fell within the target area of heart-healthy eating. The adult questionnaire included two additional target areas that were not included in the child and adolescent questionnaires: causes of high blood pressure and actions to control high blood cholesterol. The questionnaires were subdivided into sections that queried participants about their knowledge, attitude, behavior, and/or intention in the various target areas.

The same Web-based data-collection system, which was created for the 2002 Hearts N' Parks program, was used in 2003. Magnet Centers used the system to register their programs, obtain spreadsheet templates, and submit program-performance data directly to staff through a secure NHLBI Web site (with the exception of a few sites who submitted their data via e-mail). Once submitted, project staff processed and cleaned the data, and compiled it into a SAS database to conduct the analysis detailed in this report. As in 2002, Magnet Center staff were able to view basic results of their participants' performance measures after submitting their spreadsheets through the Web site/database system.

As of December 2003, pre- and posttest performance data from 142 programs (60 child, 21 adolescent, and 61 adult) across 48 Magnet Centers were submitted to the tracking and reporting Web site.

Eight Magnet Centers did not submit data in 2003 due to the following circumstances:

- Some Magnet Centers lacked an adequate amount of staff necessary to collect and enter performance data.
- Some Magnet Center personnel misinterpreted the timeline for data submission, and thus, were not prepared to submit data on time.
- One Magnet Center was waiting for a new recreation facility to open before it could implement programs.
- One Magnet Center site experienced computer technology difficulties and could not provide the program data.
- Lack of coordination between project staff and U.S. Marine Corps Magnet Centers, due to staff turnover and disruptions from war deployments.

# Data Quality

Although restrictions built into the spreadsheets—such as rejecting false answers (i.e., values lying outside a specified range or misspelled words) and matching pre- and posttest identification numbers automatically—reduced the amount of time necessary for data cleaning, the data (as in 2002) still required a moderate amount of cleaning. This was due to a number of factors: personnel turnover at the sites without orientation of the new staff to the data submission process by predecessors; the use of older versions of Microsoft Excel software, which necessitated the need for project staff to reformat spreadsheets into the current version of Excel; and data-entry issues at the site level, such as the failure to check key section boxes. Other minor problems had to be resolved before the spreadsheet processing and data analysis could be conducted. First, a few sites recycled 2002 program spreadsheets, which could not be accepted by the Web site. Other sites did not properly register their 2003 programs to the Web site and submitted spreadsheet data to 2002 programs. Phoning or e-mailing the appropriate sites to ask them to register 2003 programs and download the appropriate spreadsheets on the Web site rectified these problems easily. In addition, numbers entered into adult spreadsheets to represent the amount of time adults spent doing certain physical activities for the FIT and SIT Scores (see next chapter) were occasionally entered in minutes instead of hours, as required. This type of mistake was easily identified and resolved while cleaning the adult data in SAS.

As in 2002, another limitation of the data was that a number of participants did not complete both the pretest and posttest for a given program. Some programs experienced high attrition rates, while others gained participants after the pretests were administered. Thus, a large number of participants' performance measures could not be analyzed for pretest-to-posttest changes.

Finally, most participants completed the majority, if not all, of the questions in the various sections in 2003. There were few cases of participants completing less than half of the questions in a section, which would have meant not counting the section score of the participant. If at least half the questions in a section were answered, then the participant's score was calculated based on the average of all valid answers.

# Analysis Tables

In the analysis tables that follow, the sample size for each group, "N," represents the number of participants who completed both pretest and posttest questionnaires. Pretest-to-posttest improvement is indicated in bold type (YES instead of YES) if the score increase is *statistically significant at the .05 level* (p < .05, 95 percent confidence interval), based on matched-pairs T-tests of significance. Analysis of variance (ANOVA) was used to compare scores between groups (e.g., males and females) for pretest-to-posttest change. For the children's sections, "Things I Like and Things I Do" (pretest) and "Things I Learned and Did This Summer" (posttest), an independent, sample T-test was used for boy/girl and older/younger child comparisons, because the pretest and posttest measures were not identical and therefore could not be analyzed as matched pairs.

# IV. Analysis of Overall Program Data

# Children

# **Magnet Centers**

Thirty-nine Magnet Centers submitted pretest and posttest data for analysis of sixty child programs. A total of 2,140 children participated in these programs, representing an average of 36 participants per program. The programs were a combination of summer camps and after-school programs. Children's programs lasted from 2 weeks to 3 months. The average program length was approximately 7 weeks.

# **Magnet Center Children's Programs**

State	Magnet Center	Program	Number of Participants*
Arizona	Glendale	Rose Lane	5
	Sierra Vista	Healthy Kids 1	24
		Healthy Kids 2	33
Florida	Lee County	North Park Summer Camp	32
		Schandler Hall Traditional Summer Camp	26
		Terry Park Summer Camp	18
	Oldsmar	Summer Camp	45
	Tallahassee	Fall Fitness	6
	Tamarac	Summer Shape Up	30
Georgia	Roswell	RRPD Summer Camp	29
	Savannah	Savannah Kids' Camp	59
Illinois	Decatur	Staley Striders Track & Field	18
	Homewood	Extra Innings	22
		Stomping Grounds	23
	Rockford	Northwest Community Center Boys & Girls Club	48
		Washington Park Community Center	23
Indiana	Bloomington	After School Adventure	9
		Lil' Healthy Hoosiers	5
	Fort Wayne	Jennings Center Kids' Summer Day Camp	25
	Gary	Learn 2 Live Next Steps	30
	Indianapolis	Recreation Adventure-IPS 31	8
		Recreation Adventure-IPS 46	9
		Recreation Adventure-IPS 49	14
		Recreation Adventure-IPS 82	18
	Lafayette	McAllister Day Camp	42
	South Bend	Kids' World	31
		Summer Fun Learning Camp	36
Maryland	Baltimore	Camp Baltimore (Morrell Park)	22
		Camp Baltimore Fun and Fitness	18
	Montgomery County	KidZone	21
	Prince George's County	Summer Camp	19

# **Magnet Center Children's Programs**

State	Magnet Center	Program	ı	Number of Participants*
Michigan	Adrian	Sports for Squirts		9
		Summer Playground		19
	Meridian Township	Get Michigan Youth Moving		12
	Monroe	Bless Your Heart 1		24
		Bless Your Heart 2		21
	Muskegon	Playground Program C1		12
		Playground Program C2		54
Missouri	Jefferson City	Family Health and Fitness		23
		Start Smart Baseball		57
	Kansas City	Operation READY		124
	Poplar Bluff	Wall Walk		30
	Springfield	Fassnight Park Program		31
Nevada	Clark County	Desert Breeze		67
		Walnut		40
	Henderson	Safekey Nutrition and Physical Activity		111
		Fall 2003 Safekey/UNLV <sup>†</sup>		172
	Las Vegas	Kids' Kamp/Camp Odyssey		388
	Reno	Park Pals		10
New Mexico	Rio Rancho	After School Recreation Club		24
	Roswell	Hiking the Goodnight Loving Trail		16
		Summer Fun and Fitness		12
		Swim Team		17
U.S. Marine Corps	Camp Pendleton	Browne CDC After School Kids		27
	Cherry Point	Food Challenge		30
		Snack It Up		15
	Kaneohe Bay	A Plus YA-1		12
Ohio	Bowling Green	Summer Day Camp		5
	Elyria	Eat Well Play Hard		15
		Rap a Lap		15
			Total	2,140

<sup>\*</sup>This number represents the total number of participants for whom pretest and/or posttest data were submitted, not the number who completed both pre- and posttests.

# **Child Questionnaire**

The children's questionnaire is primarily based on the Child and Adolescent Trial for Cardiovascular Health (CATCH) instruments. The questionnaire first asks the child's gender and age category, and then covers five heart-health sections. The first four sections are identical in pretest and posttest; however, the last section's pre- and posttest formats are not identical.

<sup>&</sup>lt;sup>†</sup>University of Nevada, Las Vegas.

*Heart-Healthy Eating Knowledge* (7 questions): Under the heading "Which food is better for your health?" this section asks children to choose the healthier of two foods for each question. Scores are presented as the percentage of questions answered correctly.

Heart-Healthy Eating Behavior (7 questions): Under the heading "What foods do you eat most of the time?" this section asks children to mark for each question which of two foods they eat more often. Scores are presented as the percentage of questions in which participants chose the healthier food.

Heart-Healthy Eating Intention (7 questions): Under the heading "What would you do?" this section asks children to identify which of two foods they would eat in a given circumstance (e.g., at the movies, for a snack, at a fast-food restaurant). Scores are presented as the percentage of questions in which participants chose the healthier food.

Things I Like and Things I Do (pretest only): This section consists of a table with 14 rows listing different types of physical activity (jump rope, soccer, swimming, etc.) and the following three column headings: "I like to do this," "I've done this in the past week," and "I would like to learn how to do this." Scores are measured in two ways:

- (1) The percentage of children who marked each activity under each heading
- (2) The average number of activities marked in each column

This section measures children's self-reported interest and involvement in physical activity.

Things I Learned and Did This Summer (posttest only): This section is identical to the previous one in format, and the activity rows are the same; however, the column headings are switched to "Something new I learned," "I got better at this," and "I would like to play this again." Scores are presented in the same way as "Things I Like and Things I Do." This section seeks to determine the kinds of physical activity that children learned, enjoyed, and are interested in doing again after completing their programs.

**Note:** For overall children's results (59 programs), "Things I Like and Things I Do" and "Things I Learned and Did This Summer" are initially presented activity-by-activity on pg. 15–16. For simplicity, the results of these sections are presented thereafter in tables that show the average number of activities checked under each heading, without breaking down all 14 activities beneath those headings.

*Physical Activity Attitude* (6 questions): Under the heading "Physical Activity and You!" this section measures children's attitudes toward physical activity on a scale of 0–12 (6 questions; 0–2 points per question; higher score is favorable).

## Age and Gender Distribution

As the following tables indicate, nearly 60 percent of children were between 8 and 11 years of age. The largest age group was 8–9 years of age. Girls slightly outnumbered boys, 52 percent to 48 percent.

#### Age

	Frequency	Percent
Under 6 years	308	14.5%
6 or 7 years	552	25.9%
8 or 9 years	724	34.0%
10 or 11 years	547	25.7%
Total	2,131	100%
Not Given	9	

#### Gender

	Frequency	Percent
Girl	1,109	52.0%
Boy	1,023	48.0%
Total	2,132	100%
Not Given	8	

# **Performance Scores and Significance Tests**

Children's scores (see the following table) increased significantly from pretest to posttest in every section in which significance tests are possible: the heart-healthy eating knowledge, self-reported behavior and intention sections, and physical activity attitude. The posttest score for "Heart-Healthy Eating Knowledge" is high (85.2 percent), while children's posttest scores on sections regarding eating behavior and intention show more room for improvement. When given a choice between eating an unhealthy food and a similar but healthier substitute, children at posttest said they tend to make the healthier choice (55.4 percent of the time, on average). Similarly, their *intention* to make a healthy eating choice when provided specific circumstances was indicated in 53 percent of posttest questions, on average. Nevertheless, these results strongly suggest that after participating in Hearts N' Parks, children had significantly improved their knowledge of heart-healthy eating, their current self-reported eating behavior, their intention to make healthy eating choices in the future, and their attitude toward physical activity.

At the beginning of the program, in the section entitled "Things I Like and Things I Do," children checked off things from a list of 14 activities that they like to do, that they've done in the past week, and that they'd like to learn how to do. On average, children checked off nearly 9 activities out of the 14 that they "like to do"; the activities cited most frequently were swimming, games (e.g., tag and hopscotch), and biking. For things they've "done" in the past week, they averaged four activities, with exercises (e.g., jumping jacks) and games the most common. Activities they "would like to learn" garnered the fewest checks—an average of 2.8 per child. The most common activities checked in this column were football, tennis, and volleyball.

At the end of the program, children checked off activities from the same list, but with an adjusted format from the pretest, entitled "Things I Learned and Did This Summer." The questionnaire instructed children to check off activities that they "learned," activities at which they "got better," and activities that they "would like to play again." The children checked off slightly

more than five activities, on average, "learned" by the end of the program. The prevalence of activities learned was consistent: each of the 14 was checked off between 34.4 percent and 41.4 percent of the time. Under activities that children said they "got better at," the average was 4.9 per respondent. "Exercises" was by far the most commonly cited item in this group, as it was in the prior year. Finally, children listed 5.7 activities, on average, that they would like to play again. The most common of these, by a small margin, were swimming and games.

#### Children: 60 Programs

Section	Scale	N	Pre Mean	Post Mean	Improvement? (In Bold If Significant)
Heart-Healthy Eating Knowledge	% Correct	1,735	58.9%	85.2%	YES
Heart-Healthy Eating Behavior	% Healthy	1,720	41.0%	55.4%	YES
Heart-Healthy Eating Intention	% Healthy	1,731	38.1%	53.0%	YES
Physical Activity Attitude	0–12	1,276	8.90	9.30	YES

Things I Like and Things I Do: N=1,310

(PRE)	I Like To Do This	I've Done This in the Past Week	I Would Like To Learn How To Do This
Softball/Baseball	57.9%	24.5%	22.8%
Basketball	63.3%	31.8%	19.7%
Biking	72.8%	31.8%	12.1%
Bowling	69.2%	21.4%	17.1%
Dancing	53.8%	27.3%	18.7%
Exercises	63.5%	45.8%	10.4%
Football	49.8%	26.0%	26.3%
Games	75.3%	39.3%	12.9%
Jump Rope	62.1%	32.1%	16.1%
Roller Skating	64.1%	24.6%	23.5%
Soccer	58.8%	25.8%	21.9%
Swimming	74.7%	31.0%	15.1%
Tennis	42.8%	22.5%	33.1%
Volleyball	47.7%	19.5%	32.1%
Average Number of Activities Per Person	8.56	4.03	2.82

Things I Learned and Did This Summer: N=1,310

(POST)	Something New I Learned	I Got Better at This	l Would Like To Play This Again
Softball/Baseball	36.9%	32.8%	38.3%
Basketball	37.1%	37.4%	42.8%
Biking	36.8%	33.0%	41.4%
Bowling	38.6%	33.1%	41.3%
Dancing	34.4%	30.7%	35.2%
Exercises	37.5%	47.6%	37.6%
Football	35.3%	28.3%	38.7%
Games	41.4%	42.5%	44.7%
Jump Rope	37.1%	40.0%	37.9%
Roller Skating	38.9%	32.7%	41.1%
Soccer	37.9%	36.4%	41.8%
Swimming	39.6%	38.4%	46.3%
Tennis	36.0%	27.5%	38.5%
Volleyball	37.1%	28.6%	39.2%
Average Number of Activities Per Person	5.24	4.89	5.65

# Child Results, by Gender

When the children's data were separated by gender (following tables), we see that girls scored better than boys on pre- and posttest heart-healthy eating knowledge, behavior, and intention. Boys, however, produced higher physical activity attitude scores in pretest and posttest. Both genders showed significant improvement in all sections. Analysis of variance tests does not indicate that one group improved by a significantly greater degree than the other.

Children: Boys

Section	Scale	N	Pre Mean	Post Mean	Improvement? (In Bold If Significant)
Heart-Healthy Eating Knowledge	% Correct	910	56.0%	83.8%	YES
Heart-Healthy Eating Behavior	% Healthy	899	38.7%	54.0%	YES
Heart-Healthy Eating Intention	% Healthy	906	35.9%	50.7%	YES
Physical Activity Attitude	0–12	661	9.16	9.54	YES

#### **Children: Girls**

Section	Scale	N	Pre Mean	Post Mean	Improvement? (In Bold If Significant)
Heart-Healthy Eating Knowledge	% Correct	821	62.1%	86.9%	YES
Heart-Healthy Eating Behavior	% Healthy	817	43.4%	56.8%	YES
Heart-Healthy Eating Intention	% Healthy	821	40.4%	55.4%	YES
Physical Activity Attitude	0–12	611	8.62	9.06	YES

In the following two tables, which display the average number of activities marked in the sections "Things I Like and Things I Do" and "Things I Learned and Did This Summer," there are two areas where significant differences are observed using independent samples t-tests. The first is the number of activities "done in the past week (pretest)," where boys did significantly more activities than girls (4.24 vs. 3.81). The second significant difference is in the number of activities they "would like to learn how to do (pretest)," where girls indicated an average of 3.0 activities while boys indicated an average of 2.65 activities. No other areas of "Things I Like and Things I Do" or "Things I Learned and Did This Summer" have statistically significant differences between boys and girls. (The "N" column represents the numbers of boys and girls who completed both sections of "Things I Like . . . /Things I Learned . . . . ")

#### Children: Boys

Things I Like and Do/				
Things I Learned and Did	Scale	N	Pre Mean	Post Mean
I like to do this	# Activities	673	8.64	
I have done this in the past week	# Activities	673	4.24	
I would like to learn how to do this	# Activities	673	2.65	
Something new I learned	# Activities	673		5.15
I got better at this	# Activities	673		4.99
I would like to play this again	# Activities	673		5.84

#### **Children: Girls**

Things I Like and Do/				
Things I Learned and Did	Scale	N	Pre Mean	Post Mean
I like to do this	# Activities	633	8.49	
I have done this in the past week	# Activities	633	3.81	
I would like to learn how to do this	# Activities	633	3.00	
Something new I learned	# Activities	633		5.33
I got better at this	# Activities	633		4.79
I would like to play this again	# Activities	633		5.46

# Child Results, by Age

This analysis compares the results of surveys of younger children (9 years and younger) with those of older children (10–11 years of age) as a way to observe whether Hearts N' Parks was more beneficial to one age group than another. The two age groups' results are compared in the following tables. Unlike the results found in 2002, the posttest heart-healthy eating knowledge scores of both age groups were relatively close. ANOVA tests, however, show that the younger group's scores improved significantly more than the older group's scores, for all sections except "Heart-Healthy Eating Behavior."

Children: 10-11 Years of Age

Section	Scale	N	Pre Mean	Post Mean	Improvement? (In Bold If Significant)
Heart-Healthy Eating Knowledge	% Correct	427	75.8%	85.9%	YES
Heart-Healthy Eating Behavior	% Healthy	428	49.0%	61.9%	YES
Heart-Healthy Eating Intention	% Healthy	428	47.1%	59.6%	YES
Physical Activity Attitude	0–12	391	9.20	9.35	YES

#### Children: 9 Years and Younger

Section	Scale	N	Pre Mean	Post Mean	Improvement? (In Bold If Significant)
Heart-Healthy Eating Knowledge	% Correct	1,302	53.4%	85.1%	YES
Heart-Healthy Eating Behavior	% Healthy	1,286	38.3%	53.1%	YES
Heart-Healthy Eating Intention	% Healthy	1,297	35.1%	50.6%	YES
Physical Activity Attitude	0–12	880	8.77	9.29	YES

In the two following tables, which display the average number of activities marked in the sections "Things I Like and Things I Do" and "Things I Learned and Did This Summer," there are some significant differences between younger and older children's scores (using independent samples t-tests). Children 10–11 years old listed significantly more activities that they "like to do" and "would like to play again," but significantly fewer activities that they "would like to learn how to do," compared to children 9 years and younger.

**Note:** "Pre Mean" represents the average number of activities marked for the pretest section items; "Post Mean" represents the average for the posttest items. These pre- and posttest items are not identical measures and therefore cannot be directly compared. The "N" column represents the number of children in each age group who completed "Things I Like . . . /Things I Learned . . . ."

## Children: 10-11 Years of Age

Things I Like and Do/				
Things I Learned and Did	Scale	N	Pre Mean	Post Mean
I like to do this	# Activities	400	9.06	
I have done this in the past week	# Activities	400	4.24	
I would like to learn how to do this	# Activities	400	2.31	
Something new I learned	# Activities	400		5.34
I got better at this	# Activities	400		5.19
I would like to play this again	# Activities	400		6.04

#### Children: 9 Years and Younger

Things I Like and Do/				
Things I Learned and Did	Scale	N	Pre Mean	Post Mean
I like to do this	# Activities	904	8.35	
I have done this in the past week	# Activities	904	3.94	
I would like to learn how to do this	# Activities	904	3.03	
Something new I learned	# Activities	904		5.20
I got better at this	# Activities	904		4.74
I would like to play this again	# Activities	904		5.49

# **Child Programs With Dietitians**

The following 12 Magnet Center sites brought in registered dietitians to help educate their participants in 16 programs about heart-healthy eating.

- Lee County (FL)—(3) North Park Summer Camp; Terry Park Summer Camp; Schandler Hall Traditional Summer Camp
- Tallahassee (FL)—Fall Fitness
- Homewood (IL)—Extra Innings
- Indianapolis (IN)—Recreation Adventure-IPS 82
- South Bend (IN)—Summer Fun and Learning Camp
- Baltimore (MD)—(2) Camp Baltimore (Morrell Park); Camp Baltimore Fun and Fitness
- Monroe (MI)—Bless Your Heart 1
- Henderson (NV)—Fall 2003 Safekey/UNLV
- Roswell (NM)—Summer Fun and Fitness
- Bowling Green (OH)—Summer Day Camp

- Elyria (OH)—(2) Eat Well Play Hard; Rap a Lap
- Camp Pendleton (U.S. Marine Corps)—Browne CDC After School Kids

The heart-healthy eating scores of this group of programs were compared to the scores of all other child programs. Both kinds of programs achieved significant improvement in their heart-healthy eating scores, and programs with dieticians showed higher pretest and posttest scores than programs without dieticians. ANOVA tests, however, failed to show that programs that used dietitians—as opposed to programs that did not use dietitians—achieved a significantly greater degree of improvement from pretest to posttest (i.e., positive change) in heart-healthy eating knowledge, self-reported behavior, or intention scores.

#### **Children: Programs With Dietitians**

Section	Scale	N	Pre Mean	Post Mean	Improvement? (In Bold If Significant)
Heart-Healthy Eating Knowledge	% Correct	429	71.6%	79.4%	YES
Heart-Healthy Eating Behavior	% Healthy	424	52.5%	62.7%	YES
Heart-Healthy Eating Intention	% Healthy	427	48.9%	59.8%	YES

#### **Children: Programs Without Dietitians**

Section	Scale	N	Pre Mean	Post Mean	Improvement? (In Bold If Significant)
Heart-Healthy Eating Knowledge	% Correct	1,306	54.8%	87.1%	YES
Heart-Healthy Eating Behavior	% Healthy	1,296	37.2%	53.0%	YES
Heart-Healthy Eating Intention	% Healthy	1,296	34.5%	50.7%	YES

## **Adolescents**

#### **Magnet Centers**

Seventeen Magnet Centers submitted pretest and posttest data for analysis of twenty-one adolescent programs. A total of 446 adolescents participated in programs, representing an average of 21 participants per program. These programs were either after-school programs or summer camps. The average length of adolescent programs was 8 weeks, though they ranged from  $2\frac{1}{2}$  weeks to 4 months.

#### **Magnet Center Adolescent Programs**

State	Magnet Center	Program	Number of Participants*
Florida	Florida Largo Physicians of Fun		11
	Lee County	North Teens	19
		Schandler Hall Teens	21
	Tallahassee	Fall Fitness	8
	Tamarac	Fall Into Fitness	12
Georgia	Roswell	Youth Baseball 2	33
	Savannah	Adolescent Camp	16
Illinois	Decatur	Teen Summer Camp	9
Indiana	Gary	Come Out and Play	25
	Indianapolis	Indy After School	9
	Lafayette	Purdue-NYSP	35
Maryland	Prince George's County	Soccer Teams	20
	Queen Anne's County	Centreville M.S. After School	11
		Stevensville M.S. After School	7
		Sudlersville M.S. After School	8
Michigan	Muskegon	Playground Program A1	46
		Playground Program A2	19
Missouri	Kansas City	Operation READY	13
Nevada	Henderson	Hearts N' Parks Challenge	35
	Reno	Reno Enrichment Program	28
New Mexico	Las Cruces	Youth Sports Programs	61
		Т	otal 446

<sup>\*</sup>This number represents the total number of participants for whom pretest and/or posttest data were submitted, not the number that completed both pre- and posttests.

#### **Adolescent Questionnaire**

The adolescent questionnaire is based on accumulated instruments refined specifically for Hearts N' Parks, such as instruments used in CATCH, CDC's Youth Risk Behavior Surveillance System (YRBSS), and NHLBI materials. The questionnaire first asked the participant's gender and age category and then covered seven sections on heart health. The pretest and posttest were identical.

Heart-Healthy Eating Knowledge (12 questions): The first 4 questions test knowledge of food groups and proper diet. The last 8 questions, under the heading "Which food is better for your health?" ask adolescents to choose the healthier of two foods for each question. Scores are presented as the percentage of questions answered correctly.

Overweight/Obesity Knowledge (9 questions): This section is in true/false format, where adolescents must decide whether each statement concerning overweight/obesity risks and facts is true or false. Scores are based on the percentage of questions answered correctly.

Heart-Healthy Eating Attitude (10 questions): This section is based on a 4-point agree/disagree scale, which the respondent uses to indicate how much he or she agrees with each statement expressing a positive attitude toward healthy eating. Section scores represent the average of all questions on a 1–4-point scale, where 4 is the best possible score ("strongly agree") and 1 is the worst score ("strongly disagree").

Overweight/Obesity Attitude (8 questions): This section is based on a 4-point agree/disagree scale, which measures respondents' attitudes toward overweight or obesity. A score of 4 represents the healthiest attitude.

Heart-Healthy Eating Behavior (8 questions): Under the heading "What foods do you eat most of the time?" this section asks adolescents to mark which of two foods they eat most often. Scores are presented as the percentage of questions in which participants chose the healthier food.

Heart-Healthy Eating Intention (8 questions): Under the heading "What would you do?" this section asks adolescents to identify which of two foods they would eat in a given circumstance (e.g., at the movies, for a snack, at a fast-food restaurant). Scores are presented as the percentage of questions in which participants chose the healthier food.

*Physical Activity Level* (5 questions): This section measures the level of physical activity in which adolescents have engaged, based on time spent exercising and playing sports. Scores are based on a 0–6-point scale, where 6 is the best score.

# Age and Gender Distribution

Fifty-seven percent of adolescent participants were ages 12 or 13; the other 42 percent were ages 14 and older. Boys outnumbered girls, 61 percent to 39 percent (the percentage of boys rose 12 percentage points over the 2002 percentage).

#### Age

	Frequency	Percent
12 or 13 years	252	56.9%
14 or 15 years	101	22.8%
16 or 17 years	47	10.6%
18 years or older	43	9.7%
Total	443	100%
Not Given	3	

#### Gender

	Frequency	Percent
Boy	273	61.3%
Girl	172	38.7%
Total	445	100%
Not Given	1	

#### **Performance Results**

The following table displays the overall results of the 21 adolescent programs. Six out of seven section scores improved significantly from pretest to posttest. The section that showed the most improvement in 2002, self-reported "Heart-Healthy Eating Behavior," showed the most improvement (15 percentage points) again in 2003. "Heart-Healthy Eating Intention" showed a similar level of improvement of 16 percentage points, which was the highest of any section in the adolescent questionnaire.

# **Adolescents: 21 Programs**

Section	Scale	N	Pre Mean	Post Mean	Improvement? (In Bold If Significant)
Heart-Healthy Eating Knowledge	% Correct	341	77.0%	85.0%	YES
Overweight/Obesity Knowledge	% Correct	349	59.1%	64.3%	YES
Heart-Healthy Eating Attitude	1–4	367	2.74	2.83	YES
Overweight/Obesity Attitude	1–4	363	2.67	2.74	YES
Heart-Healthy Eating Behavior	% Healthy	327	43.4%	58.6%	YES
Heart-Healthy Eating Intention	% Healthy	367	43.8%	60.2%	YES
Physical Activity Level	0–6	350	3.30	3.40	YES

# Adolescents' Results, by Gender

When adolescent performance results were sorted by gender, there were some obvious differences between boys' and girls' results. Boys earned higher scores than girls in the posttest in all but one section ("Heart-Healthy Eating Attitude"). Boys also made significant improvement in every section. Girls, however, did not achieve significantly higher scores in the "Overweight/Obesity Knowledge and Attitude" sections or the self-reported "Heart-Healthy Eating Behavior" section.

# **Adolescent: Boys**

Section	Scale	N	Pre Mean	Post Mean	Improvement? (In Bold If Significant)
Heart-Healthy Eating Knowledge	% Correct	209	75.8%	85.5%	YES
Overweight/Obesity Knowledge	% Correct	217	61.0%	64.7%	YES
Heart-Healthy Eating Attitude	1–4	225	2.76	2.82	YES
Overweight/Obesity Attitude	1–4	222	2.64	2.76	YES
Heart-Healthy Eating Behavior	% Healthy	199	43.7%	61.0%	YES
Heart-Healthy Eating Intention	% Healthy	224	42.7%	61.4%	YES
Physical Activity Level	0–16	213	3.64	3.75	YES

#### Adolescent: Girls

Section	Scale	N	Pre Mean	Post Mean	Improvement? (In Bold If Significant)
Heart-Healthy Eating Knowledge	% Correct	132	78.9%	84.2%	YES
Overweight/Obesity Knowledge	% Correct	132	55.9%	63.7%	YES
Heart-Healthy Eating Attitude	1–4	142	2.73	2.84	YES
Overweight/Obesity Attitude	1–4	141	2.72	2.70	NO
Heart-Healthy Eating Behavior	% Healthy	128	42.9%	55.0%	YES
Heart-Healthy Eating Intention	% Healthy	143	45.5%	58.3%	YES
Physical Activity Level	0–16	137	2.76	2.87	YES

# Adolescents' Results, by Age

Adolescents were separated into two age groups of comparable size for analysis: 12–13-year-olds (57 percent of adolescents) and 14 years and older (43 percent of adolescents). Based on a comparison of the two age groups, the older group made somewhat greater improvements from pre- to posttest and scored higher in most sections. Both groups showed significant improvement in the same sections, with the exception of "Overweight/Obesity Knowledge," where only the score of the 12–13-year-olds showed a significant increase.

Adolescents: 12-13 Years of Age

Section	Scale	N	Pre Mean	Post Mean	Improvement? (In Bold If Significant)
Heart-Healthy Eating Knowledge	% Correct	181	74.9%	82.4%	YES
Overweight/Obesity Knowledge	% Correct	184	59.0%	64.2%	YES
Heart-Healthy Eating Attitude	1–4	199	2.74	2.79	YES
Overweight/Obesity Attitude	1–4	195	2.66	2.67	YES
Heart-Healthy Eating Behavior	% Healthy	171	44.3%	55.5%	YES
Heart-Healthy Eating Intention	% Healthy	200	45.1%	55.7%	YES
Physical Activity Level	0–16	188	3.66	3.66	NO

# Adolescents: 14 Years and Older

Section	Scale	N	Pre Mean	Post Mean	Improvement? (In Bold If Significant)
Heart-Healthy Eating Knowledge	% Correct	159	79.5%	88.2%	YES
Overweight/Obesity Knowledge	% Correct	165	59.1%	64.5%	YES
Heart-Healthy Eating Attitude	1–4	167	2.75	2.88	YES
Overweight/Obesity Attitude	1–4	167	2.69	2.82	YES
Heart-Healthy Eating Behavior	% Healthy	155	42.5%	62.3%	YES
Heart-Healthy Eating Intention	% Healthy	166	42.2%	65.9%	YES
Physical Activity Level	0–16	161	2.86	3.11	YES

# **Adolescent Programs With Dietitians**

Five magnet centers brought in registered dietitians to help educate their participants in eight programs about heart-healthy eating:

- Largo (FL)—Physicians of Fun
- Lee County (FL)—(2) Schandler Hall Teens; North Park Teens
- Lafayette (IN)—Purdue-NYSP
- Queen Anne's County (MD)—(3) After School Programs: Centreville M.S., Stevensville M.S., and Sudlersville M.S.
- Kansas City (MO)—Operation READY

In 2003, 28 percent of Hearts N' Parks adolescent participants received some type of instruction from a dietitian. The heart-healthy eating and overweight/obesity scores of these participants were compared to the scores of participants in all other adolescent programs. ANOVA showed that programs that used dietitians did not attain significantly higher scores or make greater improvement than programs that did not use them.

# **Adolescents: Programs With Dietitians**

Section	Scale	N	Pre Mean	Post Mean	Improvement? (In Bold If Significant)
Heart-Healthy Eating Knowledge	% Correct	90	80.8%	83.4%	YES
Overweight/Obesity Knowledge	% Correct	77	61.0%	59.3%	NO
Heart-Healthy Eating Attitude	1–4	93	2.74	2.82	YES
Overweight/Obesity Attitude	1–4	92	2.67	2.62	NO
Heart-Healthy Eating Behavior	% Healthy	82	39.9%	50.6%	YES
Heart-Healthy Eating Intention	% Healthy	90	40.8%	47.0%	YES

#### **Adolescents: Programs Without Dietitians**

Section	Scale	N	Pre Mean	Post Mean	Improvement? (In Bold If Significant)
Heart-Healthy Eating Knowledge	% Correct	251	75.6%	85.6%	YES
Overweight/Obesity Knowledge	% Correct	272	58.5%	65.8%	YES
Heart-Healthy Eating Attitude	1–4	274	2.75	2.83	YES
Overweight/Obesity Attitude	1–4	271	2.67	2.78	YES
Heart-Healthy Eating Behavior	% Healthy	245	44.5%	61.3%	YES
Heart-Healthy Eating Intention	% Healthy	277	44.8%	64.5%	YES

# Adults

# **Magnet Centers**

Forty Magnet Centers submitted pretest and posttest data for analysis of 61 adult programs. A total of 1,130 adults participated in these programs, representing an average of 19 participants per program. The programs were a combination of senior programs, city employee programs (usually parks and recreation department staff), general park and recreation programs, and one program at Poplar Bluff (MO), which served disabled persons.

The average length of adult programs was 10 weeks. Just over half of the adult programs were conducted primarily during the summer months, while most others were conducted during the spring and fall.

## **Magnet Center Adult Programs**

State	Magnet Center	Program	Number of Participants*
Arizona	Sierra Vista	Lean, Mean Lifeguard Machine	24
		Senior Fit	17
Florida	Largo	Jazzercise	8
	Oldsmar	After Work Basketball	13
		Golden Movement	10
	Tallahassee	Fall Fitness	12
	Tamarac	Fitness Fridays	15
		Hearts N' Parks Walk Fit	27
		Wellness Wednesdays	15
Georgia	Athens	Senior Stretch	10
	Roswell	Fun Fit—Healthy Steps	21
	Savannah	Adult Exercise and Healthy Eating	18
		Golden Walk to Dallas	21
Illinois	Decatur	FIT 3	7
	Homewood	Healthy Lifestyles	4
		Sr'Cise	15
	Rockford	Greater Park Action Community and Senior Center (GPAC)	16
		Wesley Willows	18
Indiana	Bloomington	City of Bloomington Employees Survivor Challenge	17
		Hearts N' Parks for the Active Adult	10
	Fort Wayne	Community Center Adults	11
	Gary	Get Up and Play	10
		Learn 2 Live Next Step	11
	Indianapolis	Indy in Motion	4
	Lafayette	Community Wellness	20
	South Bend	City Employees	29
		Healthy Seniors MLK	25
		South Bend Fire Department (SBFD) Recruit	9

## **Magnet Center Adult Programs**

State	Magnet Center	Program		Number of Participants*
Maryland	Montgomery County	Healthy Seniors		13
		Recreation Walk Across America		18
	Prince George's County	Morning Milers		31
		Yoga		15
	Queen Anne County	Walk Across Maryland		56
Michigan	Adrian	Hearts N' Parks Weekly Fall Walks		12
	Meridian Township	Adult Fitness Class		3
	Monroe	Bless Your Heart 1		11
		Bless Your Heart 2		15
Missouri	Jefferson City	City Survivor Challenge II		17
		Family Health and Fitness		17
	Poplar Bluff	Arthritis Aquatics		13
	Rolla	Water Aerobics		14
	Springfield	Cox Healthy Lifestyles		45
Nevada	Clark County	Cora Coleman Seniors		14
		Cambridge Seniors		14
		West Flamingo		69
	Henderson	Healthy Bingo Senior Style		36
	Las Vegas	Doolittle Seniors' Nutrition Program		26
		Staff Education Program		25
	Reno	Reno Enrichment Program		10
New Mexico	Albuquerque	Heart-Healthy Eating for Men		34
	Las Cruces	Healthy Hearts at Eastside		4
		Healthy Hearts Grow Stronger I		8
		Healthy Hearts Grow Stronger II		12
	Roswell	Active RAC		46
		Goodnight Loving Trail Adult		17
		Summer Fun and Fitness		18
Marines	Camp LeJeune	Adult Martial Arts		34
	Cherry Point	Walking Teams		24
	Kaneohe Bay	CSSG		12
Ohio	Elyria	Lorain County Walks		15
		Seniors Take a Stroll and Lose the Roll		15
			Total	1,130

<sup>\*</sup>This number represents the total number of participants for whom pretest and/or posttest data were submitted, not the number that completed both pre- and posttests.

## **Adult Questionnaire**

The adult questionnaire is based on accumulated instruments refined specifically for Hearts N' Parks, such as the CDC's Behavioral Risk Factor Surveillance System (BRFSS) and NHLBI materials. The first four questions of the questionnaire ask the respondent's gender, age group,

race, and level of education. Twelve different substantive sections follow. The pretest and posttest are identical.

Heart-Healthy Eating Knowledge (6 questions): This section is composed of a series of multiple-choice questions that test respondents' knowledge of proper serving sizes and lowfat diets. Scores represent the percentage of questions answered correctly.

Overweight/Obesity Knowledge (9 questions): A series of true/false questions comprise this section. Adults must decide whether each statement concerning overweight/obesity risks and facts is true or false. Scores are based on the percentage of questions answered correctly.

Heart-Healthy Eating Attitude (6 questions): This section is based on a 4-point importance scale ("very," "somewhat," "not too," or "not at all important"), which the respondent uses to indicate how important each of the six healthy eating habits is to him/her. Section scores represent the average of all questions on a 1–4-point scale, where 4 is the best possible score.

Overweight/Obesity Attitude (8 questions): This section is based on a 4-point agree/disagree scale, which reflects a person's predisposition for overweight or obesity. A score of 4 represents the healthiest attitude toward achieving a healthy weight.

*Heart-Healthy Eating Behavior* (7 questions): This section measures the frequency with which adults report making healthy eating choices, such as "low-calorie instead of regular salad dressing." Scores are based on a 0–4-point scale, in which 0 equals "never" and 4 equals "almost always."

Physical Activity Level (7 questions): The questions in this section are designed to measure adults' participation in physical activity, based on past, current, and future levels of activity, plus group activities (e.g., classes, leagues). The maximum number of points achievable in this section is 12.

Physical Activity Attitude (14 questions): The questions in this section are designed to measure how likely respondents are to give excuses for not exercising, based on a 1–4 scale, where 1 equals "very likely" and 4 equals "very unlikely".

*Physical Activity Knowledge* (12 questions): The questions in this section are designed to measure respondents' knowledge of the need for physical activity, as well as the risks that come with it. Answers are either true or false, and section scores are based on the percentage of correct answers.

High Blood Pressure Knowledge (14 questions): The questions in this section are designed to measure adults' ability to identify the causes of high blood pressure (HBP). The section score represents the percentage of items that the respondents correctly identified as either a cause or not a cause of HBP.

Cholesterol Knowledge (12 questions): The questions in this section are designed to measure adults' ability to identify proper actions to control high blood cholesterol. The section scores represent the percentage of items that the respondents correctly identified as something that either would or would not help control blood cholesterol.

FIT Score: The questions in this section are intended to measure the number of hours adults engaged in each of 14 different types of physical activity over the last 7 days, which are added up to produce the "FIT Score." A group FIT Score is simply the average among those who reported both pre- and post-FIT Scores.

*SIT Score:* This section measures the number of inactive hours spent engaging in each of five different activities (e.g., watching TV, reading, using a computer) over the last 7 days and adds them up to produce the "SIT Score." A group SIT Score is simply the average among those who reported both pre- and post-SIT Scores.

# Age, Gender, Race, and Education Distribution

As in 2002, the largest adult age group participating in Hearts N' Parks was the older-than-70 group. Slightly more than half were in the 60-and-under age groups and there was a fairly even distribution among the 50-and-under age groups. Again, women outnumbered men by two to one; however, this was reduced from three to one in 2002. The Albuquerque, NM program, "Heart-Healthy Eating for Men," was an exception, by having 34 male participants only. Whites far outnumbered other racial types, in spite of Hispanic participation more than doubling from 3.2 percent in 2002 to 6.8 percent in 2003. More than half of the participants reported having obtained at least some college education, 31 percent reported college degrees, and slightly more than 90 percent said they were high school graduates.

#### Age

	Frequency	Percent
Under 21 years	34	3.4%
21–30 years	102	10.1%
31–40 years	112	11.1%
41–50 years	122	12.1%
51–60 years	139	13.8%
61–70 years	212	21.0%
Over 70 years	288	28.5%
Total	1,009	100%
Not Given	121	

#### Gender

	Frequency	Percent
Male	328	31.2%
Female	723	68.8%
Total	1,051	100%
Not Given	79	

#### Race

	Frequency	Percent
White	692	68.9%
African American or Black	214	21.3%
Hispanic	69	6.9%
Asian or Pacific Islander	18	1.8%
American Indian/Alaska Native	3	0.3%
Other	9	0.9%
Total	1,005	100%
Not Given	125	

#### Education

	Frequency	Percent
Less than high school	70	7.0%
High school graduate	294	29.5%
Some college	312	31.4%
College degree	188	18.9%
Some graduate school	46	4.6%
Graduate degree	85	8.5%
Total	995	100%
Not Given	135	

#### **Performance Results**

As shown in the following table, adult respondents who completed pretests and posttests across all sites demonstrated significant improvement in every section (not including each individual FIT Score and SIT Score activity). Although further improvement still is possible in most areas, adult respondents, in general, completed their programs with more knowledge about hearthealthy eating, overweight/obesity risks, how to engage in physical activity properly, causes of high blood pressure, and controlling high blood cholesterol than they had when they started their programs. By the end of the program, respondents on average considered healthy eating habits to be between "somewhat important" and "very important" to them. At posttest, they were significantly less likely to make excuses for not engaging in physical activity. Self-reported physical activity FIT Scores suggest that adults were significantly more active and engaged in more physical activity at posttest than at pretest. Posttest data for bicycling, walking, golfing, along with traditional forms of exercise (i.e., aerobics, jogging, treadmills, weightlifting) show significant increases. Similarly, self-reported adult SIT Scores indicate an average of 3 fewer hours spent inactively (e.g., watching TV).

**Note:** To keep the report at a manageable length, all further adult results tables provide the total FIT and SIT Scores, and not the individual activities that generate those scores.

# Adults: Overall—61 Programs

Section	Scale	N	Pre Mean	Post Mean	Improvement? In Bold If Significant)
Heart-Healthy Eating Knowledge	% Correct	818	58.2%	70.5%	YES
Overweight/Obesity Knowledge	% Correct	797	66.6%	75.9%	YES
Heart-Healthy Eating Attitude	1–4	773	3.22	3.39	YES
Overweight/Obesity Attitude	1–4	781	2.82	2.95	YES
Heart-Healthy Eating Behavior	0–4	757	2.27	2.54	YES
Physical Activity Level	0–12	717	6.98	8.06	YES
Physical Activity Attitude	1–4	647	3.15	3.29	YES
Physical Activity Knowledge	% Correct	689	85.2%	90.7%	YES
High Blood Pressure Knowledge	% Correct	597	59.3%	73.4%	YES
Cholesterol Knowledge	% Correct	566	71.8%	83.8%	YES

FIT Score Section	Scale	N	Pre Mean	Post Mean	Improvement? (In Bold If Significant)
FIT Score	# hours	593	7.41	8.58	YES
Bicycling	# hours	593	0.27	0.38	YES
Bowling	# hours	593	0.10	0.10	YES
Chores	# hours	593	1.53	1.55	YES
Dancing/aerobics	# hours	593	0.58	0.74	YES
Golfing	# hours	593	0.12	0.22	YES
Jogging/stairs/treadmill	# hours	593	0.59	0.71	YES
Pushups/sit-ups	# hours	593	0.34	0.41	YES
Rollerblading, skating	# hours	593	0.04	0.01	NO
Team or organized sports	# hours	593	0.24	0.18	NO
Walking/hiking	# hours	593	2.20	2.63	YES
Water sports (swimming)	# hours	593	0.35	0.36	YES
Weightlifting	# hours	593	0.49	0.63	YES
Winter sports (snow skiing)	# hours	593	0.01	0.01	NO
Other physical activities	# hours	593	0.55	0.65	YES

SIT Score Section	Scale	N	Pre Mean	Post Mean	Improvement? (In Bold If Significant)
SIT Score	# hours	617	34.65	31.23	YES
TV	# hours	617	12.36	10.62	YES
Computer	# hours	617	5.43	5.23	YES
Work (nonmanual labor)	# hours	617	11.11	10.30	YES
Reading	# hours	617	4.12	3.87	YES
Movies	# hours	617	1.62	1.22	YES

# Adult Results, by Gender

Women outnumbered men in Hearts N' Parks programs by a ratio of about two to one—a reduction from three to one in 2002—so the overall results are weighted heavily by the women's scores. Based on ANOVA, women's scores are significantly greater than men's for "Heart-Healthy Eating Attitude" and self-reported "Heart-Healthy Eating Behavior," but men's self-reported FIT Score hours are significantly higher than women's hours. Men's improvement in "Heart-Healthy Eating Knowledge" (17 percentage points) significantly outpaced women's improvement (10 percentage points). No other sections showed significant differences when comparing the degree of improvement for men and women in Hearts N' Parks programs.

Adults: Men

Section	Scale	N	Pre Mean	Post Mean	Improvement? (In Bold If Significant)
Heart-Healthy Eating Knowledge	% Correct	271	54.8%	72.2%	YES
Overweight/Obesity Knowledge	% Correct	265	66.3%	77.0%	YES
Heart-Healthy Eating Attitude	1–4	260	3.13	3.34	YES
Overweight/Obesity Attitude	1–4	265	2.77	2.92	YES
Heart-Healthy Eating Behavior	0–4	253	2.10	2.42	YES
Physical Activity Level	0–12	211	7.12	8.10	YES
Physical Activity Attitude	1–4	195	3.20	3.35	YES
Physical Activity Knowledge	% Correct	205	85.7%	91.3%	YES
High Blood Pressure Knowledge	% Correct	183	59.7%	75.8%	YES
Cholesterol Knowledge	% Correct	173	71.7%	85.0%	YES
FIT Score	# Hours	176	8.78	10.04	YES
SIT Score	# Hours	186	36.34	31.93	YES

#### Adults: Women

Section	Scale	N	Pre Mean	Post Mean	Improvement? (In Bold If Significant)
Heart-Healthy Eating Knowledge	% Correct	520	60.1%	70.3%	YES
Overweight/Obesity Knowledge	% Correct	505	67.1%	76.1%	YES
Heart-Healthy Eating Attitude	1–4	487	3.28	3.44	YES
Overweight/Obesity Attitude	1–4	489	2.84	2.96	YES
Heart-Healthy Eating Behavior	0–4	478	2.36	2.61	YES
Physical Activity Level	0–12	478	6.85	8.01	YES
Physical Activity Attitude	1–4	424	3.10	3.24	YES
Physical Activity Knowledge	% Correct	458	84.8%	90.5%	YES
High Blood Pressure Knowledge	% Correct	393	59.8%	73.5%	YES
Cholesterol Knowledge	% Correct	368	72.0%	84.3%	YES
FIT Score	# Hours	394	6.65	7.97	YES
SIT Score	# Hours	410	33.83	31.03	YES

# Adults by Age Group: Seniors Versus Adults 60 Years and Younger

By separating adults into two age groups—seniors (older than 60 years) and adults 60 years and younger (see the following tables)—we see that both groups improved significantly in all sections. The younger adult group participants appear to be more knowledgeable about most subjects, with higher knowledge scores for heart-healthy eating, overweight/obesity, physical activity, high blood pressure, and cholesterol. Senior participants, however, performed better in most sections related to attitudes and self-reported behavior, specifically regarding heart-healthy eating, overweight/obesity, and physical activity. "Heart-Healthy Eating Behavior" and "Physical Activity Level" showed significantly greater increases among seniors than 60-and-younger participants.

#### Adults: Seniors (Older Than 60)

Section	Scale	N	Pre Mean	Post Mean	Improvement? (In Bold If Significant)
Heart-Healthy Eating Knowledge	% Correct	352	54.1%	67.3%	YES
Overweight/Obesity Knowledge	% Correct	337	63.1%	73.6%	YES
Heart-Healthy Eating Attitude	1–4	315	3.24	3.45	YES
Overweight/Obesity Attitude	1–4	321	2.87	3.02	YES
Heart-Healthy Eating Behavior	0–4	313	2.31	2.71	YES
Physical Activity Level	0–12	293	6.77	8.21	YES
Physical Activity Attitude	1–4	242	3.16	3.34	YES
Physical Activity Knowledge	% Correct	273	81.7%	89.2%	YES
High Blood Pressure Knowledge	% Correct	207	53.3%	71.2%	YES
Cholesterol Knowledge	% Correct	202	69.8%	82.8%	YES
FIT Score	# Hours	217	7.49	8.77	YES
SIT Score	# Hours	239	28.39	24.80	YES

#### Adults: 60 and Younger

Section	Scale	N	Pre Mean	Post Mean (	Improvement? In Bold If Significant)
Heart-Healthy Eating Knowledge	% Correct	425	61.5%	73.9%	YES
Overweight/Obesity Knowledge	% Correct	422	69.7%	78.7%	YES
Heart-Healthy Eating Attitude	1–4	422	3.21	3.37	YES
Overweight/Obesity Attitude	1–4	420	2.76	2.89	YES
Heart-Healthy Eating Behavior	0–4	407	2.21	2.42	YES
Physical Activity Level	0–12	385	7.06	7.93	YES
Physical Activity Attitude	1–4	364	3.11	3.22	YES
Physical Activity Knowledge	% Correct	378	87.5%	92.0%	YES
High Blood Pressure Knowledge	% Correct	354	63.6%	76.8%	YES
Cholesterol Knowledge	% Correct	324	73.1%	85.7%	YES
FIT Score	# Hours	346	7.15	8.31	YES
SIT Score	# Hours	344	39.50	36.23	YES

#### Adult Results, by Education

When adult scores are sorted into two groups—participants who do not have college-level educations, and participants who have at least some college education (see the following tables)—the results are very similar to 2002. Both groups improved significantly in virtually every category. Though college-educated participants generally performed better over both pretest and posttest, participants without any college education made far greater progress in most areas of health knowledge, attitude, and self-reported behavior. In 8 of the 12 sections—"Overweight/Obesity Knowledge," "Overweight/Obesity Attitude," "Heart-Healthy Eating Behavior," "Physical Activity Level," "Physical Activity Attitude," "Physical Activity Knowledge," "High Blood Pressure Knowledge," and "Cholesterol Knowledge"— ANOVA tests reveal that noncollege-educated participants made significantly greater improvements than participants with some college education.

#### **Adults: No College Education**

Section	Scale	N	Pre Mean	Post Mean	Improvement? (In Bold If Significant)
Heart-Healthy Eating Knowledge	% Correct	280	53.6%	69.0%	YES
Overweight/Obesity Knowledge	% Correct	269	63.9%	76.1%	YES
Heart-Healthy Eating Attitude	1–4	253	3.22	3.43	YES
Overweight/Obesity Attitude	1–4	253	2.72	2.92	YES
Heart-Healthy Eating Behavior	0–4	248	2.12	2.59	YES
Physical Activity Level	0–12	228	6.51	8.07	YES
Physical Activity Attitude	1–4	191	2.99	3.22	YES
Physical Activity Knowledge	% Correct	213	80.0%	88.9%	YES
High Blood Pressure Knowledge	% Correct	171	57.6%	75.6%	YES
Cholesterol Knowledge	% Correct	159	67.7%	84.3%	YES
FIT Score	# Hours	170	6.26	7.90	YES
SIT Score	# Hours	181	29.48	26.61	YES

#### Adults: Some College Education

Section	Scale	N	Pre Mean	Post Mean	Improvement? (In Bold If Significant)
Heart-Healthy Eating Knowledge	% Correct	490	60.8%	72.7%	YES
Overweight/Obesity Knowledge	% Correct	482	68.6%	77.0%	YES
Heart-Healthy Eating Attitude	1–4	478	3.22	3.39	YES
Overweight/Obesity Attitude	1–4	481	2.86	2.96	YES
Heart-Healthy Eating Behavior	0–4	465	2.32	2.53	YES
Physical Activity Level	0–12	443	7.20	8.05	YES
Physical Activity Attitude	1–4	410	3.20	3.29	YES
Physical Activity Knowledge	% Correct	431	87.6%	92.1%	YES
High Blood Pressure Knowledge	% Correct	385	60.8%	74.7%	YES
Cholesterol Knowledge	% Correct	360	73.5%	85.0%	YES
FIT Score	# Hours	390	7.75	8.76	YES
SIT Score	# Hours	397	37.55	34.05	YES

#### **Adult Programs With Dietitians**

The following 9 Magnet Center sites brought in registered dietitians to help educate their participants in heart-healthy eating for a total of 10 adult programs:

- Largo (FL)—Golden Movement
- Athens (GA)—Senior Stretch
- Decatur (IL)—FIT 3
- Homewood (IL)—Healthy Lifestyles
- Montgomery County (MD)—Healthy Seniors
- Prince George's County (MD)—Morning Milers
- Queen Anne County (MD)—Walk Across Maryland
- Las Vegas (NV)—Doolittle Seniors Nutrition Program
- Elyria (OH)—(2) Lorain County Walks; Seniors Take a Stroll and Lose the Roll

Overall, dietitians reached about 17 percent of all adult Hearts N' Parks participants in 2003. In the tables below, the heart-healthy eating and overweight/obesity-related scores of these adults were compared to the scores of all other adult programs. ANOVA showed that the only section where adults in programs with dietitians improved by a significantly greater degree than those in nondietitian programs was "Cholesterol Knowledge."

#### **Adults: Programs With Dietitians**

Section	Scale	N	Pre Mean	Post Mean	Improvement? (In Bold If Significant)
Heart-Healthy Eating Knowledge	% Correct	147	58.4%	66.1%	YES
Overweight/Obesity Knowledge	% Correct	138	68.6%	74.0%	YES
Heart-Healthy Eating Attitude	1–4	138	3.16	3.39	YES
Overweight/Obesity Attitude	1–4	143	2.80	2.91	YES
Heart-Healthy Eating Behavior	0–4	140	2.40	2.47	YES
High Blood Pressure Knowledge	% Correct	76	56.3%	73.7%	YES
Cholesterol Knowledge	% Correct	69	66.7%	86.2%	YES

**Adults: Programs Without Dietitians** 

Section	Scale	N	Pre Mean	Post Mean	Improvement? (In Bold If Significant)
Heart-Healthy Eating Knowledge	% Correct	671	58.1%	71.5%	YES
Overweight/Obesity Knowledge	% Correct	659	66.2%	76.3%	YES
Heart-Healthy Eating Attitude	1–4	635	3.24	3.39	YES
Overweight/Obesity Attitude	1–4	638	2.83	2.96	YES
Heart-Healthy Eating Behavior	0–4	617	2.24	2.56	YES
High Blood Pressure Knowledge	% Correct	521	59.8%	73.3%	YES
Cholesterol Knowledge	% Correct	497	72.5%	83.5%	YES

# V. Individual Program Results

## Children's Programs

Nearly all of the individual children's programs show score increases from pretest to posttest in at least one of the questionnaire sections, while most show increases in several or all sections. The majority of the children's programs had a level of participation high enough to observe a statistically significant difference. In all but a few programs, participants completed all sections of the children's questionnaire.

#### Glendale, AZ-Rose Lane

Section	Scale	N	Pre Mean	Post Mean	Improvement? (In Bold If Significant)
Heart-Healthy Eating Knowledge	% Correct	5	22.9%	94.3%	YES
Heart-Healthy Eating Behavior	% Healthy	5	17.1%	88.6%	YES
Heart-Healthy Eating Intention	% Healthy	5	31.4%	94.3%	YES
Physical Activity Attitude	0–12	5	6.80	10.40	YES

Things I Like and Do/				
Things I Learned and Did	Scale	N	Pre Mean	Post Mean
I like to do this	# Activities	5	6.40	
I have done this in the past week	# Activities	5	3.80	
I would like to learn how to do this	# Activities	5	3.20	
Something new I learned	# Activities	5		10.20
I got better at this	# Activities	5		4.80
I would like to play this again	# Activities	5		7.80

#### Sierra Vista, AZ—Healthy Kids 1

Section	Scale	N	Pre Mean	Post Mean	Improvement? (In Bold If Significant)
Heart-Healthy Eating Knowledge	% Correct	19	72.2%	83.5%	YES
Heart-Healthy Eating Behavior	% Healthy	19	53.8%	65.4%	YES
Heart-Healthy Eating Intention	% Healthy	19	48.6%	67.7%	YES
Physical Activity Attitude	0–12	15	7.80	8.73	YES

Things I Like and Do/				
Things I Learned and Did	Scale	N	Pre Mean	Post Mean
I like to do this	# Activities	19	7.74	
I have done this in the past week	# Activities	19	4.00	
I would like to learn how to do this	# Activities	19	1.32	
Something new I learned	# Activities	19		7.95
I got better at this	# Activities	19		4.68
I would like to play this again	# Activities	19		3.26

#### Sierra Vista, AZ—Healthy Kids 2

Section	Scale	N	Pre Mean	Post Mean	Improvement? (In Bold If Significant)
Heart-Healthy Eating Knowledge	% Correct	30	71.9%	76.2%	YES
Heart-Healthy Eating Behavior	% Healthy	31	54.4%	52.5%	NO
Heart-Healthy Eating Intention	% Healthy	29	53.7%	54.7%	YES
Physical Activity Attitude	0–12	26	8.73	9.08	YES

Things I Like and Do/				
Things I Learned and Did	Scale	N	Pre Mean	Post Mean
I like to do this	# Activities	30	8.37	
I have done this in the past week	# Activities	30	4.53	
I would like to learn how to do this	# Activities	30	4.40	
Something new I learned	# Activities	30		4.47
I got better at this	# Activities	30		4.23
I would like to play this again	# Activities	30		3.33

## Lee County, FL—North Park Summer Camp

Section	Scale	N	Pre Mean	Post Mean	Improvement? (In Bold If Significant)
Heart-Healthy Eating Knowledge	% Correct	31	72.4%	80.2%	YES
Heart-Healthy Eating Behavior	% Healthy	31	54.8%	67.7%	YES
Heart-Healthy Eating Intention	% Healthy	31	53.0%	63.6%	YES
Physical Activity Attitude	0–12	24	9.96	10.29	YES

Things I Like and Do/				
Things I Learned and Did	Scale	N	Pre Mean	Post Mean
I like to do this	# Activities	26	9.35	
I have done this in the past week	# Activities	26	2.58	
I would like to learn how to do this	# Activities	26	2.00	
Something new I learned	# Activities	26		2.08
I got better at this	# Activities	26		4.27
I would like to play this again	# Activities	26		6.77

#### Lee County, FL—Terry Park Summer Camp

Section	Scale	N	Pre Mean	Post Mean	Improvement? (In Bold If Significant)
Heart-Healthy Eating Knowledge	% Correct	14	77.6%	91.8%	YES
Heart-Healthy Eating Behavior	% Healthy	14	59.2%	86.7%	YES
Heart-Healthy Eating Intention	% Healthy	14	61.2%	81.6%	YES
Physical Activity Attitude	0–12	14	9.79	9.50	NO

Things I Like and Do/				
Things I Learned and Did	Scale	N	Pre Mean	Post Mean
I like to do this	# Activities	14	10.07	
I have done this in the past week	# Activities	14	3.50	
I would like to learn how to do this	# Activities	14	1.14	
Something new I learned	# Activities	14		3.14
I got better at this	# Activities	14		3.21
I would like to play this again	# Activities	14		7.14

### Lee County, FL—Schandler Hall Traditional Summer Camp

Section	Scale	N	Pre Mean	Post Mean	Improvement? (In Bold If Significant)
Heart-Healthy Eating Knowledge	% Correct	20	70.0%	75.8%	YES
Heart-Healthy Eating Behavior	% Healthy	20	52.9%	59.3%	YES
Heart-Healthy Eating Intention	% Healthy	20	42.1%	57.1%	YES
Physical Activity Attitude	0–12	20	8.95	8.55	NO

Things I Like and Do/				
Things I Learned and Did	Scale	N	Pre Mean	Post Mean
I like to do this	# Activities	20	10.30	
I have done this in the past week	# Activities	20	6.00	
I would like to learn how to do this	# Activities	20	2.15	
Something new I learned	# Activities	20		2.95
I got better at this	# Activities	20		4.85
I would like to play this again	# Activities	20		8.05

#### Oldsmar, FL—Summer Camp

Section	Scale	N	Pre Mean	Post Mean	Improvement? (In Bold If Significant)
Heart-Healthy Eating Knowledge	% Correct	41	77.0%	94.8%	YES
Heart-Healthy Eating Behavior	% Healthy	44	53.8%	76.6%	YES
Heart-Healthy Eating Intention	% Healthy	45	49.3%	75.0%	YES
Physical Activity Attitude	0–12	45	8.18	7.82	NO

Things I Like and Do/				
Things I Learned and Did	Scale	N	Pre Mean	Post Mean
I like to do this	# Activities	44	8.27	
I have done this in the past week	# Activities	44	3.00	
I would like to learn how to do this	# Activities	44	2.45	
Something new I learned	# Activities	44		2.50
I got better at this	# Activities	44		2.73
I would like to play this again	# Activities	44		3.00

## Tallahassee, FL—Fall Fitness

Section	Scale	N	Pre Mean	Post Mean	Improvement? (In Bold If Significant)
Heart-Healthy Eating Knowledge	% Correct	2	85.7%	85.7%	NO
Heart-Healthy Eating Behavior	% Healthy	2	70.2%	78.6%	YES
Heart-Healthy Eating Intention	% Healthy	2	64.3%	78.6%	YES
Physical Activity Attitude	0–12	2	10.00	10.00	NO

Things I Like and Do/ Things I Learned and Did	Scale	N	Pre Mean	Post Mean
I like to do this	# Activities	2	5.00	
I have done this in the past week	# Activities	2	5.00	
I would like to learn how to do this	# Activities	2	3.50	
Something new I learned	# Activities	2		1.50
I got better at this	# Activities	2		2.00
I would like to play this again	# Activities	2		4.50

Tamarac, FL—Summer Shape Up

Section	Scale	N	Pre Mean	Post Mean	Improvement? (In Bold If Significant)
Heart-Healthy Eating Knowledge	% Correct	30	85.2%	99.5%	YES
Heart-Healthy Eating Behavior	% Healthy	30	62.9%	78.1%	YES
Heart-Healthy Eating Intention	% Healthy	30	69.5%	90.5%	YES
Physical Activity Attitude	0–12	30	10.40	11.30	YES

Things I Like and Do/				
Things I Learned and Did	Scale	N	Pre Mean	Post Mean
I like to do this	# Activities	30	10.13	
I have done this in the past week	# Activities	30	5.27	
I would like to learn how to do this	# Activities	30	4.03	
Something new I learned	# Activities	30		10.43
I got better at this	# Activities	30		12.03
I would like to play this again	# Activities	30		12.70

### Roswell, GA—RRPD Summer Camp

Section	Scale	N	Pre Mean	Post Mean	Improvement? (In Bold If Significant)
Heart-Healthy Eating Knowledge	% Correct	29	77.8%	86.2%	YES
Heart-Healthy Eating Behavior	% Healthy	29	65.4%	63.1%	NO
Heart-Healthy Eating Intention	% Healthy	29	57.3%	61.7%	YES
Physical Activity Attitude	0–12	20	7.60	9.90	YES

Things I Like and Do/				
Things I Learned and Did	Scale	N	Pre Mean	Post Mean
I like to do this	# Activities	19	8.42	
I have done this in the past week	# Activities	19	1.53	
I would like to learn how to do this	# Activities	19	2.05	
Something new I learned	# Activities	19		4.58
I got better at this	# Activities	19		3.79
I would like to play this again	# Activities	19		5.21

#### Savannah, GA—Savannah Kid's Camp

Section	Scale	N	Pre Mean	Post Mean	Improvement? (In Bold If Significant)
Heart-Healthy Eating Knowledge	% Correct	46	77.3%	81.3%	YES
Heart-Healthy Eating Behavior	% Healthy	48	64.3%	69.3%	YES
Heart-Healthy Eating Intention	% Healthy	44	58.8%	64.9%	YES
Physical Activity Attitude	0–12	47	8.85	9.26	YES

Things I Like and Do/				
Things I Learned and Did	Scale	N	Pre Mean	Post Mean
I like to do this	# Activities	47	8.74	
I have done this in the past week	# Activities	47	2.72	
I would like to learn how to do this	# Activities	47	3.17	
Something new I learned	# Activities	47		5.53
I got better at this	# Activities	47		3.91
I would like to play this again	# Activities	47		5.79

### Decatur, IL—Staley Striders Track & Field

Section	Scale	N	Pre Mean	Post Mean	Improvement? (In Bold If Significant)
Heart-Healthy Eating Knowledge	% Correct	18	75.4%	90.5%	YES
Heart-Healthy Eating Behavior	% Healthy	18	64.3%	82.5%	YES
Heart-Healthy Eating Intention	% Healthy	18	45.6%	71.4%	YES
Physical Activity Attitude	0–12	18	9.56	9.94	YES

Things I Like and Do/				
Things I Learned and Did	Scale	N	Pre Mean	Post Mean
I like to do this	# Activities	18	10.50	
I have done this in the past week	# Activities	18	4.11	
I would like to learn how to do this	# Activities	18	2.72	
Something new I learned	# Activities	18		2.28
I got better at this	# Activities	18		6.22
I would like to play this again	# Activities	18		12.33

#### Homewood, IL—Extra Innings

Section	Scale	N	Pre Mean	Post Mean	Improvement? (In Bold If Significant)
Heart-Healthy Eating Knowledge	% Correct	14	80.6%	82.7%	YES
Heart-Healthy Eating Behavior	% Healthy	14	37.8%	58.0%	YES
Heart-Healthy Eating Intention	% Healthy	14	40.8%	57.1%	YES

This Magnet Center did not incorporate the physical activity components into its program

#### Homewood, IL—Stomping Grounds

Section	Scale	N	Pre Mean	Post Mean	Improvement? (In Bold If Significant)
Physical Activity Attitude	0–12	19	8.84	9.53	YES

Things I Like and Do/				
Things I Learned and Did	Scale	N	Pre Mean	Post Mean
I like to do this	# Activities	23	9.43	
I have done this in the past week	# Activities	23	4.35	
I would like to learn how to do this	# Activities	23	3.22	
Something new I learned	# Activities	23		3.17
I got better at this	# Activities	23		5.13
I would like to play this again	# Activities	23		4.65

This Magnet Center did not incorporate the heart-healthy eating components into its program.

### Rockford, IL—Northwest Community Center Boys & Girls Club

Section	Scale	N	Pre Mean	Post Mean	Improvement? (In Bold If Significant)
Heart-Healthy Eating Knowledge	% Correct	28	73.1%	78.7%	YES
Heart-Healthy Eating Behavior	% Healthy	28	60.9%	67.0%	YES
Heart-Healthy Eating Intention	% Healthy	29	57.2%	58.9%	YES
Physical Activity Attitude	0–12	30	9.27	9.17	NO

Things I Like and Do/ Things I Learned and Did	Scale	N	Pre Mean	Post Mean
I like to do this	# Activities	32	8.34	
I have done this in the past week	# Activities	32	4.13	
I would like to learn how to do this	# Activities	32	2.44	
Something new I learned	# Activities	32		3.44
I got better at this	# Activities	32		4.41
I would like to play this again	# Activities	32		5.22

### Rockford, IL—Washington Park Community Center

Section	Scale	N	Pre Mean	Post Mean	Improvement? (In Bold If Significant)
Heart-Healthy Eating Knowledge	% Correct	7	78.6%	73.5%	NO
Heart-Healthy Eating Behavior	% Healthy	7	12.2%	53.1%	YES
Heart-Healthy Eating Intention	% Healthy	7	14.3%	49.0%	YES
Physical Activity Attitude	0–12	7	8.86	9.00	YES

Things I Like and Do/ Things I Learned and Did	Scale	N	Pre Mean	Post Mean
Things I Learned and Did	Scale	IN	Fie Weari	POST Mean
I like to do this	# Activities	7	7.57	
I have done this in the past week	# Activities	7	5.00	
I would like to learn how to do this	# Activities	7	1.29	
Something new I learned	# Activities	7		4.14
I got better at this	# Activities	7		6.71
I would like to play this again	# Activities	7		4.71

## Bloomington, IN—After School Adventure

Section	Scale	N	Pre Mean	Post Mean	Improvement? (In Bold If Significant)
Heart-Healthy Eating Knowledge	% Correct	9	54.0%	71.4%	YES
Heart-Healthy Eating Behavior	% Healthy	9	42.9%	60.3%	YES
Heart-Healthy Eating Intention	% Healthy	9	25.4%	55.6%	YES
Physical Activity Attitude	0–12	8	9.50	10.25	YES

Things I Like and Do/ Things I Learned and Did	Scale	N	Pre Mean	Post Mean
- Things i Edurica and Did			1 TO INICALL	1 Oot moun
I like to do this	# Activities	8	10.00	
I have done this in the past week	# Activities	8	5.88	
I would like to learn how to do this	# Activities	8	3.25	
Something new I learned	# Activities	8		5.75
I got better at this	# Activities	8		4.63
I would like to play this again	# Activities	8		3.00

#### Bloomington, IN—Lil' Healthy Hoosiers

Section	Scale	N	Pre Mean	Post Mean	Improvement? (In Bold If Significant)
Heart-Healthy Eating Knowledge	% Correct	5	45.7%	77.1%	YES
Heart-Healthy Eating Behavior	% Healthy	5	71.3%	88.1%	YES
Heart-Healthy Eating Intention	% Healthy	5	55.7%	77.1%	YES

This Magnet Center did not incorporate the physical activity components into its program.

### Fort Wayne, IN—Jennings Center Kids' Summer Day Camp

Section	Scale	N	Pre Mean	Post Mean	Improvement? (In Bold If Significant)
Heart-Healthy Eating Knowledge	% Correct	25	77.1%	90.9%	YES
Heart-Healthy Eating Behavior	% Healthy	25	30.3%	80.0%	YES
Heart-Healthy Eating Intention	% Healthy	25	29.2%	78.9%	YES
Physical Activity Attitude	0–12	25	9.96	11.32	YES

Things I Like and Do/ Things I Learned and Did	Scale	N	Pre Mean	Post Mean
Things I Learned and Did	Scale	IN .	Pre Weari	POST Mean
I like to do this	# Activities	25	11.92	
I have done this in the past week	# Activities	25	11.08	
I would like to learn how to do this	# Activities	25	2.00	
Something new I learned	# Activities	25		7.00
I got better at this	# Activities	25		12.56
I would like to play this again	# Activities	25		12.80

### Gary, IN—Learn 2 Live Next Steps

Section	Scale	N	Pre Mean	Post Mean	Improvement? (In Bold If Significant)
Heart-Healthy Eating Knowledge	% Correct	30	72.9%	94.3%	YES
Heart-Healthy Eating Behavior	% Healthy	30	52.9%	77.6%	YES
Heart-Healthy Eating Intention	% Healthy	30	51.9%	80.5%	YES
Physical Activity Attitude	0–12	30	8.43	9.87	YES

Things I Like and Do/				
Things I Learned and Did	Scale	N	Pre Mean	Post Mean
I like to do this	# Activities	30	8.87	
I have done this in the past week	# Activities	30	2.97	
I would like to learn how to do this	# Activities	30	3.27	
Something new I learned	# Activities	30		4.33
I got better at this	# Activities	30		5.00
I would like to play this again	# Activities	30		8.73

#### Indianapolis, IN—Recreation Adventure-IPS 31

Section	Scale	N	Pre Mean	Post Mean	Improvement? (In Bold If Significant)
Heart-Healthy Eating Knowledge	% Correct	8	76.8%	94.6%	YES
Heart-Healthy Eating Behavior	% Healthy	8	30.4%	55.4%	YES
Heart-Healthy Eating Intention	% Healthy	8	26.8%	48.2%	YES
Physical Activity Attitude	0–12	8	8.13	8.88	YES

Things I Like and Do/ Things I Learned and Did	Scale	N	Pre Mean	Post Mean
Things I Learned and Did	Scale	IN	Fre Weari	POSt Weari
I like to do this	# Activities	8	11.38	
I have done this in the past week	# Activities	8	6.00	
I would like to learn how to do this	# Activities	8	3.13	
Something new I learned	# Activities	8		3.88
I got better at this	# Activities	8		7.88
I would like to play this again	# Activities	8		8.38

### Indianapolis, IN—Recreation Adventure-IPS 46

Section	Scale	N	Pre Mean	Post Mean	Improvement? (In Bold If Significant)
Heart-Healthy Eating Knowledge	% Correct	6	88.1%	92.9%	YES
Heart-Healthy Eating Behavior	% Healthy	5	62.9%	68.6%	YES
Heart-Healthy Eating Intention	% Healthy	7	61.2%	65.3%	YES
Physical Activity Attitude	0–12	8	9.75	9.50	NO

Things I Like and Do/				
Things I Learned and Did	Scale	N	Pre Mean	Post Mean
I like to do this	# Activities	8	12.25	
I have done this in the past week	# Activities	8	2.50	
I would like to learn how to do this	# Activities	8	4.88	
Something new I learned	# Activities	8		4.38
I got better at this	# Activities	8		4.63
I would like to play this again	# Activities	8		11.00

#### Indianapolis, IN—Recreation Adventure-IPS 49

Section	Scale	N	Pre Mean	Post Mean	Improvement? (In Bold If Significant)
Heart-Healthy Eating Knowledge	% Correct	14	72.4%	82.7%	YES
Heart-Healthy Eating Behavior	% Healthy	14	59.2%	57.1%	NO
Heart-Healthy Eating Intention	% Healthy	14	63.3%	56.1%	NO
Physical Activity Attitude	0–12	14	8.00	8.36	YES

Things I Like and Do/				
Things I Learned and Did	Scale	N	Pre Mean	Post Mean
I like to do this	# Activities	14	7.21	
I have done this in the past week	# Activities	14	1.93	
I would like to learn how to do this	# Activities	14	4.14	
Something new I learned	# Activities	14		3.00
I got better at this	# Activities	14		4.07
I would like to play this again	# Activities	14		6.57

## Indianapolis, IN—Recreation Adventure-IPS 82

Section	Scale	N	Pre Mean	Post Mean	Improvement? (In Bold If Significant)
Heart-Healthy Eating Knowledge	% Correct	18	69.8%	73.8%	YES
Heart-Healthy Eating Behavior	% Healthy	18	80.2%	76.2%	NO
Heart-Healthy Eating Intention	% Healthy	18	76.2%	77.8%	YES
Physical Activity Attitude	0–12	18	8.89	8.61	NO

Things I Like and Do/				
Things I Learned and Did	Scale	N	Pre Mean	Post Mean
I like to do this	# Activities	18	9.78	
I have done this in the past week	# Activities	18	3.61	
I would like to learn how to do this	# Activities	18	1.61	
Something new I learned	# Activities	18		3.72
I got better at this	# Activities	18		5.61
I would like to play this again	# Activities	18		7.33

#### Lafayette, IN—McAllister Day Camp

Section	Scale	N	Pre Mean	Post Mean	Improvement? (In Bold If Significant)
Heart-Healthy Eating Knowledge	% Correct	28	79.4%	85.2%	YES
Heart-Healthy Eating Behavior	% Healthy	26	50.4%	69.2%	YES
Heart-Healthy Eating Intention	% Healthy	28	46.8%	64.3%	YES
Physical Activity Attitude	0–12	30	9.00	9.77	YES

Things I Like and Do/				
Things I Learned and Did	Scale	N	Pre Mean	Post Mean
I like to do this	# Activities	30	9.33	
I have done this in the past week	# Activities	30	5.50	
I would like to learn how to do this	# Activities	30	1.67	
Something new I learned	# Activities	30		3.93
I got better at this	# Activities	30		7.43
I would like to play this again	# Activities	30		8.97

### South Bend, IN—Kids' World

Section	Scale	N	Pre Mean	Post Mean	Improvement? (In Bold If Significant)
Heart-Healthy Eating Knowledge	% Correct	30	87.6%	86.8%	NO
Heart-Healthy Eating Behavior	% Healthy	31	60.5%	67.7%	YES
Heart-Healthy Eating Intention	% Healthy	29	63.5%	67.9%	YES
Physical Activity Attitude	0–12	29	8.72	8.14	NO

Things I Like and Do/				
Things I Learned and Did	Scale	N	Pre Mean	Post Mean
I like to do this	# Activities	31	5.90	
I have done this in the past week	# Activities	31	3.81	
I would like to learn how to do this	# Activities	31	3.65	
Something new I learned	# Activities	31		3.03
I got better at this	# Activities	31		3.97
I would like to play this again	# Activities	31		7.52

#### South Bend, IN—Summer Fun Learning Camp

Section	Scale	N	Pre Mean	Post Mean	Improvement? (In Bold If Significant)
Heart-Healthy Eating Knowledge	% Correct	36	77.8%	78.6%	YES
Heart-Healthy Eating Behavior	% Healthy	36	53.2%	52.0%	NO
Heart-Healthy Eating Intention	% Healthy	36	43.7%	42.5%	NO
Physical Activity Attitude	0–12	36	9.31	9.36	YES

Things I Like and Do/ Things I Learned and Did	Scale	N	Pre Mean	Post Mean
I like to do this	# Activities	36	6.89	
I have done this in the past week	# Activities	36	4.97	
I would like to learn how to do this	# Activities	36	2.25	
Something new I learned	# Activities	36		7.50
I got better at this	# Activities	36		5.39
I would like to play this again	# Activities	36		2.06

### Baltimore, MD—Camp Baltimore Fun and Fitness

Section	Scale	N	Pre Mean	Post Mean	Improvement? (In Bold If Significant)
Heart-Healthy Eating Knowledge	% Correct	17	85.6%	89.9%	YES
Heart-Healthy Eating Behavior	% Healthy	17	62.4%	71.4%	YES
Heart-Healthy Eating Intention	% Healthy	17	67.2%	65.5%	NO
Physical Activity Attitude	0–12	16	9.13	8.63	NO

Things I Like and Do/				
Things I Learned and Did	Scale	N	Pre Mean	Post Mean
I like to do this	# Activities	18	9.11	
I have done this in the past week	# Activities	18	4.56	
I would like to learn how to do this	# Activities	18	3.67	
Something new I learned	# Activities	18		6.67
I got better at this	# Activities	18		4.00
I would like to play this again	# Activities	18		5.00

#### Baltimore, MD—Camp Baltimore (Morrell Park)

Section	Scale	N	Pre Mean	Post Mean	Improvement? (In Bold If Significant)
Heart-Healthy Eating Knowledge	% Correct	20	60.9%	70.0%	YES
Heart-Healthy Eating Behavior	% Healthy	20	30.6%	48.6%	YES
Heart-Healthy Eating Intention	% Healthy	20	21.2%	46.4%	YES
Physical Activity Attitude	0–12	20	9.20	7.40	NO

Things I Like and Do/				
Things I Learned and Did	Scale	N	Pre Mean	Post Mean
I like to do this	# Activities	20	7.60	
I have done this in the past week	# Activities	20	5.25	
I would like to learn how to do this	# Activities	20	3.45	
Something new I learned	# Activities	20		5.20
I got better at this	# Activities	20		4.60
I would like to play this again	# Activities	20		2.85

### Montgomery County, MD—KidZone

Section	Scale	N	Pre Mean	Post Mean	Improvement? (In Bold If Significant)
Heart-Healthy Eating Knowledge	% Correct	20	69.3%	74.7%	YES
Heart-Healthy Eating Behavior	% Healthy	19	45.1%	42.9%	NO
Heart-Healthy Eating Intention	% Healthy	20	30.1%	32.4%	YES
Physical Activity Attitude	0–12	16	8.88	8.63	NO

Things I Like and Do/ Things I Learned and Did	Scale	N	Pre Mean	Post Mean
I like to do this	# Activities	20	10.75	
I have done this in the past week	# Activities	20	2.55	
I would like to learn how to do this	# Activities	20	1.05	
Something new I learned	# Activities	20		3.30
I got better at this	# Activities	20		4.80
I would like to play this again	# Activities	20		6.95

#### Prince George's County, MD—Summer Camp

Section	Scale	N	Pre Mean	Post Mean	Improvement? (In Bold If Significant)
Heart-Healthy Eating Knowledge	% Correct	19	60.9%	92.5%	YES
Heart-Healthy Eating Behavior	% Healthy	18	31.7%	69.8%	YES
Heart-Healthy Eating Intention	% Healthy	19	36.8%	76.7%	YES
Physical Activity Attitude	0–12	19	6.11	8.74	YES

Things I Like and Do/				
Things I Learned and Did	Scale	N	Pre Mean	Post Mean
I like to do this	# Activities	19	5.00	
I have done this in the past week	# Activities	19	2.63	
I would like to learn how to do this	# Activities	19	1.84	
Something new I learned	# Activities	19		3.37
I got better at this	# Activities	19		5.26
I would like to play this again	# Activities	19		6.95

#### Adrian, MI—Sports for Squirts

Section	Scale	N	Pre Mean	Post Mean	Improvement? (In Bold If Significant)
Heart-Healthy Eating Knowledge	% Correct	9	71.4%	100.0%	YES
Heart-Healthy Eating Behavior	% Healthy	9	42.9%	52.4%	YES
Heart-Healthy Eating Intention	% Healthy	9	12.7%	34.9%	YES
Physical Activity Attitude	0–12	9	7.78	9.11	YES

This Magnet Center did not incorporate the "Things I Like and Do" and "Things I Learned and Did" components into its program.

#### Adrian, MI—Summer Playground Program

Section	Scale	N	Pre Mean	Post Mean	Improvement? (In Bold If Significant)
Heart-Healthy Eating Knowledge	% Correct	18	53.3%	80.2%	YES
Heart-Healthy Eating Behavior	% Healthy	18	34.9%	85.7%	YES
Heart-Healthy Eating Intention	% Healthy	18	34.8%	87.3%	YES
Physical Activity Attitude	0–12	18	8.11	10.94	YES

Things I Like and Do/ Things I Learned and Did	Scale	N	Pre Mean	Post Mean
I like to do this	# Activities	18	8.94	
I have done this in the past week	# Activities	18	3.17	
I would like to learn how to do this	# Activities	18	2.83	
Something new I learned	# Activities	18		6.44
I got better at this	# Activities	18		7.28
I would like to play this again	# Activities	18		7.83

#### Meridian Township, MI—Get Michigan Youth Moving

Section	Scale	N	Pre Mean	Post Mean	Improvement? (In Bold If Significant)
Heart-Healthy Eating Knowledge	% Correct	12	69.0%	71.4%	YES
Heart-Healthy Eating Behavior	% Healthy	12	58.3%	71.4%	YES
Heart-Healthy Eating Intention	% Healthy	12	45.2%	48.8%	YES
Physical Activity Attitude	0–12	12	8.25	8.42	YES

Things I Like and Do/ Things I Learned and Did	Scale	N	Pre Mean	Post Mean
Tillings i Learned and Did	Jeane	14	rie Wiedii	r OSt Mean
I like to do this	# Activities	12	10.67	
I have done this in the past week	# Activities	12	7.58	
I would like to learn how to do this	# Activities	12	4.33	
Something new I learned	# Activities	12		6.67
I got better at this	# Activities	12		9.75
I would like to play this again	# Activities	12		10.42

#### Monroe, MI—Bless Your Heart Child 1

Section	Scale	N	Pre Mean	Post Mean	Improvement? (In Bold If Significant)
Heart-Healthy Eating Knowledge	% Correct	19	42.1%	82.0%	YES
Heart-Healthy Eating Behavior	% Healthy	19	31.6%	79.7%	YES
Heart-Healthy Eating Intention	% Healthy	19	30.8%	78.9%	YES

This Magnet Center did not incorporate the physical activity components into its program.

#### Monroe, MI—Bless Your Heart Child 2

Section	Scale	N	Pre Mean	Post Mean	Improvement? (In Bold If Significant)
Physical Activity Attitude	0–12	19	9.84	10.68	YES

This Magnet Center did not incorporate the heart-healthy eating components into its program.

Things I Like and Do/	•			
Things I Learned and Did	Scale	N	Pre Mean	Post Mean
I like to do this	# Activities	19	6.47	
I have done this in the past week	# Activities	19	4.95	
I would like to learn how to do this	# Activities	19	3.11	
Something new I learned	# Activities	19		0.26
I got better at this	# Activities	19		3.79
I would like to play this again	# Activities	19		10.21

### Muskegon, MI—Playground Program C1

Section	Scale	N	Pre Mean	Post Mean	Improvement? (In Bold If Significant)
Heart-Healthy Eating Knowledge	% Correct	12	72.9%	75.2%	YES
Heart-Healthy Eating Behavior	% Healthy	11	53.9%	63.6%	YES
Heart-Healthy Eating Intention	% Healthy	12	51.4%	72.4%	YES
Physical Activity Attitude	0–12	11	7.73	8.09	YES

Things I Like and Do/				
Things I Learned and Did	Scale	N	Pre Mean	Post Mean
I like to do this	# Activities	12	6.08	
I have done this in the past week	# Activities	12	3.42	
I would like to learn how to do this	# Activities	12	2.92	
Something new I learned	# Activities	12		4.17
I got better at this	# Activities	12		4.08
I would like to play this again	# Activities	12		3.67

## Muskegon, MI—Playground Program C2

Section	Scale	N	Pre Mean	Post Mean	Improvement? (In Bold If Significant)
Heart-Healthy Eating Knowledge	% Correct	48	72.5%	77.0%	YES
Heart-Healthy Eating Behavior	% Healthy	49	52.5%	72.5%	YES
Heart-Healthy Eating Intention	% Healthy	48	47.7%	63.3%	YES
Physical Activity Attitude	0–12	52	8.94	8.56	NO

Things I Like and Do/ Things I Learned and Did	Scale	N	Pre Mean	Post Mean
I like to do this	# Activities	52	8.06	
I have done this in the past week	# Activities	52	3.81	
I would like to learn how to do this	# Activities	52	2.13	
Something new I learned	# Activities	52		2.44
I got better at this	# Activities	52		4.90
I would like to play this again	# Activities	52		6.42

#### Jefferson City, MO—Family Health and Fitness

Section	Scale	N	Pre Mean	Post Mean	Improvement? (In Bold If Significant)
Heart-Healthy Eating Knowledge	% Correct	9	71.4%	77.8%	YES
Heart-Healthy Eating Behavior	% Healthy	9	39.7%	54.0%	YES
Heart-Healthy Eating Intention	% Healthy	9	41.3%	46.0%	YES
Physical Activity Attitude	0–12	9	9.67	8.67	NO

Things I Like and Do/	0 1			D (M
Things I Learned and Did	Scale	N	Pre Mean	Post Mean
I like to do this	# Activities	8	9.00	
I have done this in the past week	# Activities	8	5.38	
I would like to learn how to do this	# Activities	8	4.00	
Something new I learned	# Activities	8		1.50
I got better at this	# Activities	8		4.13
I would like to play this again	# Activities	8		4.13

### Jefferson City, MO—Start Smart Basketball

Section	Scale	N	Pre Mean	Post Mean	Improvement? (In Bold If Significant)
Heart-Healthy Eating Knowledge	% Correct	41	62.7%	66.2%	YES
Heart-Healthy Eating Behavior	% Healthy	42	53.1%	58.5%	YES
Heart-Healthy Eating Intention	% Healthy	42	45.2%	52.0%	YES
Physical Activity Attitude	0–12	43	8.88	9.12	YES

Things I Like and Do/				
Things I Learned and Did	Scale	N	Pre Mean	Post Mean
I like to do this	# Activities	37	7.22	
I have done this in the past week	# Activities	37	3.97	
I would like to learn how to do this	# Activities	37	4.30	
Something new I learned	# Activities	37		1.35
I got better at this	# Activities	37		2.68
I would like to play this again	# Activities	37		2.62

### Kansas City, MO—Operation READY

Section	Scale	N	Pre Mean	Post Mean	Improvement? (In Bold If Significant)
Heart-Healthy Eating Knowledge	% Correct	71	81.5%	85.8%	YES
Heart-Healthy Eating Behavior	% Healthy	71	43.6%	50.8%	YES
Heart-Healthy Eating Intention	% Healthy	71	42.5%	46.3%	YES
Physical Activity Attitude	0–12	71	9.51	9.14	NO

Things I Like and Do/				
Things I Learned and Did	Scale	N	Pre Mean	Post Mean
I like to do this	# Activities	71	9.54	
I have done this in the past week	# Activities	71	2.31	
I would like to learn how to do this	# Activities	71	2.21	
Something new I learned	# Activities	71		11.23
I got better at this	# Activities	71		0.73
I would like to play this again	# Activities	71		2.44

### Kansas City, MO—Operation READY

Section	Scale	N	Pre Mean	Post Mean	Improvement? (In Bold If Significant)
Heart-Healthy Eating Knowledge	% Correct	71	81.5%	85.8%	YES
Heart-Healthy Eating Behavior	% Healthy	71	43.6%	50.8%	YES
Heart-Healthy Eating Intention	% Healthy	71	42.5%	46.3%	YES
Physical Activity Attitude	0–12	71	9.51	9.14	NO

Things I Like and Do/				
Things I Learned and Did	Scale	N	Pre Mean	Post Mean
I like to do this	# Activities	71	9.54	
I have done this in the past week	# Activities	71	2.31	
I would like to learn how to do this	# Activities	71	2.21	
Something new I learned	# Activities	71		11.23
I got better at this	# Activities	71		0.73
I would like to play this again	# Activities	71		2.44

#### Poplar Bluff, MO—Wall Walk

Section	Scale	N	Pre Mean	Post Mean	Improvement? (In Bold If Significant)
Physical Activity Attitude	0–12	27	9.56	10.11	YES

Things I Like and Do/				
Things I Learned and Did	Scale	N	Pre Mean	Post Mean
I like to do this	# Activities	28	10.96	
I have done this in the past week	# Activities	28	1.29	
I would like to learn how to do this	# Activities	28	0.14	
Something new I learned	# Activities	28		2.25
I got better at this	# Activities	28		5.14
I would like to play this again	# Activities	28		4.75

This Magnet Center did not incorporate the heart-healthy eating components into its program.

#### Springfield, MO—Fassnight Park Program

Section	Scale	N	Pre Mean	Post Mean	Improvement? (In Bold If Significant)
Heart-Healthy Eating Knowledge	% Correct	21	79.6%	83.7%	YES
Heart-Healthy Eating Behavior	% Healthy	21	48.3%	44.2%	NO
Heart-Healthy Eating Intention	% Healthy	21	49.7%	55.1%	YES

This Magnet Center did not incorporate the physical activity components into its program.

#### Clark County, NV—Desert Breeze

Section	Scale	N	Pre Mean	Post Mean	Improvement? (In Bold If Significant)
Heart-Healthy Eating Knowledge	% Correct	4	85.7%	78.6%	NO
Heart-Healthy Eating Behavior	% Healthy	3	90.5%	42.9%	NO
Heart-Healthy Eating Intention	% Healthy	3	71.4%	61.9%	NO
Physical Activity Attitude	0–12	22	9.59	10.05	YES

Things I Like and Do/				
Things I Learned and Did	Scale	N	Pre Mean	Post Mean
I like to do this	# Activities	22	9.41	
I have done this in the past week	# Activities	22	5.36	
I would like to learn how to do this	# Activities	22	1.68	
Something new I learned	# Activities	22		9.27
I got better at this	# Activities	22		5.95
I would like to play this again	# Activities	22		1.41

#### Clark County, NV—Walnut

Section	Scale	N	Pre Mean	Post Mean	Improvement? (In Bold If Significant)
Heart-Healthy Eating Knowledge	% Correct	14	82.7%	89.8%	YES
Heart-Healthy Eating Behavior	% Healthy	14	64.3%	77.8%	YES
Heart-Healthy Eating Intention	% Healthy	14	64.3%	84.7%	YES
Physical Activity Attitude	0–12	14	9.14	9.71	YES

Things I Like and Do/				
Things I Learned and Did	Scale	N	Pre Mean	Post Mean
I like to do this	# Activities	14	7.00	
I have done this in the past week	# Activities	14	6.07	
I would like to learn how to do this	# Activities	14	3.29	
Something new I learned	# Activities	14		4.57
I got better at this	# Activities	14		3.86
I would like to play this again	# Activities	14		4.93

### Henderson, NV—Fall 2003 Safekey/University of Nevada, Las Vegas

Section	Scale	N	Pre Mean	Post Mean	Improvement? (In Bold If Significant)
Heart-Healthy Eating Knowledge	% Correct	168	70.6%	76.4%	YES
Heart-Healthy Eating Behavior	% Healthy	163	50.0%	54.5%	YES
Heart-Healthy Eating Intention	% Healthy	166	48.2%	53.6%	YES
Physical Activity Attitude	0–12	151	8.52	9.25	YES

Things I Like and Do/ Things I Learned and Did	Scale	N	Pre Mean	Post Mean
Things I Learned and Did	Scale	IN	Fre Wieari	POST Mean
I like to do this	# Activities	166	8.07	
I have done this in the past week	# Activities	166	3.90	
I would like to learn how to do this	# Activities	166	3.11	
Something new I learned	# Activities	166		4.86
I got better at this	# Activities	166		4.47
I would like to play this again	# Activities	166		5.64

#### Henderson, NV—Safekey Nutrition and Physical Activity

Section	Scale	N	Pre Mean	Post Mean	Improvement? (In Bold If Significant)
Heart-Healthy Eating Knowledge	% Correct	106	67.7%	73.6%	YES
Heart-Healthy Eating Behavior	% Healthy	106	52.6%	59.2%	YES
Heart-Healthy Eating Intention	% Healthy	106	49.8%	55.9%	YES
Physical Activity Attitude	0–12	105	8.93	9.63	YES

Things I Like and Do/				
Things I Learned and Did	Scale	N	Pre Mean	Post Mean
I like to do this	# Activities	105	8.83	
I have done this in the past week	# Activities	105	3.63	
I would like to learn how to do this	# Activities	105	2.47	
Something new I learned	# Activities	105		8.79
I got better at this	# Activities	105		3.37
I would like to play this again	# Activities	105		2.60

### Las Vegas, NV—Kids Kamp/Camp Odyssey

Section	Scale	N	Pre Mean	Post Mean	Improvement? (In Bold If Significant)
Heart-Healthy Eating Knowledge	% Correct	388	9.2%	97.1%	YES
Heart-Healthy Eating Behavior	% Healthy	388	2.3%	25.5%	YES
Heart-Healthy Eating Intention	% Healthy	388	0.7%	22.5%	YES

This Magnet Center did not incorporate the physical activity components into its program.

### Reno, NV—Park Pals

Section	Scale	N	Pre Mean	Post Mean	Improvement? (In Bold If Significant)
Heart-Healthy Eating Knowledge	% Correct	10	57.1%	82.9%	YES
Heart-Healthy Eating Behavior	% Healthy	10	41.4%	60.0%	YES
Heart-Healthy Eating Intention	% Healthy	10	15.7%	65.7%	YES
Physical Activity Attitude	0–12	10	6.00	8.50	YES

Things I Like and Do/				
Things I Learned and Did	Scale	N	Pre Mean	Post Mean
I like to do this	# Activities	10	7.70	
I have done this in the past week	# Activities	10	6.90	
I would like to learn how to do this	# Activities	10	7.60	
Something new I learned	# Activities	10		8.90
I got better at this	# Activities	10		10.60
I would like to play this again	# Activities	10		8.60

#### Rio Rancho, NM—After School Recreation Club

Section	Scale	N	Pre Mean	Post Mean	Improvement? (In Bold If Significant)
Heart-Healthy Eating Knowledge	% Correct	17	84.5%	86.8%	YES
Heart-Healthy Eating Behavior	% Healthy	14	58.2%	75.0%	YES
Heart-Healthy Eating Intention	% Healthy	14	57.5%	68.1%	YES
Physical Activity Attitude	0–12	13	9.54	9.38	NO

Things I Like and Do/				
Things I Learned and Did	Scale	N	Pre Mean	Post Mean
I like to do this	# Activities	15	9.47	
I have done this in the past week	# Activities	15	4.33	
I would like to learn how to do this	# Activities	15	3.13	
Something new I learned	# Activities	15		3.73
I got better at this	# Activities	15		5.80
I would like to play this again	# Activities	15		5.40

### Roswell, NM—Hiking the Goodnight Loving Trail

Section	Scale	N	Pre Mean	Post Mean	Improvement? (In Bold If Significant)
Heart-Healthy Eating Knowledge	% Correct	8	91.1%	87.5%	NO
Heart-Healthy Eating Intention	% Healthy	8	67.9%	69.6%	YES
Physical Activity Attitude	0–12	7	11.14	10.86	NO

Things I Like and Do/ Things I Learned and Did	Scale	N	Pre Mean	Post Mean
I like to do this	# Activities	7	7.43	
I have done this in the past week	# Activities	7	1.57	
I would like to learn how to do this	# Activities	7	5.43	
Something new I learned	# Activities	7		5.57
I got better at this	# Activities	7		4.14
I would like to play this again	# Activities	7		5.86

This Magnet Center did not incorporate the heart-healthy eating behavior component into its program.

### Roswell, NM—Summer Fun and Fitness

Section	Scale	N	Pre Mean	Post Mean	Improvement? (In Bold If Significant)
Heart-Healthy Eating Knowledge	% Correct	11	85.7%	76.6%	NO
Heart-Healthy Eating Behavior	% Healthy	11	68.8%	59.7%	NO
Heart-Healthy Eating Intention	% Healthy	11	66.9%	57.1%	NO
Physical Activity Attitude	0–12	8	8.25	9.25	YES

Things I Like and Do/				
Things I Learned and Did	Scale	N	Pre Mean	Post Mean
I like to do this	# Activities	8	8.25	
I have done this in the past week	# Activities	8	1.75	
I would like to learn how to do this	# Activities	8	4.25	
Something new I learned	# Activities	8		3.63
I got better at this	# Activities	8		3.50
I would like to play this again	# Activities	8		4.63

### Roswell, NM—Swim Team

Section	Scale	N	Pre Mean	Post Mean	Improvement? (In Bold If Significant)
Heart-Healthy Eating Knowledge	% Correct	15	85.6%	84.6%	NO
Heart-Healthy Eating Behavior	% Healthy	15	65.7%	61.0%	NO
Heart-Healthy Eating Intention	% Healthy	15	59.4%	59.4%	NO
Physical Activity Attitude	0–12	15	9.20	8.87	NO

Things I Like and Do/				
Things I Learned and Did	Scale	N	Pre Mean	Post Mean
I like to do this	# Activities	15	7.33	
I have done this in the past week	# Activities	15	4.07	
I would like to learn how to do this	# Activities	15	2.73	
Something new I learned	# Activities	15		7.73
I got better at this	# Activities	15		4.20
I would like to play this again	# Activities	15		3.13

#### Bowling Green, OH—Summer Day Camp

Section	Scale	N	Pre Mean	Post Mean	Improvement? (In Bold If Significant)
Heart-Healthy Eating Knowledge	% Correct	5	79.0%	94.3%	YES
Heart-Healthy Eating Behavior	% Healthy	5	68.6%	70.3%	YES
Heart-Healthy Eating Intention	% Healthy	5	67.6%	62.9%	NO
Physical Activity Attitude	0–12	4	11.50	9.50	NO

Things I Like and Do/ Things I Learned and Did	Scale	N	Pre Mean	Post Mean
- Illings i Learned and Did	Scale	IN	Fie Wieaii	POST Weari
I like to do this	# Activities	4	8.50	
I have done this in the past week	# Activities	4	2.75	
I would like to learn how to do this	# Activities	4	2.00	
Something new I learned	# Activities	4		1.50
I got better at this	# Activities	4		7.00
I would like to play this again	# Activities	4		11.25

## Elyria, OH—Eat Well Play Hard

Section	Scale	N	Pre Mean	Post Mean	Improvement? (In Bold If Significant)
Heart-Healthy Eating Knowledge	% Correct	15	78.1%	89.5%	YES
Heart-Healthy Eating Behavior	% Healthy	15	59.0%	74.3%	YES
Heart-Healthy Eating Intention	% Healthy	15	53.3%	63.8%	YES
Physical Activity Attitude	0–12	12	9.50	9.50	NO

Things I Like and Do/				
Things I Learned and Did	Scale	N	Pre Mean	Post Mean
I like to do this	# Activities	15	10.13	
I have done this in the past week	# Activities	15	6.87	
I would like to learn how to do this	# Activities	15	2.60	
Something new I learned	# Activities	15		10.13
I got better at this	# Activities	15		6.93
I would like to play this again	# Activities	15		3.53

#### Elyria, OH—Rap a Lap

Section	Scale	N	Pre Mean	Post Mean	Improvement? (In Bold If Significant)
Heart-Healthy Eating Knowledge	% Correct	15	72.4%	86.7%	YES
Heart-Healthy Eating Behavior	% Healthy	15	58.1%	61.0%	YES
Heart-Healthy Eating Intention	% Healthy	15	52.4%	69.5%	YES
Physical Activity Attitude	0–12	10	9.70	7.90	NO

Things I Like and Do/				
Things I Learned and Did	Scale	N	Pre Mean	Post Mean
I like to do this	# Activities	15	9.47	
I have done this in the past week	# Activities	15	6.20	
I would like to learn how to do this	# Activities	15	1.47	
Something new I learned	# Activities	15		9.67
I got better at this	# Activities	15		7.67
I would like to play this again	# Activities	15		1.47

### Camp Pendleton, U.S. Marine Corps—Browne CDC After School Kids

Section	Scale	N	Pre Mean	Post Mean	Improvement? (In Bold If Significant)
Heart-Healthy Eating Knowledge	% Correct	24	70.2%	83.3%	YES
Heart-Healthy Eating Behavior	% Healthy	24	57.1%	94.0%	YES
Heart-Healthy Eating Intention	% Healthy	24	44.6%	83.9%	YES
Physical Activity Attitude	0–12	24	8.29	9.29	YES

Things I Like and Do/ Things I Learned and Did	Scale	N	Pre Mean	Post Mean
				1 oot moun
I like to do this	# Activities	24	3.92	
I have done this in the past week	# Activities	24	4.71	
I would like to learn how to do this	# Activities	24	7.29	
Something new I learned	# Activities	24		1.33
I got better at this	# Activities	24		9.79
I would like to play this again	# Activities	24		11.04

### Cherry Point, U.S. Marine Corps—Food Challenge

Section	Scale	N	Pre Mean	Post Mean	Improvement? (In Bold If Significant)
Heart-Healthy Eating Knowledge	% Correct	30	78.6%	81.0%	YES
Heart-Healthy Eating Behavior	% Healthy	30	52.0%	54.9%	YES
Heart-Healthy Eating Intention	% Healthy	29	54.2%	57.6%	YES

This Magnet Center did not incorporate the physical activity components into its program.

#### Cherry Point, U.S. Marine Corps—Snack It Up

Section	Scale	N	Pre Mean	Post Mean	Improvement? (In Bold If Significant)
Heart-Healthy Eating Knowledge	% Correct	15	84.8%	85.7%	YES
Heart-Healthy Eating Behavior	% Healthy	15	44.8%	63.8%	YES
Heart-Healthy Eating Intention	% Healthy	14	46.9%	66.3%	YES

This Magnet Center did not incorporate the physical activity components into its program.

### Kaneohe Bay, U.S. Marine Corps—A Plus YA-1

Section	Scale	N	Pre Mean	Post Mean	Improvement? (In Bold If Significant)
Heart-Healthy Eating Knowledge	% Correct	11	59.7%	97.4%	YES
Heart-Healthy Eating Behavior	% Healthy	10	51.4%	70.0%	YES
Heart-Healthy Eating Intention	% Healthy	12	58.2%	68.7%	YES
Physical Activity Attitude	0–12	11	9.27	9.27	NO

Things I Like and Do/				
Things I Learned and Did	Scale	N	Pre Mean	Post Mean
I like to do this	# Activities	12	8.67	
I have done this in the past week	# Activities	12	4.33	
I would like to learn how to do this	# Activities	12	1.33	
Something new I learned	# Activities	12		2.25
I got better at this	# Activities	12		5.50
I would like to play this again	# Activities	12		8.25

## Adolescent Programs

The majority of the posttest scores for individual adolescent programs were higher than pretest scores, more so than in the previous year. In 2003, a number of adolescent programs reported a pretest/posttest sample size large enough to show statistically significant increases in multiple sections of the questionnaires, as compared to only one site in the prior year. With the exception of a few programs that skipped the "Overweight/Obesity Knowledge" section, nearly all programs completed each section of the adolescent questionnaire.

Largo, FL—Physicians of Fun

Section	Scale	N	Pre Mean	Post Mean	Improvement? (In Bold If Significant)
Heart-Healthy Eating Knowledge	% Correct	10	79.9%	85.0%	YES
Overweight/Obesity Knowledge	% Correct	11	53.5%	58.6%	YES
Heart-Healthy Eating Attitude	1–4	11	2.52	2.75	YES
Overweight/Obesity Attitude	1–4	11	2.59	2.56	NO
Heart-Healthy Eating Behavior	% Healthy	11	27.3%	42.0%	YES
Heart-Healthy Eating Intention	% Healthy	11	27.3%	51.9%	YES
Physical Activity Level	0–11	11	3.45	4.18	YES

#### Lee County, FL—North Teens

Section	Scale	N	Pre Mean	Post Mean	Improvement? (In Bold If Significant)
Heart-Healthy Eating Knowledge	% Correct	13	84.0%	83.3%	NO
Overweight/Obesity Knowledge	% Correct	13	53.8%	53.0%	NO
Heart-Healthy Eating Attitude	1–4	13	2.83	2.82	NO
Overweight/Obesity Attitude	1–4	13	2.59	2.61	YES
Heart-Healthy Eating Behavior	% Healthy	12	43.3%	46.9%	YES
Heart-Healthy Eating Intention	% Healthy	13	42.9%	46.2%	YES
Physical Activity Level	0–6	13	3.38	3.69	YES

#### Lee County, FL—Schandler Teens

Section	Scale	N	Pre Mean	Post Mean (	Improvement? (In Bold If Significant)
Heart-Healthy Eating Knowledge	% Correct	12	75.0%	84.6%	YES
Overweight/Obesity Knowledge	% Correct	12	66.7%	63.9%	NO
Heart-Healthy Eating Attitude	1–4	12	2.77	2.68	NO
Overweight/Obesity Attitude	1–4	12	2.49	2.74	YES
Heart-Healthy Eating Behavior	% Healthy	12	39.6%	53.1%	YES
Heart-Healthy Eating Intention	% Healthy	12	34.5%	40.5%	YES
Physical Activity Level	0–6	12	3.42	4.25	YES

#### Tallahassee, FL—Fall Fitness

Section	Scale	N	Pre Mean	Post Mean	Improvement? (In Bold If Significant)
Heart-Healthy Eating Knowledge	% Correct	2	83.3%	81.8%	NO
Overweight/Obesity Knowledge	% Correct	2	55.6%	72.2%	YES
Heart-Healthy Eating Attitude	1–4	3	2.70	2.70	NO
Overweight/Obesity Attitude	1–4	3	2.63	2.63	NO
Heart-Healthy Eating Behavior	% Healthy	3	38.7%	51.2%	YES
Heart-Healthy Eating Intention	% Healthy	3	50.0%	44.4%	NO
Physical Activity Level	0–6	3	5.00	4.67	NO

### Tamarac, FL—Fall Into Fitness

Section	Scale	N	Pre Mean	Post Mean	Improvement? (In Bold If Significant)
Heart-Healthy Eating Knowledge	% Correct	12	71.5%	97.9%	YES
Overweight/Obesity Knowledge	% Correct	11	57.6%	88.9%	YES
Heart-Healthy Eating Attitude	1–4	12	2.78	3.31	YES
Overweight/Obesity Attitude	1–4	12	2.76	3.14	YES
Heart-Healthy Eating Behavior	% Healthy	12	33.3%	96.9%	YES
Heart-Healthy Eating Intention	% Healthy	12	35.7%	97.6%	YES
Physical Activity Level	0–6	11	2.91	3.73	YES

#### Savannah, GA—Adolescent Camp

Section	Scale	N	Pre Mean	Post Mean (	Improvement? (In Bold If Significant)
Heart-Healthy Eating Knowledge	% Correct	13	76.9%	80.7%	YES
Overweight/Obesity Knowledge	% Correct	14	59.5%	58.7%	NO
Heart-Healthy Eating Attitude	1–4	14	2.75	2.84	YES
Overweight/Obesity Attitude	1–4	14	2.70	2.75	YES
Heart-Healthy Eating Behavior	% Healthy	13	47.1%	56.7%	YES
Heart-Healthy Eating Intention	% Healthy	14	50.0%	63.3%	YES
Physical Activity Level	0–6	14	2.93	3.36	YES

### Roswell, GA—Youth Baseball 2

Section	Scale	N	Pre Mean	Post Mean	Improvement? (In Bold If Significant)
Heart-Healthy Eating Knowledge	% Correct	31	83.3%	94.2%	YES
Overweight/Obesity Knowledge	% Correct	31	70.3%	85.3%	YES
Heart-Healthy Eating Attitude	1–4	31	2.98	3.08	YES
Overweight/Obesity Attitude	1–4	30	2.72	2.85	YES
Heart-Healthy Eating Behavior	% Healthy	29	62.4%	83.6%	YES
Heart-Healthy Eating Intention	% Healthy	31	58.3%	80.9%	YES
Physical Activity Level	0–6	31	4.65	4.52	NO

#### **Decatur, IL—Teen Summer Camp**

Section	Scale	N	Pre Mean	Post Mean	Improvement? (In Bold If Significant)
Heart-Healthy Eating Knowledge	% Correct	4	79.2%	80.9%	YES
Overweight/Obesity Knowledge	% Correct	4	50.0%	45.5%	NO
Heart-Healthy Eating Attitude	1–4	4	2.70	2.84	YES
Overweight/Obesity Attitude	1–4	4	2.78	2.93	YES
Heart-Healthy Eating Behavior	% Healthy	4	47.5%	38.5%	NO
Heart-Healthy Eating Intention	% Healthy	4	50.0%	35.7%	NO
Physical Activity Level	0–6	4	3.75	4.00	YES

#### Gary, IN—Come Out and Play

Section	Scale	N	Pre Mean	Post Mean	Improvement? (In Bold If Significant)
Heart-Healthy Eating Knowledge	% Correct	25	71.8%	98.7%	YES
Overweight/Obesity Knowledge	% Correct	25	56.0%	81.8%	YES
Heart-Healthy Eating Attitude	1–4	25	2.91	3.16	YES
Overweight/Obesity Attitude	1–4	25	2.60	2.95	YES
Heart-Healthy Eating Behavior	% Healthy	25	37.0%	64.0%	YES
Heart-Healthy Eating Intention	% Healthy	25	37.1%	74.3%	YES
Physical Activity Level	0–6	25	2.28	3.12	YES

#### Indianapolis, IN—Indy After School

Section	Scale	N	Pre Mean	Post Mean (	Improvement? (In Bold If Significant)
Heart-Healthy Eating Knowledge	% Correct	9	70.4%	83.3%	YES
Overweight/Obesity Knowledge	% Correct	9	53.1%	69.1%	YES
Heart-Healthy Eating Attitude	1–4	9	2.84	3.07	YES
Overweight/Obesity Attitude	1–4	9	2.33	2.38	YES
Heart-Healthy Eating Behavior	% Healthy	9	48.6%	77.8%	YES
Heart-Healthy Eating Intention	% Healthy	9	44.4%	71.4%	YES
Physical Activity Level	0–6	9	3.67	4.33	YES

#### Lafayette, IN—Purdue—NYSP

Section	Scale	N	Pre Mean	Post Mean	Improvement? (In Bold If Significant)
Heart-Healthy Eating Knowledge	% Correct	34	82.1%	83.3%	YES
Overweight/Obesity Knowledge	% Correct	32	63.9%	62.5%	NO
Heart-Healthy Eating Attitude	1–4	33	2.82	2.93	YES
Overweight/Obesity Attitude	1–4	32	2.71	2.60	NO
Heart-Healthy Eating Behavior	% Healthy	28	43.3%	58.5%	YES
Heart-Healthy Eating Intention	% Healthy	32	45.5%	53.1%	YES
Physical Activity Level	0–6	29	3.14	3.41	YES

#### Prince George's County, MD—Soccer Teams

Section	Scale	N	Pre Mean	Post Mean	Improvement? (In Bold If Significant)
Heart-Healthy Eating Knowledge	% Correct	20	69.8%	90.0%	YES
Overweight/Obesity Knowledge	% Correct	19	47.4%	81.9%	YES
Heart-Healthy Eating Attitude	1–4	20	2.28	2.59	YES
Overweight/Obesity Attitude	1–4	20	2.56	2.76	YES
Heart-Healthy Eating Behavior	% Healthy	20	31.3%	47.5%	YES
Heart-Healthy Eating Intention	% Healthy	20	37.1%	71.4%	YES
Physical Activity Level	0–6	20	4.00	4.10	YES

#### Queen Anne's County, MD—Centreville M.S.-After School

Section	Scale	N	Pre Mean	Post Mean	Improvement? (In Bold If Significant)
Heart-Healthy Eating Knowledge	% Correct	5	79.9%	83.3%	YES
Heart-Healthy Eating Attitude	1–4	5	2.57	2.41	NO
Overweight/Obesity Attitude	1–4	5	2.45	2.90	YES
Heart-Healthy Eating Behavior	% Healthy	4	34.4%	50.0%	YES
Heart-Healthy Eating Intention	% Healthy	4	21.4%	3.6%	NO
Physical Activity Level	0–6	5	4.40	3.80	NO

This Magnet Center did not incorporate the "Overweight/Obesity Knowledge" component into its program.

#### Queen Anne's County, MD—Stevensville M.S.-After School

Section	Scale	N	Pre Mean	Post Mean	Improvement? (In Bold If Significant)
Heart-Healthy Eating Knowledge	% Correct	3	71.7%	72.8%	YES
Heart-Healthy Eating Attitude	1–4	5	2.94	3.06	YES
Overweight/Obesity Attitude	1–4	5	2.88	2.49	NO
Heart-Healthy Eating Behavior	% Healthy	3	33.3%	33.3%	NO
Heart-Healthy Eating Intention	% Healthy	4	46.4%	35.7%	NO
Physical Activity Level	0–6	4	5.00	4.25	NO

This Magnet Center did not incorporate the "Overweight/Obesity Knowledge" component into its program

#### Queen Anne's County, MD—Sudlersville M.S.-After School

Section	Scale	N	Pre Mean	Post Mean	Improvement? (In Bold If Significant)
Heart-Healthy Eating Knowledge	% Correct	4	81.3%	81.3%	NO
Heart-Healthy Eating Attitude	1–4	5	3.02	3.38	YES
Overweight/Obesity Attitude	1–4	5	2.83	2.33	NO
Heart-Healthy Eating Behavior	% Healthy	3	60.7%	50.6%	NO
Heart-Healthy Eating Intention	% Healthy	5	68.6%	81.0%	YES
Physical Activity Level	0–6	5	3.00	3.60	YES

This Magnet Center did not incorporate the "Overweight/Obesity Knowledge" component into its program.

### Muskegon, MI—Playground Program A1

Section	Scale	N	Pre Mean	Post Mean	Improvement? (In Bold If Significant)
Heart-Healthy Eating Knowledge	% Correct	30	66.6%	62.4%	NO
Overweight/Obesity Knowledge	% Correct	42	55.2%	51.5%	YES
Heart-Healthy Eating Attitude	1–4	42	2.65	2.74	YES
Overweight/Obesity Attitude	1–4	39	2.54	2.48	NO
Heart-Healthy Eating Behavior	% Healthy	25	40.7%	48.0%	YES
Heart-Healthy Eating Intention	% Healthy	45	47.2%	53.4%	YES
Physical Activity Level	0–6	34	3.44	3.62	YES

#### Muskegon, MI—Playground Program A2

Section	Scale	N	Pre Mean	Post Mean	Improvement? (In Bold If Significant)
Heart-Healthy Eating Knowledge	% Correct	12	69.0%	67.4%	NO
Overweight/Obesity Knowledge	% Correct	18	55.4%	53.9%	NO
Heart-Healthy Eating Attitude	1–4	18	2.71	2.52	NO
Overweight/Obesity Attitude	1–4	18	2.60	2.66	YES
Heart-Healthy Eating Behavior	% Healthy	12	32.8%	34.4%	YES
Heart-Healthy Eating Intention	% Healthy	45	47.2%	53.4%	YES
Physical Activity Level	0–6	16	3.25	2.44	NO

### Kansas City, MO—Operation Ready

Section	Scale	N	Pre Mean	Post Mean	Improvement? (In Bold If Significant)
Heart-Healthy Eating Knowledge	% Correct	9	83.3%	85.2%	YES
Overweight/Obesity Knowledge	% Correct	9	63.0%	51.9%	NO
Heart-Healthy Eating Attitude	1–4	9	2.39	2.46	YES
Overweight/Obesity Attitude	1–4	9	2.96	2.75	NO
Heart-Healthy Eating Behavior	% Healthy	9	37.9%	44.4%	YES
Heart-Healthy Eating Intention	% Healthy	9	36.5%	34.9%	NO
Physical Activity Level	0–6	9	2.56	3.44	YES

#### Henderson, NV—Hearts N' Parks Challenge

Section	Scale	N	Pre Mean	Post Mean	Improvement? (In Bold If Significant)
Heart-Healthy Eating Knowledge	% Correct	35	91.9%	92.4%	YES
Overweight/Obesity Knowledge	% Correct	35	61.0%	60.0%	NO
Heart-Healthy Eating Attitude	1–4	35	2.71	2.75	YES
Overweight/Obesity Attitude	1–4	35	2.87	2.90	YES
Heart-Healthy Eating Behavior	% Healthy	35	46.8%	51.8%	YES
Heart-Healthy Eating Intention	% Healthy	35	49.8%	62.4%	YES
Physical Activity Level	0–6	35	1.97	1.34	NO

### Reno, NV—Reno Enrichment

Section	Scale	N	Pre Mean	Post Mean	Improvement? (In Bold If Significant)
Heart-Healthy Eating Knowledge	% Correct	20	55.7%	80.0%	YES
Overweight/Obesity Knowledge	% Correct	22	57.5%	61.5%	YES
Heart-Healthy Eating Attitude	1–4	21	2.75	2.27	NO
Overweight/Obesity Attitude	1–4	22	2.69	2.86	YES
Heart-Healthy Eating Behavior	% Healthy	21	45.7%	31.0%	NO
Heart-Healthy Eating Intention	% Healthy	22	33.3%	37.7%	YES
Physical Activity Level	0–6	22	2.82	1.36	NO

#### Las Cruces, NM—Youth Sports Programs

Section	Scale	N	Pre Mean	Post Mean	Improvement? (In Bold If Significant)
Heart-Healthy Eating Knowledge	% Correct	38	81.0%	87.3%	YES
Overweight/Obesity Knowledge	% Correct	40	61.5%	57.7%	NO
Heart-Healthy Eating Attitude	1–4	40	2.80	2.97	YES
Overweight/Obesity Attitude	1–4	40	2.75	2.79	YES
Heart-Healthy Eating Behavior	% Healthy	37	48.3%	82.8%	YES
Heart-Healthy Eating Intention	% Healthy	39	47.3%	80.6%	YES
Physical Activity Level	0–6	38	3.76	4.37	YES

# **Adult Programs**

The majority of the adult programs showed increases in most of the questionnaire sections. However, slightly less than half of the adult programs showed significant score increases throughout multiple sections. As in 2002, the score increases at the Springfield (MO) program, "Cox Healthy Lifestyles," are quite drastic. Again, adult participants at that Magnet Center site progressed from having some of the lowest pretest scores of any program to having scores in the top 10 percent in almost every section of the posttest. The two Prince George's County (MD) programs, "Morning Milers" and "Yoga," also demonstrated remarkable improvement in almost every section. Most programs administered the entire adult pre- and posttest questionnaires to their participants.

Sierra Vista, AZ-Lean, Mean Lifeguard Machine

Section	Scale	N	Pre Mean	Post Mean	Improvement? (In Bold If Significant)
Heart-Healthy Eating Knowledge	% Correct	21	61.1%	72.2%	YES
Overweight/Obesity Knowledge	% Correct	21	66.1%	69.8%	YES
Heart-Healthy Eating Attitude	1–4	21	3.18	3.33	YES
Overweight/Obesity Attitude	1–4	21	3.04	2.92	NO
Heart-Healthy Eating Behavior	0–4	19	2.14	1.96	NO
Physical Activity Level	0–12	20	7.70	7.50	NO
Physical Activity Attitude	1–4	20	3.39	3.31	NO
Physical Activity Knowledge	% Correct	20	86.3%	87.1%	YES
High Blood Pressure Knowledge	% Correct	20	57.5%	59.5%	YES
Cholesterol Knowledge	% Correct	19	65.4%	75.0%	YES
FIT Score	# Hours	15	9.10	10.75	YES
SIT Score	# Hours	17	27.39	29.40	NO

#### Sierra Vista, AZ—Senior Fit

Section	Scale	N	Pre Mean	Post Mean	Improvement? (In Bold If Significant)
Physical Activity Level	0–12	14	6.79	9.00	YES
Physical Activity Attitude	1–4	14	3.10	3.34	YES
Physical Activity Knowledge	% Correct	14	76.8%	87.5%	YES
FIT Score	# Hours	12	6.08	11.25	YES
SIT Score	# Hours	14	28.14	20.39	YES

This Magnet Center did not incorporate the heart-healthy eating components into its program.

Largo, FL—Golden Movement

Section	Scale	N	Pre Mean	Post Mean (	Improvement? In Bold If Significant)
Heart-Healthy Eating Knowledge	% Correct	10	65.0%	63.3%	NO
Overweight/Obesity Knowledge	% Correct	9	77.8%	70.4%	NO
Heart-Healthy Eating Attitude	1–4	9	3.34	3.54	YES
Overweight/Obesity Attitude	1–4	9	3.43	3.25	NO
Heart-Healthy Eating Behavior	0–4	9	2.90	2.18	NO
Physical Activity Level	0–12	9	9.11	8.67	NO
Physical Activity Attitude	1–4	9	3.80	3.55	NO
Physical Activity Knowledge	% Correct	10	96.7%	97.5%	YES
High Blood Pressure Knowledge	% Correct	8	56.3%	54.1%	NO
Cholesterol Knowledge	% Correct	9	80.6%	83.3%	YES
FIT Score	# Hours	1	3.50	11.50	YES
SIT Score	# Hours	5	12.90	24.50	NO

## Oldsmar, FL—After Work Basketball

Section	Scale	N	Pre Mean	Post Mean (	Improvement? (In Bold If Significant)
Heart-Healthy Eating Knowledge	% Correct	13	52.1%	91.0%	YES
Overweight/Obesity Knowledge	% Correct	13	65.8%	100.0%	YES
Heart-Healthy Eating Attitude	1–4	13	2.87	3.09	YES
Overweight/Obesity Attitude	1–4	13	2.80	2.98	YES
Heart-Healthy Eating Behavior	0–4	12	1.97	1.98	YES
Physical Activity Level	0–12	13	6.77	8.23	YES
Physical Activity Attitude	1–4	13	3.28	3.22	NO
Physical Activity Knowledge	% Correct	13	87.1%	100.0%	YES
High Blood Pressure Knowledge	% Correct	12	60.1%	100.0%	YES
Cholesterol Knowledge	% Correct	12	69.0%	97.2%	YES
FIT Score	# Hours	10	10.46	5.60	NO
SIT Score	# Hours	11	32.89	0.00	YES

### Oldsmar, FL—Jazzercise

Section	Scale	N	Pre Mean	Post Mean	Improvement? (In Bold If Significant)
Heart-Healthy Eating Knowledge	% Correct	6	55.6%	97.2%	YES
Overweight/Obesity Knowledge	% Correct	6	63.0%	100.0%	YES
Heart-Healthy Eating Attitude	1–4	6	3.14	3.17	YES
Overweight/Obesity Attitude	1–4	6	2.81	2.71	NO
Heart-Healthy Eating Behavior	0–4	6	2.02	2.43	YES
Physical Activity Level	0–12	6	9.33	9.00	NO
Physical Activity Attitude	1–4	6	3.36	3.32	NO
Physical Activity Knowledge	% Correct	6	90.3%	100.0%	YES
High Blood Pressure Knowledge	% Correct	6	58.3%	100.0%	YES
Cholesterol Knowledge	% Correct	6	80.6%	100.0%	YES
FIT Score	# Hours	5	6.24	8.00	YES
SIT Score	# Hours	5	57.30	55.80	YES

## Tallahassee, FL—Fall Fitness

Section	Scale	N	Pre Mean	Post Mean (	Improvement? In Bold If Significant)
Heart-Healthy Eating Knowledge	% Correct	8	70.8%	79.2%	YES
Overweight/Obesity Knowledge	% Correct	8	66.7%	75.0%	YES
Heart-Healthy Eating Attitude	1–4	8	3.31	3.35	YES
Overweight/Obesity Attitude	1–4	8	2.81	2.86	YES
Heart-Healthy Eating Behavior	0–4	7	2.50	2.39	NO
Physical Activity Level	0–12	8	7.00	6.13	NO
Physical Activity Attitude	1–4	8	3.26	3.40	YES
Physical Activity Knowledge	% Correct	8	90.6%	88.5%	NO
High Blood Pressure Knowledge	% Correct	8	62.5%	58.0%	NO
Cholesterol Knowledge	% Correct	8	72.9%	72.9%	NO
FIT Score	# Hours	7	10.50	11.64	YES
SIT Score	# Hours	7	24.86	39.14	NO

Tamarac, FL—Fitness Fridays

Section	Scale	N	Pre Mean	Post Mean (	Improvement? (In Bold If Significant)
Heart-Healthy Eating Knowledge	% Correct	15	64.1%	71.8%	YES
Overweight/Obesity Knowledge	% Correct	15	68.5%	82.1%	YES
Heart-Healthy Eating Attitude	1–4	15	3.30	3.50	YES
Overweight/Obesity Attitude	1–4	15	3.13	3.16	YES
Heart-Healthy Eating Behavior	0–4	15	3.01	3.05	YES
Physical Activity Level	0–12	15	10.73	10.93	YES
Physical Activity Attitude	1–4	15	3.67	3.64	NO
Physical Activity Knowledge	% Correct	15	90.0%	94.4%	YES
High Blood Pressure Knowledge	% Correct	15	53.3%	83.0%	YES
Cholesterol Knowledge	% Correct	15	73.2%	91.1%	YES
FIT Score	# Hours	14	10.71	10.68	NO
SIT Score	# Hours	15	25.53	24.53	YES

Tamarac, FL—Hearts N' Parks Walk Fit

Section	Scale	N	Pre Mean	Post Mean (	Improvement? (In Bold If Significant)
Heart-Healthy Eating Knowledge	% Correct	15	61.1%	66.3%	YES
Overweight/Obesity Knowledge	% Correct	15	61.6%	68.7%	YES
Heart-Healthy Eating Attitude	1–4	16	3.32	3.31	NO
Overweight/Obesity Attitude	1–4	16	3.17	3.14	NO
Heart-Healthy Eating Behavior	0–4	16	2.60	3.04	YES
Physical Activity Level	0–12	15	9.73	10.73	YES
Physical Activity Attitude	1–4	16	3.57	3.69	YES
Physical Activity Knowledge	% Correct	14	88.7%	88.0%	NO
High Blood Pressure Knowledge	% Correct	15	46.4%	51.6%	YES
Cholesterol Knowledge	% Correct	15	74.7%	74.2%	NO
FIT Score	# Hours	15	9.57	9.92	YES
SIT Score	# Hours	15	33.23	25.83	YES

Tamarac, FL—Wellness Wednesdays

Section	Scale	N	Pre Mean	Post Mean (	Improvement? In Bold If Significant)
Heart-Healthy Eating Knowledge	% Correct	15	65.8%	73.1%	YES
Overweight/Obesity Knowledge	% Correct	14	67.3%	80.1%	YES
Heart-Healthy Eating Attitude	1–4	15	3.32	3.52	YES
Overweight/Obesity Attitude	1–4	15	3.12	3.16	YES
Heart-Healthy Eating Behavior	0–4	15	3.01	3.05	YES
Physical Activity Level	0–12	15	10.73	11.07	YES
Physical Activity Attitude	1–4	15	3.65	3.64	NO
Physical Activity Knowledge	% Correct	15	89.4%	94.4%	YES
High Blood Pressure Knowledge	% Correct	14	51.5%	86.0%	YES
Cholesterol Knowledge	% Correct	14	71.7%	90.4%	YES
FIT Score	# Hours	13	10.85	12.17	YES
SIT Score	# Hours	14	25.00	21.86	YES

## Athens, GA—Senior Stretch

Section	Scale	N	Pre Mean	Post Mean	Improvement? (In Bold If Significant)
Heart-Healthy Eating Knowledge	% Correct	6	55.6%	27.8%	NO
Overweight/Obesity Knowledge	% Correct	6	60.2%	59.0%	NO
Heart-Healthy Eating Attitude	1–4	5	3.20	2.87	NO
Overweight/Obesity Attitude	1–4	6	2.60	2.60	NO
Heart-Healthy Eating Behavior	0–4	6	2.90	1.69	NO
Physical Activity Level	0–12	4	3.75	8.50	YES
Physical Activity Attitude	1–4	5	2.64	2.79	YES
Physical Activity Knowledge	% Correct	5	80.0%	66.7%	NO
High Blood Pressure Knowledge	% Correct	5	58.6%	45.7%	NO
Cholesterol Knowledge	% Correct	6	73.8%	65.3%	NO
FIT Score	# Hours	1	3.00	10.00	YES
SIT Score	# Hours	5	18.96	14.00	YES

Roswell, GA—Fun Fit—Healthy Steps

Section	Scale	N	Pre Mean	Post Mean (	Improvement? In Bold If Significant)
Heart-Healthy Eating Knowledge	% Correct	21	64.6%	65.5%	YES
Overweight/Obesity Knowledge	% Correct	21	71.4%	76.2%	YES
Heart-Healthy Eating Attitude	1–4	21	3.49	3.51	YES
Overweight/Obesity Attitude	1–4	21	3.13	3.12	NO
Heart-Healthy Eating Behavior	0–4	21	2.76	2.86	YES
Physical Activity Level	0–12	21	8.81	8.76	NO
Physical Activity Attitude	1–4	21	3.53	3.53	NO
Physical Activity Knowledge	% Correct	21	92.1%	90.9%	NO
High Blood Pressure Knowledge	% Correct	20	66.8%	70.4%	YES
Cholesterol Knowledge	% Correct	21	73.8%	83.3%	YES
FIT Score	# Hours	21	7.98	9.52	YES
SIT Score	# Hours	20	18.25	23.15	NO

### Savannah, GA—Adult Exercise and Healthy Eating

Section	Scale	N	Pre Mean	Post Mean	Improvement? (In Bold If Significant)
Heart-Healthy Eating Knowledge	% Correct	18	45.8%	50.0%	YES
Overweight/Obesity Knowledge	% Correct	17	61.0%	62.1%	YES
Heart-Healthy Eating Attitude	1–4	16	3.14	3.49	YES
Overweight/Obesity Attitude	1–4	18	2.86	2.73	NO
Heart-Healthy Eating Behavior	0–4	18	1.97	1.27	NO
Physical Activity Level	0–12	18	7.67	8.94	YES
Physical Activity Attitude	1–4	18	3.27	2.64	NO
Physical Activity Knowledge	% Correct	18	80.5%	85.2%	YES
FIT Score	# Hours	18	9.75	9.00	NO
SIT Score	# Hours	18	34.00	48.39	NO

This Magnet Center did not incorporate the high blood pressure and cholesterol components into its program.

Savannah, GA-Golden Walk to Dallas

Section	Scale	N	Pre Mean	Post Mean	Improvement? (In Bold If Significant)
Heart-Healthy Eating Knowledge	% Correct	20	45.1%	55.1%	YES
Overweight/Obesity Knowledge	% Correct	20	57.5%	62.1%	YES
Heart-Healthy Eating Attitude	1–4	17	3.45	3.39	NO
Overweight/Obesity Attitude	1–4	19	2.53	2.68	YES
Heart-Healthy Eating Behavior	0–4	19	2.27	2.56	YES
Physical Activity Level	0–12	17	8.00	8.29	YES
Physical Activity Attitude	1–4	18	3.16	3.00	NO
Physical Activity Knowledge	% Correct	19	76.0%	78.1%	YES
FIT Score	# Hours	20	6.39	5.82	NO
SIT Score	# Hours	20	20.48	15.50	YES

This Magnet Center did not incorporate the high blood pressure and cholesterol components into its program.

Decatur, IL—FIT 3

Section	Scale	N	Pre Mean	Post Mean	Improvement? (In Bold If Significant)
Heart-Healthy Eating Knowledge	% Correct	6	61.1%	72.2%	YES
Overweight/Obesity Knowledge	% Correct	6	66.7%	64.8%	NO
Heart-Healthy Eating Attitude	1–4	6	3.36	3.42	YES
Overweight/Obesity Attitude	1–4	6	3.27	3.17	NO
Heart-Healthy Eating Behavior	0–4	6	2.64	2.40	NO
Physical Activity Level	0–12	6	9.50	10.50	YES
Physical Activity Attitude	1–4	6	3.58	3.55	NO
Physical Activity Knowledge	% Correct	6	88.9%	94.4%	YES
FIT Score	# Hours	7	9.21	11.06	YES
SIT Score	# Hours	7	24.79	19.64	YES

This Magnet Center did not incorporate the high blood pressure and cholesterol components into its program.

### Homewood, IL—Healthy Lifestyles

Section	Scale	N	Pre Mean	Post Mean	Improvement? (In Bold If Significant)
Heart-Healthy Eating Knowledge	% Correct	3	33.3%	72.2%	YES
Overweight/Obesity Knowledge	% Correct	3	55.6%	77.8%	YES
Heart-Healthy Eating Attitude	1–4	3	3.50	3.72	YES
Overweight/Obesity Attitude	1–4	3	2.46	2.38	NO
Heart-Healthy Eating Behavior	0–4	3	1.52	2.34	YES
High Blood Pressure Knowledge	% Correct	3	50.0%	64.3%	YES
Cholesterol Knowledge	% Correct	1	83.3%	83.3%	NO

This Magnet Center did not incorporate the physical activity components into its program.

### Homewood, IL—Sr'Cise

Section	Scale	N	Pre Mean	Post Mean	Improvement? (In Bold If Significant)
Physical Activity Level	0–12	11	7.27	8.18	YES
Physical Activity Attitude	1–4	8	3.23	3.37	YES
Physical Activity Knowledge	% Correct	10	92.5%	87.5%	NO
FIT Score	# Hours	10	6.40	8.75	YES
SIT Score	# Hours	9	24.39	31.78	NO

This Magnet Center did not incorporate the heart-healthy eating components into its program.

Rockford, IL— Greater Park Action Community and Senior Center (GPAC)

Section	Scale	N	Pre Mean	Post Mean (	Improvement? (In Bold If Significant)
Heart-Healthy Eating Knowledge	% Correct	4	50.0%	66.7%	YES
Overweight/Obesity Knowledge	% Correct	3	59.3%	74.1%	YES
Heart-Healthy Eating Attitude	1–4	4	3.54	3.54	NO
Overweight/Obesity Attitude	1–4	4	2.72	2.52	NO
Heart-Healthy Eating Behavior	0–4	4	1.82	2.07	YES
Physical Activity Level	0–12	4	1.50	1.50	YES
Physical Activity Attitude	1–4	4	3.00	2.80	NO
Physical Activity Knowledge	% Correct	4	72.9%	91.5%	YES
High Blood Pressure Knowledge	% Correct	2	39.3%	60.7%	YES
Cholesterol Knowledge	% Correct	4	66.7%	37.5%	NO
FIT Score	# Hours	1	7.50	1.50	NO
SIT Score	# Hours	2	16.50	9.75	YES

### Rockford, IL—Wesley Willows

Section	Scale	N	Pre Mean	Post Mean	Improvement? (In Bold If Significant)
Heart-Healthy Eating Knowledge	% Correct	7	66.2%	76.2%	YES
Overweight/Obesity Knowledge	% Correct	7	67.9%	59.9%	NO
Heart-Healthy Eating Attitude	1–4	7	3.54	3.12	NO
Overweight/Obesity Attitude	1–4	7	3.00	3.29	YES
Heart-Healthy Eating Behavior	0–4	7	2.47	2.43	NO
Physical Activity Level	0–12	7	8.86	6.14	NO
Physical Activity Attitude	1–4	7	3.34	3.21	NO
Physical Activity Knowledge	% Correct	7	85.7%	85.7%	YES
High Blood Pressure Knowledge	% Correct	6	54.8%	56.6%	YES
Cholesterol Knowledge	% Correct	7	77.4%	79.8%	YES
FIT Score	# Hours	5	5.50	2.60	NO
SIT Score	# Hours	7	18.36	13.71	YES

### Bloomington, IN—City of Bloomington Employees' Survivor Challenge

Section	Scale	N	Pre Mean	Post Mean (	Improvement? (In Bold If Significant)
Heart-Healthy Eating Knowledge	% Correct	14	69.0%	70.2%	YES
Overweight/Obesity Knowledge	% Correct	14	67.5%	73.8%	YES
Heart-Healthy Eating Attitude	1–4	14	3.32	3.55	YES
Overweight/Obesity Attitude	1–4	14	2.99	2.93	NO
Heart-Healthy Eating Behavior	0–4	14	2.65	2.61	NO
Physical Activity Level	0–12	14	6.50	6.93	YES
Physical Activity Attitude	1–4	14	3.30	3.40	YES
Physical Activity Knowledge	% Correct	14	95.2%	92.3%	NO
High Blood Pressure Knowledge	% Correct	14	60.2%	64.8%	YES
Cholesterol Knowledge	% Correct	14	78.0%	76.8%	NO
FIT Score	# Hours	14	9.04	5.29	NO
SIT Score	# Hours	12	42.00	36.58	YES

## Bloomington, IN—Hearts N' Parks for the Active Adult

Section	Scale	N	Pre Mean	Post Mean (	Improvement? n Bold If Significant))
Heart-Healthy Eating Knowledge	% Correct	4	75.0%	79.2%	YES
Overweight/Obesity Knowledge	% Correct	4	61.1%	63.9%	YES
Heart-Healthy Eating Attitude	1–4	4	3.46	3.63	YES
Overweight/Obesity Attitude	1–4	4	3.06	2.69	NO
Heart-Healthy Eating Behavior	0–4	4	2.41	2.92	YES
Physical Activity Level	0–12	4	6.75	9.50	YES
Physical Activity Attitude	1–4	4	2.75	3.34	YES
Physical Activity Knowledge	% Correct	4	87.5%	95.8%	YES
High Blood Pressure Knowledge	% Correct	3	61.9%	54.8%	NO
Cholesterol Knowledge	% Correct	4	79.2%	83.3%	YES
FIT Score	# Hours	4	13.63	3.06	NO
SIT Score	# Hours	4	31.25	22.00	YES

Fort Wayne, IN—Community Center Adults

Section	Scale	N	Pre Mean	Post Mean	Improvement? (In Bold If Significant)
Heart-Healthy Eating Knowledge	% Correct	11	57.6%	71.2%	YES
Overweight/Obesity Knowledge	% Correct	11	62.6%	75.8%	YES
Heart-Healthy Eating Attitude	1–4	11	3.32	3.45	YES
Overweight/Obesity Attitude	1–4	10	3.13	3.14	YES
Heart-Healthy Eating Behavior	0–4	10	2.61	3.21	YES
Physical Activity Level	0–12	11	7.36	7.64	YES
Physical Activity Attitude	1–4	11	3.16	3.36	YES
Physical Activity Knowledge	% Correct	11	93.2%	87.9%	NO
High Blood Pressure Knowledge	% Correct	11	60.4%	57.8%	NO
Cholesterol Knowledge	% Correct	9	82.4%	75.9%	NO
FIT Score	# Hours	9	4.89	6.83	YES
SIT Score	# Hours	9	15.00	13.94	YES

### Gary, IN—Get Up and Play

Section	Scale	N	Pre Mean	Post Mean	Improvement? (In Bold If Significant)
Heart-Healthy Eating Knowledge	% Correct	10	40.0%	86.7%	YES
Overweight/Obesity Knowledge	% Correct	10	54.4%	84.4%	YES
Heart-Healthy Eating Attitude	1–4	10	2.87	3.17	YES
Overweight/Obesity Attitude	1–4	10	2.84	3.11	YES

This Magnet Center did not incorporate the physical activity components into its program.

Gary, IN—Live 2 Learn Next Steps

Section	Scale	N	Pre Mean	Post Mean	Improvement? (In Bold If Significant)
Heart-Healthy Eating Knowledge	% Correct	11	65.2%	90.9%	YES
Overweight/Obesity Knowledge	% Correct	11	52.5%	77.8%	YES
Heart-Healthy Eating Attitude	1–4	11	2.58	3.11	YES
Overweight/Obesity Attitude	1–4	11	2.70	3.05	YES
Heart-Healthy Eating Behavior	0–4	11	2.31	2.65	YES

This Magnet Center did not incorporate the physical activity components into its program.

### Indianapolis, IN—Indy in Motion

Section	Scale	N	Pre Mean	Post Mean (	Improvement? In Bold If Significant)
Heart-Healthy Eating Knowledge	% Correct	4	45.8%	66.7%	YES
Overweight/Obesity Knowledge	% Correct	4	72.2%	69.4%	NO
Heart-Healthy Eating Attitude	1–4	4	2.71	3.08	YES
Overweight/Obesity Attitude	1–4	4	2.72	2.84	YES
Heart-Healthy Eating Behavior	0–4	4	2.64	2.72	YES
Physical Activity Level	0–12	4	7.25	8.50	YES
Physical Activity Attitude	1–4	4	3.18	3.30	YES
Physical Activity Knowledge	% Correct	4	89.6%	89.6%	NO
High Blood Pressure Knowledge	% Correct	4	57.1%	66.1%	YES
Cholesterol Knowledge	% Correct	4	68.8%	77.1%	YES
FIT Score	# Hours	4	10.25	11.75	YES
SIT Score	# Hours	4	18.50	18.38	YES

## Lafayette, IN—Community Wellness

Section	Scale	N	Pre Mean	Post Mean	Improvement? (In Bold If Significant)
Heart-Healthy Eating Knowledge	% Correct	20	63.3%	98.3%	YES
Overweight/Obesity Knowledge	% Correct	20	66.7%	83.9%	YES
Heart-Healthy Eating Attitude	1–4	20	3.29	3.78	YES
Overweight/Obesity Attitude	1–4	20	2.83	3.48	YES
Heart-Healthy Eating Behavior	0–4	20	2.38	3.32	YES
Physical Activity Level	0–12	20	4.35	8.65	YES
Physical Activity Attitude	1–4	20	2.57	3.31	YES
Physical Activity Knowledge	% Correct	20	92.1%	94.2%	YES
High Blood Pressure Knowledge	% Correct	20	61.8%	92.5%	YES
Cholesterol Knowledge	% Correct	5	63.3%	98.3%	YES
FIT Score	# Hours	19	5.03	8.82	YES
SIT Score	# Hours	18	33.18	33.22	NO

## South Bend, IN—City Employees

Section	Scale	N	Pre Mean	Post Mean (	Improvement? In Bold If Significant)
Heart-Healthy Eating Knowledge	% Correct	23	57.2%	56.5%	NO
Overweight/Obesity Knowledge	% Correct	23	72.0%	67.1%	NO
Heart-Healthy Eating Attitude	1–4	23	3.27	3.22	NO
Overweight/Obesity Attitude	1–4	23	2.87	2.95	YES
Heart-Healthy Eating Behavior	0–4	22	1.95	2.29	YES
Physical Activity Level	0–12	23	5.52	7.17	YES
Physical Activity Attitude	1–4	23	3.10	3.26	YES
Physical Activity Knowledge	% Correct	23	91.7%	93.1%	YES
High Blood Pressure Knowledge	% Correct	22	61.4%	64.0%	YES
Cholesterol Knowledge	% Correct	17	75.0%	79.4%	YES
FIT Score	# Hours	22	7.91	11.41	YES
SIT Score	# Hours	20	40.38	35.53	YES

# South Bend, IN—Healthy Seniors MLK

Section	Scale	N	Pre Mean	Post Mean (	Improvement? In Bold If Significant)
Heart-Healthy Eating Knowledge	% Correct	25	45.1%	53.3%	YES
Overweight/Obesity Knowledge	% Correct	17	58.9%	78.5%	YES
Heart-Healthy Eating Attitude	1–4	13	3.21	3.28	YES
Overweight/Obesity Attitude	1–4	13	2.54	2.45	NO
Heart-Healthy Eating Behavior	0–4	21	1.91	2.22	YES
Physical Activity Level	0–12	16	1.88	6.13	YES
Physical Activity Attitude	1–4	13	2.68	2.92	YES
Physical Activity Knowledge	% Correct	20	76.1%	84.9%	YES
High Blood Pressure Knowledge	% Correct	19	56.8%	70.9%	YES
Cholesterol Knowledge	% Correct	20	66.0%	81.1%	YES
FIT Score	# Hours	4	5.38	2.44	NO
SIT Score	# Hours	16	40.75	33.89	YES

South Bend, IN—South Bend Fire Department (SBFD) Recruit

Section	Scale	N	Pre Mean	Post Mean	Improvement? (In Bold If Significant)
Heart-Healthy Eating Knowledge	% Correct	9	68.5%	59.3%	NO
Overweight/Obesity Knowledge	% Correct	9	68.7%	65.4%	NO
Heart-Healthy Eating Attitude	1–4	9	3.18	3.11	NO
Overweight/Obesity Attitude	1–4	9	2.92	2.58	NO
Heart-Healthy Eating Behavior	0–4	9	2.31	2.45	YES
Physical Activity Level	0–12	9	8.33	8.67	YES
Physical Activity Attitude	1–4	7	3.15	3.30	YES
Physical Activity Knowledge	% Correct	9	86.1%	88.9%	YES
High Blood Pressure Knowledge	% Correct	9	60.3%	69.0%	YES
Cholesterol Knowledge	% Correct	9	72.2%	75.9%	YES
FIT Score	# Hours	9	6.54	8.19	YES
SIT Score	# Hours	9	48.11	42.06	YES

### Montgomery County, MD—Healthy Seniors

Section	Scale	N	Pre Mean	Post Mean	Improvement? (In Bold If Significant)
Heart-Healthy Eating Knowledge	% Correct	9	73.3%	75.2%	YES
Overweight/Obesity Knowledge	% Correct	8	78.8%	75.0%	NO
Heart-Healthy Eating Attitude	1–4	9	3.43	3.50	YES
Overweight/Obesity Attitude	1–4	8	3.06	3.03	NO
Heart-Healthy Eating Behavior	0–4	9	2.96	2.92	NO
Physical Activity Level	0–12	8	7.50	7.63	YES
Physical Activity Attitude	1–4	6	3.57	3.45	NO
Physical Activity Knowledge	% Correct	9	91.7%	91.7%	NO
FIT Score	# Hours	8	7.50	7.50	NO
SIT Score	# Hours	6	22.17	36.83	NO

This Magnet Center did not incorporate the high blood pressure and cholesterol components into its program.

### Montgomery County, MD—Recreation Walk Across America

Section	Scale	N	Pre Mean	Post Mean (	Improvement? (In Bold If Significant)
Heart-Healthy Eating Knowledge	% Correct	9	64.8%	48.1%	NO
Overweight/Obesity Knowledge	% Correct	9	61.7%	67.9%	YES
Heart-Healthy Eating Attitude	1–4	9	3.09	2.98	NO
Overweight/Obesity Attitude	1–4	9	2.71	2.86	YES
Heart-Healthy Eating Behavior	0–4	9	1.95	1.68	NO
Physical Activity Level	0–12	9	5.33	5.89	YES
Physical Activity Attitude	1–4	9	2.80	3.01	YES
Physical Activity Knowledge	% Correct	9	91.7%	91.7%	NO
High Blood Pressure Knowledge	% Correct	9	58.5%	56.7%	NO
FIT Score	# Hours	9	5.47	15.06	YES
SIT Score	# Hours	9	48.67	50.50	NO

This Magnet Center did not have its participants complete the cholesterol section of the questionnaire.

## Prince George's County, MD—Morning Milers

Section	Scale	N	Pre Mean	Post Mean	Improvement? (In Bold If Significant)
Heart-Healthy Eating Knowledge	% Correct	31	65.6%	90.9%	YES
Overweight/Obesity Knowledge	% Correct	30	73.0%	92.2%	YES
Heart-Healthy Eating Attitude	1–4	31	2.54	3.40	YES
Overweight/Obesity Attitude	1–4	30	2.39	2.87	YES
Heart-Healthy Eating Behavior	0–4	31	2.18	2.83	YES
Physical Activity Level	0–12	31	8.81	9.97	YES
Physical Activity Attitude	1–4	31	2.46	2.90	YES
Physical Activity Knowledge	% Correct	31	75.3%	93.5%	YES
High Blood Pressure Knowledge	% Correct	31	56.0%	90.1%	YES
Cholesterol Knowledge	% Correct	31	57.0%	96.0%	YES
FIT Score	# Hours	31	4.19	7.13	YES
SIT Score	# Hours	31	54.65	46.71	YES

### Prince George's County, MD—Yoga

Section	Scale	N	Pre Mean	Post Mean	Improvement? (In Bold If Significant)
Heart-Healthy Eating Knowledge	% Correct	15	67.8%	88.9%	YES
Overweight/Obesity Knowledge	% Correct	15	74.8%	91.1%	YES
Heart-Healthy Eating Attitude	1–4	15	2.91	3.21	YES
Overweight/Obesity Attitude	1–4	15	2.59	2.92	YES
Heart-Healthy Eating Behavior	0–4	15	2.64	2.92	YES
Physical Activity Level	0–12	15	9.20	9.73	YES
Physical Activity Attitude	1–4	15	3.16	3.26	YES
Physical Activity Knowledge	% Correct	15	75.6%	94.4%	YES
High Blood Pressure Knowledge	% Correct	15	55.2%	93.8%	YES
Cholesterol Knowledge	% Correct	15	72.8%	96.1%	YES
FIT Score	# Hours	15	1.53	3.27	YES
SIT Score	# Hours	15	55.73	33.60	YES

#### Queen Anne County, MD—Walk Across Maryland

Section	Scale	N	Pre Mean	Post Mean	Improvement? (In Bold If Significant)
Heart-Healthy Eating Knowledge	% Correct	28	54.2%	51.8%	NO
Overweight/Obesity Knowledge	% Correct	29	62.5%	63.2%	YES
Heart-Healthy Eating Attitude	1–4	29	3.29	3.31	YES
Overweight/Obesity Attitude	1–4	28	2.99	2.94	NO
Heart-Healthy Eating Behavior	0–4	27	2.51	2.64	YES
Physical Activity Level	0–12	28	7.21	7.21	NO

This Magnet Center did not have its participants complete all sections of the questionnaire.

Adrian, MI—Hearts N' Parks Weekly Fall Walks

Section	Scale	N	Pre Mean	Post Mean	Improvement? (In Bold If Significant)
Heart-Healthy Eating Knowledge	% Correct	12	45.8%	58.3%	YES
Overweight/Obesity Knowledge	% Correct	12	66.7%	59.3%	NO
Heart-Healthy Eating Attitude	1–4	12	3.44	3.39	NO
Overweight/Obesity Attitude	1–4	12	2.84	3.08	YES
Heart-Healthy Eating Behavior	0–4	12	1.92	1.69	NO
Physical Activity Level	0–12	12	2.83	4.58	YES
Physical Activity Knowledge	% Correct	12	79.2%	84.7%	YES

This Magnet Center did not have its participants complete all sections of the questionnaire.

### Meridian Township, MI—Adult Fitness Class

Section	Scale	N	Pre Mean	Post Mean	Improvement? (In Bold If Significant)
Heart-Healthy Eating Knowledge	% Correct	3	38.9%	72.2%	YES
Overweight/Obesity Knowledge	% Correct	3	66.7%	74.1%	YES
Heart-Healthy Eating Attitude	1–4	3	3.11	3.33	YES
Overweight/Obesity Attitude	1–4	3	2.83	2.92	YES
Heart-Healthy Eating Behavior	0–4	3	1.85	2.06	YES
Physical Activity Level	0–12	3	3.33	8.67	YES
Physical Activity Attitude	1–4	3	3.00	2.95	NO
Physical Activity Knowledge	% Correct	3	83.3%	80.6%	NO
High Blood Pressure Knowledge	% Correct	3	57.1%	66.7%	YES
Cholesterol Knowledge	% Correct	3	69.4%	80.6%	YES
FIT Score	# Hours	3	7.17	8.17	YES
SIT Score	# Hours	3	33.67	35.67	YES

#### Monroe, MI—Bless Your Heart 1

Section	Scale	N	Pre Mean	Post Mean	Improvement? (In Bold If Significant)
High Blood Pressure Knowledge	% Correct	11	64.9%	100.0%	YES
Cholesterol Knowledge	% Correct	11	79.5%	100.0%	YES

This Magnet Center did not incorporate the physical activity or heart-healthy eating components into its program.

### Monroe, MI—Bless Your Heart 2

Section	Scale	N	Pre Mean	Post Mean	Improvement? (In Bold If Significant)
Heart-Healthy Eating Knowledge	% Correct	15	52.2%	92.2%	YES
Overweight/Obesity Knowledge	% Correct	15	66.7%	85.2%	YES
Heart-Healthy Eating Attitude	1–4	15	3.37	3.52	YES
Overweight/Obesity Attitude	1–4	15	2.69	2.87	YES
Heart-Healthy Eating Behavior	0–4	15	2.08	2.40	YES

This Magnet Center did not incorporate the physical activity, high blood pressure, or cholesterol components into its program.

Jefferson City, MO—City Survivor Challenge II

Section	Scale	N	Pre Mean	Post Mean (	Improvement? In Bold If Significant))
Heart-Healthy Eating Knowledge	% Correct	15	62.2%	66.7%	YES
Overweight/Obesity Knowledge	% Correct	15	68.9%	66.7%	NO
Heart-Healthy Eating Attitude	1–4	15	3.32	3.18	NO
Overweight/Obesity Attitude	1–4	15	2.79	2.85	YES
Heart-Healthy Eating Behavior	0–4	15	1.86	1.90	YES
Physical Activity Level	0–12	15	5.93	6.33	YES
Physical Activity Attitude	1–4	15	2.97	3.02	YES
Physical Activity Knowledge	% Correct	15	90.0%	91.7%	YES
High Blood Pressure Knowledge	% Correct	15	62.4%	60.0%	NO
Cholesterol Knowledge	% Correct	15	64.4%	71.7%	YES
FIT Score	# Hours	13	9.55	10.08	YES
SIT Score	# Hours	15	37.30	34.80	YES

### Jefferson City, MO—Family Health & Fitness Program

Section	Scale	N	Pre Mean	Post Mean	Improvement? (In Bold If Significant)
Heart-Healthy Eating Knowledge	% Correct	17	74.5%	71.6%	NO
Overweight/Obesity Knowledge	% Correct	17	66.8%	71.9%	YES
Heart-Healthy Eating Attitude	1–4	17	3.50	3.45	NO
Overweight/Obesity Attitude	1–4	17	2.85	2.77	NO
Heart-Healthy Eating Behavior	0–4	15	2.57	2.74	YES
Physical Activity Level	0–12	17	6.82	6.82	NO
Physical Activity Attitude	1–4	17	3.22	2.99	NO
Physical Activity Knowledge	% Correct	17	93.0%	92.6%	YES
High Blood Pressure Knowledge	% Correct	17	59.8%	58.0%	NO
Cholesterol Knowledge	% Correct	17	76.0%	75.0%	NO
FIT Score	# Hours	15	6.83	8.63	YES
SIT Score	# Hours	17	40.79	38.38	YES

## Poplar Bluff, MO—Arthritis Aquatics

Section	Scale	N	Pre Mean	Post Mean	Improvement? (In Bold If Significant))
Physical Activity Level	0–12	13	6.00	6.15	YES
Physical Activity Attitude	1–4	13	2.80	3.18	YES
Physical Activity Knowledge	% Correct	13	89.1%	89.1%	NO
FIT Score	# Hours	13	7.92	10.69	YES
SIT Score	# Hours	13	26.46	25.77	YES

This Magnet Center did not incorporate the heart-healthy eating components into its program.

Rolla, MO—Water Aerobics

Section	Scale	N	Pre Mean	Post Mean	Improvement? (In Bold If Significant)
Heart-Healthy Eating Knowledge	% Correct	6	55.6%	72.2%	YES
Overweight/Obesity Knowledge	% Correct	6	75.5%	75.5%	NO
Heart-Healthy Eating Attitude	1–4	6	3.36	3.64	YES
Overweight/Obesity Attitude	1–4	6	3.12	3.07	NO
Heart-Healthy Eating Behavior	0–4	6	2.96	2.86	NO
High Blood Pressure Knowledge	% Correct	6	59.5%	51.2%	NO
Cholesterol Knowledge	% Correct	6	73.6%	80.6%	YES

This Magnet Center did not incorporate the physical activity components into its program.

### Springfield, MO—Cox Healthy Lifestyles

Section	Scale	N	Pre Mean	Post Mean	Improvement? (In Bold If Significant)
Heart-Healthy Eating Knowledge	% Correct	45	34.1%	80.0%	YES
Overweight/Obesity Knowledge	% Correct	45	52.8%	98.8%	YES
Heart-Healthy Eating Attitude	1–4	45	2.99	3.84	YES
Overweight/Obesity Attitude	1–4	44	2.14	3.06	YES
Heart-Healthy Eating Behavior	0–4	44	0.77	3.04	YES
Physical Activity Level	0–12	45	2.67	8.11	YES
Physical Activity Attitude	1–4	42	2.39	3.30	YES
Physical Activity Knowledge	% Correct	42	48.0%	98.4%	YES
High Blood Pressure Knowledge	% Correct	45	46.8%	98.7%	YES
Cholesterol Knowledge	% Correct	45	48.3%	99.1%	YES
FIT Score	# Hours	45	3.56	7.99	YES
SIT Score	# Hours	45	54.04	45.55	YES

Clark County, NV—Cambridge Seniors

Section	Scale	N*	Pre Mean	Post Mean (	Improvement? In Bold If Significant)
Heart-Healthy Eating Knowledge	% Correct	6	53.9%	57.8%	YES
Overweight/Obesity Knowledge	% Correct	5	64.2%	70.3%	YES
Heart-Healthy Eating Attitude	1–4	5	3.03	3.10	YES
Overweight/Obesity Attitude	1–4	5	3.03	3.15	YES
Heart-Healthy Eating Behavior	0–4	4	2.76	1.89	NO
Physical Activity Level	0–12	5	3.80	4.80	YES
Physical Activity Attitude	1–4	6	3.07	3.08	YES
Physical Activity Knowledge	% Correct	5	86.7%	83.3%	NO
High Blood Pressure Knowledge	% Correct	4	39.3%	42.9%	YES
Cholesterol Knowledge	% Correct	5	55.0%	80.0%	YES
FIT Score	# Hours	1	5.00	9.00	YES*
SIT Score	# Hours	1	32.50	19.00	YES*

<sup>\*</sup> cannot conduct significance test if n=1

## Clark County, NV—Cora Coleman Seniors

Section	Scale	N	Pre Mean	Post Mean	Improvement? (In Bold If Significant)
Heart-Healthy Eating Knowledge	% Correct	7	75.2%	78.6%	YES
Overweight/Obesity Knowledge	% Correct	6	71.1%	75.9%	YES
Heart-Healthy Eating Attitude	1–4	6	3.44	3.44	NO
Overweight/Obesity Attitude	1–4	7	3.41	3.14	NO
Heart-Healthy Eating Behavior	0–4	7	3.40	3.01	NO
Physical Activity Level	0–12	7	10.14	10.00	NO
Physical Activity Attitude	1–4	7	3.67	3.84	YES
Physical Activity Knowledge	% Correct	7	84.5%	91.7%	YES
High Blood Pressure Knowledge	% Correct	8	62.7%	64.6%	YES
Cholesterol Knowledge	% Correct	7	83.0%	83.3%	YES
FIT Score	# Hours	6	13.83	18.25	YES
SIT Score	# Hours	7	33.36	29.00	YES

Clark County, NV—West Flamingo

Section	Scale	N	Pre Mean	Post Mean (	Improvement? (In Bold If Significant)
Heart-Healthy Eating Knowledge	% Correct	26	54.5%	58.3%	YES
Overweight/Obesity Knowledge	% Correct	26	62.4%	63.0%	YES
Heart-Healthy Eating Attitude	1–4	25	3.18	3.15	NO
Overweight/Obesity Attitude	1–4	26	3.03	3.08	YES
Heart-Healthy Eating Behavior	0–4	25	2.36	2.42	YES
Physical Activity Level	0–12	26	8.04	8.69	YES
Physical Activity Attitude	1–4	27	3.45	3.65	YES
Physical Activity Knowledge	% Correct	25	89.0%	89.0%	YES
High Blood Pressure Knowledge	% Correct	21	47.3%	49.3%	YES
Cholesterol Knowledge	% Correct	25	68.0%	68.7%	YES
FIT Score	# Hours	21	9.83	8.12	NO
SIT Score	# Hours	20	36.95	30.43	YES

#### Henderson, NV—Healthy Bingo Senior Style

Section	Scale	N	Pre Mean	Post Mean	Improvement? (In Bold If Significant)
Heart-Healthy Eating Knowledge	% Correct	14	64.5%	55.1%	NO
Overweight/Obesity Knowledge	% Correct	18	71.9%	59.9%	NO
Physical Activity Level	0–12	17	3.06	4.18	YES
Physical Activity Knowledge	% Correct	16	88.5%	78.7%	NO
High Blood Pressure Knowledge	% Correct	10	81.8%	59.4%	NO
Cholesterol Knowledge	% Correct	12	95.1%	75.6%	NO

This Magnet Center did not incorporate "Heart-Healthy Eating Attitude," "Heart-Healthy Eating Behavior," or physical activity SIT or FIT score components into its program.

Las Vegas, NV—Doolittle Seniors' Nutrition Program

Section	Scale	N	Pre Mean	Post Mean	Improvement? (In Bold If Significant)
Heart-Healthy Eating Knowledge	% Correct	24	45.8%	50.0%	YES
Overweight/Obesity Knowledge	% Correct	23	60.7%	61.3%	YES
Heart-Healthy Eating Attitude	1–4	22	3.33	3.37	YES
Overweight/Obesity Attitude	1–4	24	2.79	3.00	YES
Heart-Healthy Eating Behavior	0–4	22	2.47	2.38	NO

This Magnet Center did not incorporate the physical activity components into its program.

Las Vegas, NV—Staff Education Program

Section	Scale	N	Pre Mean	Post Mean	Improvement? (In Bold If Significant)
Heart-Healthy Eating Knowledge	% Correct	24	62.5%	68.1%	YES
Overweight/Obesity Knowledge	% Correct	24	67.6%	66.9%	NO
Heart-Healthy Eating Attitude	1–4	24	3.24	3.30	YES
Overweight/Obesity Attitude	1–4	24	2.95	2.98	YES
Heart-Healthy Eating Behavior	0–4	24	2.06	2.24	YES

This Magnet Center did not incorporate the physical activity components into its program.

Reno, NV—Reno Enrichment Program

Section	Scale	N	Pre Mean	Post Mean	Improvement? (In Bold If Significant)
Heart-Healthy Eating Knowledge	% Correct	10	51.7%	100.0%	YES
Overweight/Obesity Knowledge	% Correct	10	62.2%	94.4%	YES
Heart-Healthy Eating Attitude	1–4	10	3.22	3.23	YES
Overweight/Obesity Attitude	1–4	10	2.55	3.05	YES
Heart-Healthy Eating Behavior	0–4	9	1.90	2.98	YES
Physical Activity Level	0–12	10	5.90	7.60	YES
Physical Activity Attitude	1–4	10	2.94	3.08	YES
Physical Activity Knowledge	% Correct	10	81.7%	85.8%	YES
High Blood Pressure Knowledge	% Correct	10	60.0%	95.7%	YES
Cholesterol Knowledge	% Correct	10	70.8%	88.3%	YES
FIT Score	# Hours	10	8.40	12.10	YES
SIT Score	# Hours	10	41.95	29.52	YES

### Albuquerque, NM—Heart-Healthy Eating for Men

Section	Scale	N	Pre Mean	Post Mean	Improvement? (In Bold If Significant)
Heart-Healthy Eating Knowledge	% Correct	33	47.0%	73.2%	YES
Overweight/Obesity Knowledge	% Correct	33	61.6%	72.7%	YES
Heart-Healthy Eating Attitude	1–4	33	3.12	3.37	YES
Overweight/Obesity Attitude	1–4	34	2.75	3.00	YES
Heart-Healthy Eating Behavior	0–4	31	1.94	2.45	YES

This Magnet Center did not incorporate the physical activity, cholesterol, or high blood pressure components into its program.

Las Cruces, NM—Healthy Hearts at Eastside

Section	Scale	N	Pre Mean	Post Mean	Improvement? (In Bold If Significant)
Heart-Healthy Eating Knowledge	% Correct	4	62.5%	58.3%	NO
Overweight/Obesity Knowledge	% Correct	4	63.9%	58.3%	NO
Heart-Healthy Eating Attitude	1–4	4	3.46	3.42	NO
Overweight/Obesity Attitude	1–4	4	3.32	3.13	NO
Heart-Healthy Eating Behavior	0–4	4	2.36	2.32	NO
Physical Activity Level	0–12	4	7.25	7.50	YES
Physical Activity Attitude	1–4	3	3.14	3.26	YES
Physical Activity Knowledge	% Correct	3	80.6%	80.6%	NO
High Blood Pressure Knowledge	% Correct	3	45.6%	47.6%	YES
Cholesterol Knowledge	% Correct	3	80.6%	66.7%	NO
FIT Score	# Hours	2	14.00	12.00	NO
SIT Score	# Hours	2	26.00	19.50	YES

#### Las Cruces, NM—Healthy Hearts Grow Stronger I

Section	Scale	N	Pre Mean	Post Mean	Improvement? (In Bold If Significant)
Heart-Healthy Eating Knowledge	% Correct	7	57.1%	61.4%	YES
Overweight/Obesity Knowledge	% Correct	7	61.1%	63.1%	YES
Heart-Healthy Eating Attitude	1–4	7	3.31	3.57	YES
Overweight/Obesity Attitude	1–4	7	2.73	2.93	YES
Heart-Healthy Eating Behavior	0–4	7	1.62	2.36	YES

This Magnet Center did not incorporate the physical activity, cholesterol, or high blood pressure components into its program.

Las Cruces, NM—Healthy Hearts Grow Stronger II

Section	Scale	N	Pre Mean	Post Mean	Improvement? (In Bold If Significant)
Heart-Healthy Eating Knowledge	% Correct	12	69.4%	75.0%	YES
Overweight/Obesity Knowledge	% Correct	12	69.3%	77.0%	YES
Heart-Healthy Eating Attitude	1–4	12	3.50	3.53	YES
Overweight/Obesity Attitude	1–4	12	3.04	3.30	YES
Heart-Healthy Eating Behavior	0–4	12	2.71	2.65	NO
Physical Activity Level	0–12	12	7.83	7.67	NO
Physical Activity Attitude	1–4	12	3.49	3.54	YES
Physical Activity Knowledge	% Correct	12	92.4%	91.7%	NO
High Blood Pressure Knowledge	% Correct	12	57.1%	59.5%	YES
Cholesterol Knowledge	% Correct	11	77.3%	79.5%	YES
FIT Score	# Hours	12	11.74	10.81	NO
SIT Score	# Hours	11	35.64	32.23	YES

### Roswell, NM—Active RAC

Section	Scale	N	Pre Mean	Post Mean	Improvement? (In Bold If Significant)
Heart-Healthy Eating Knowledge	% Correct	24	63.9%	72.2%	YES
Overweight/Obesity Knowledge	% Correct	24	71.4%	77.8%	YES
Heart-Healthy Eating Attitude	1–4	24	3.27	3.49	YES
Overweight/Obesity Attitude	1–4	23	2.84	2.89	YES
Heart-Healthy Eating Behavior	0–4	22	2.38	2.51	YES
Physical Activity Level	0–12	21	6.95	8.62	YES
Physical Activity Attitude	1–4	20	3.08	3.17	YES
Physical Activity Knowledge	% Correct	21	87.3%	88.1%	YES
High Blood Pressure Knowledge	% Correct	22	49.8%	71.4%	YES
Cholesterol Knowledge	% Correct	22	73.9%	81.1%	YES
FIT Score	# Hours	21	10.20	7.56	NO
SIT Score	# Hours	23	15.84	17.40	NO

## Roswell, NM—Goodnight Loving Trail

Section	Scale	N	Pre Mean	Post Mean (	Improvement? (In Bold If Significant)
Heart-Healthy Eating Knowledge	% Correct	10	68.3%	61.7%	NO
Overweight/Obesity Knowledge	% Correct	10	71.1%	66.7%	NO
Heart-Healthy Eating Attitude	1–4	10	3.25	3.17	NO
Overweight/Obesity Attitude	1–4	10	2.98	2.88	NO
Heart-Healthy Eating Behavior	0–4	8	2.04	2.29	YES
Physical Activity Level	0–12	10	5.30	6.40	YES
Physical Activity Attitude	1–4	10	2.92	3.05	YES
Physical Activity Knowledge	% Correct	10	90.8%	85.0%	NO
High Blood Pressure Knowledge	% Correct	11	60.1%	60.4%	YES
Cholesterol Knowledge	% Correct	10	70.8%	71.6%	YES
FIT Score	# Hours	7	8.89	12.82	YES
SIT Score	# Hours	8	30.06	31.34	NO

Roswell, NM—Summer Fun and Fitness

Section	Scale	N	Pre Mean	Post Mean	Improvement? (In Bold If Significant)
Heart-Healthy Eating Knowledge	% Correct	17	65.7%	63.3%	NO
Overweight/Obesity Knowledge	% Correct	14	61.9%	57.1%	NO
Heart-Healthy Eating Attitude	1–4	14	3.28	3.47	YES
Overweight/Obesity Attitude	1–4	13	2.65	2.66	YES
Heart-Healthy Eating Behavior	0–4	12	2.01	2.11	YES
Physical Activity Level	0–12	13	8.54	8.69	YES
Physical Activity Attitude	1–4	15	3.20	3.37	YES
Physical Activity Knowledge	% Correct	13	89.1%	83.3%	NO
High Blood Pressure Knowledge	% Correct	16	62.8%	55.4%	NO
Cholesterol Knowledge	% Correct	14	83.3%	81.5%	NO
FIT Score	# Hours	14	5.00	3.36	NO
SIT Score	# Hours	15	27.03	23.56	YES

Elyria, OH—Lorain County Walks

Section	Scale	N	Pre Mean	Post Mean	Improvement? (In Bold If Significant)
Heart-Healthy Eating Knowledge	% Correct	15	68.9%	85.6%	YES
Overweight/Obesity Knowledge	% Correct	15	78.5%	89.6%	YES
Heart-Healthy Eating Attitude	1–4	15	3.48	3.60	YES
Overweight/Obesity Attitude	1–4	15	2.63	2.69	YES
Heart-Healthy Eating Behavior	0–4	15	1.90	2.01	YES
Physical Activity Level	0–12	15	6.53	7.20	YES
Physical Activity Attitude	1–4	15	3.18	3.30	YES
Physical Activity Knowledge	% Correct	15	90.0%	93.3%	YES
High Blood Pressure Knowledge	% Correct	15	60.0%	74.8%	YES
Cholesterol Knowledge	% Correct	14	72.0%	82.7%	YES
FIT Score	# Hours	14	6.07	8.57	YES
SIT Score	# Hours	11	45.45	46.27	NO

Elyria, OH—Seniors Take a Stroll and Lose the Roll

Section	Scale	N	Pre Mean	Post Mean	Improvement? (In Bold If Significant)
Heart-Healthy Eating Knowledge	% Correct	15	53.3%	55.6%	YES
Overweight/Obesity Knowledge	% Correct	9	70.4%	71.6%	YES
Heart-Healthy Eating Attitude	1–4	9	3.17	3.17	YES
Overweight/Obesity Attitude	1–4	14	2.86	2.90	YES
Heart-Healthy Eating Behavior	0–4	12	2.30	2.26	NO
Physical Activity Level	0–12	15	7.80	7.87	YES
Physical Activity Attitude	1–4	9	3.05	3.05	YES
Physical Activity Knowledge	% Correct	13	92.9%	93.6%	YES
High Blood Pressure Knowledge	% Correct	14	53.6%	59.7%	YES
Cholesterol Knowledge	% Correct	8	71.9%	74.0%	YES
FIT Score	# Hours	8	5.88	6.75	YES
SIT Score	# Hours	8	40.13	43.88	NO

Camp LeJeune, U.S. Marine Corps—Martial Arts

Section	Scale	N	Pre Mean	Post Mean	Improvement? (In Bold If Significant)
Heart-Healthy Eating Knowledge	% Correct	34	80.4%	82.8%	YES
Overweight/Obesity Knowledge	% Correct	34	94.1%	100.0%	YES
Heart-Healthy Eating Attitude	1–4	34	3.48	3.40	NO
Overweight/Obesity Attitude	1–4	34	2.88	2.89	YES
Heart-Healthy Eating Behavior	0–4	34	3.36	3.38	YES
Physical Activity Level	0–12	34	9.85	9.88	YES
Physical Activity Attitude	1–4	34	3.53	3.54	YES
Physical Activity Knowledge	% Correct	34	99.5%	99.3%	NO
High Blood Pressure Knowledge	% Correct	34	96.4%	98.3%	YES
Cholesterol Knowledge	% Correct	34	92.4%	99.8%	YES
FIT Score	# Hours	34	2.56	3.06	YES
SIT Score	# Hours	34	15.59	16.09	NO

**Cherry Point, U.S. Marine Corps—Walking Teams** 

Section	Scale	N	Pre Mean	Post Mean	Improvement? (In Bold If Significant)
Physical Activity Level	0–12	22	7.32	7.18	NO
Physical Activity Attitude	1–4	23	3.46	3.47	YES
Physical Activity Knowledge	% Correct	23	91.3%	96.4%	YES
High Blood Pressure Knowledge	% Correct	23	60.6%	65.5%	YES
Cholesterol Knowledge	% Correct	23	74.6%	75.3%	YES
FIT Score	# Hours	24	14.35	13.61	NO
SIT Score	# Hours	24	60.31	47.88	YES

This Magnet Center did not incorporate the heart-healthy eating components into its program.

Kaneohe Bay, U.S. Marine Corps—CSSG

Section	Scale	N	Pre Mean	Post Mean	Improvement? (In Bold If Significant)
Heart-Healthy Eating Knowledge	% Correct	12	50.0%	84.7%	YES
Overweight/Obesity Knowledge	% Correct	12	62.0%	88.9%	YES
Heart-Healthy Eating Attitude	1–4	12	3.17	3.22	YES
Overweight/Obesity Attitude	1–4	12	2.75	2.61	NO
Heart-Healthy Eating Behavior	0–4	10	2.15	2.34	YES
Physical Activity Level	0–12	6	10.00	10.00	NO
Physical Activity Attitude	1–4	6	3.12	3.12	NO
Physical Activity Knowledge	% Correct	6	87.5%	81.9%	NO
High Blood Pressure Knowledge	% Correct	6	59.5%	85.7%	YES
Cholesterol Knowledge	% Correct	6	68.1%	93.1%	YES
FIT Score	# Hours	6	8.00	11.17	YES
SIT Score	# Hours	5	25.50	26.10	NO

# VI. Analysis of 2002 and 2003 Data

This section of the report is intended to illustrate if and how the results of the 2003 Hearts N' Parks programs differed from those of the 2002 programs, and to identify the overall effects of Hearts N' Parks from pretest to posttest across both years. More specifically, this section addresses the following questions:

1. Was there an overall improvement in pretest-to-posttest scores?

This analyses will look at the overall effectiveness of the program by comparing pretest and posttest scores, controlling for the effect of separate years.

- 2. Was the improvement in pretest-to-posttest scores different in 2002 than in 2003?
  - This analysis will test whether the magnitude of the improvement in scores differed in 2002 versus 2003. For instance, it may be possible that the magnitude of improvement in pretest-to-posttest scores in 2003 was greater than the magnitude of improvement observed in 2002.
- 3. Were the average scores of the 2003 participants significantly different than the average scores of the 2002 participants?

This analysis will look at the combined (average) pre- and posttest scores of participants to see if they differed between years. This analysis will control for the effect of pretest/posttest change in understanding the data.

These three analyses were carried out using analysis of variance (ANOVA), which allows the control of specific classifications of data (e.g., separate years, pretest/posttest) and the analysis of the effects of those classifications simultaneously.

The following tables indicate the pre- and posttest scores for each section within each age group by year. This is followed by three columns indicating the answers to the questions listed above based on ANOVA, and labeled as follows:

- **Pre/Post Improvement (controlling for year effect)**—This column indicates whether participant scores improved from pretest to posttest (controlling for any differences between 2002 and 2003), and whether that improvement was statistically significant (p<.05).
- Year With Greater Improvement—This column indicates which year's participants made the greatest improvement from pretest to posttest, and whether the difference in improvement was statistically significant.
- Year With Best Scores (controlling for pre/post change)—This column indicates which year's participants achieved the best scores (controlling for pretest/posttest differences), and whether the difference between years was statistically significant.

The children's sections "Things I Like and Things I Do" and "Things I Learned and Did Last Summer" are analyzed by year only, using independent sample t-tests, since they have no direct pretest/posttest comparison.

#### Children

In the following table, each heart-healthy eating and physical activity section in 2002 and 2003 shows significant improvement from pretest to posttest after controlling for year.

When comparing the level of improvement by year, however, the 2003 children's improvement in "Heart-Healthy Eating Knowledge" was significantly greater than the improvement in 2002. The 2002 improvement in "Heart-Healthy Eating Intention," however, significantly outpaced that section's improvement in 2003.

Controlling for any pretest/posttest changes, 2002 scores were significantly higher than 2003 scores in knowledge, self-reported behavior, and intention regarding heart-healthy eating.

Heart-Healthy Eating				Pre/Post Improvement (controlling for year effect)	Year With Greater Improvement	Year With Best Scores (controlling for pre/post change)	
Knowledge	N	Pre Mean	Post Mean	(In <b>bold</b> if diffe	erence is statistica	lly significant)	
2002	789	74.3%	81.8%	YES	2003	2002	
2003	1,735	58.9%	85.2%	120	2003	2002	
Heart-Healthy Eating Behavior							
2002	783	48.1%	62.3%	YES	2003	2002	
2003	1,720	41.0%	55.4%	120	2003	2302	
Heart- Healthy Eating Intention							
2002	832	43.9%	62.9%	YES	2002	2002	
2003	1,731	38.1%	53.0%	123	2002	2002	
Physical Activity Attitude							
2002	872	8.91	9.15	YES	2003	2003	
2003	1,276	8.90	9.30	120	2003	2000	

For the children's sections called "Things I Like and Things I Do" and "Things I Learned and Did," there is no pretest/posttest comparison because the questions are not identical in pretest and posttest. Therefore, to compare 2002 and 2003 scores, an independent sample t-test is used for each section (p<.05).

According to the following table, 2002 participants reported significantly higher numbers of activities than 2003 participants for the things they "like to do" and "have done in the past week" before the program began, and for the things they said they "got better at" by the end of the program.

		2002			2003		Year With Best Scores
Things I Like and Things I Do/ Things I Learned and Did	N	Pre Mean	Post Mean	N	Pre Mean	Post Mean	(In <b>bold</b> if significant difference)
I like to do this	824	8.98		1,310	8.56		2002
I have done this in the past week	824	4.40		1,310	4.03		2002
I would like to learn how to do this	824	2.64		1,310	2.82		2003
Something new I learned	824		5.04	1,310		5.24	2003
I got better at this	824		6.93	1,310		4.89	2002
I would like to play this again	824		5.68	1,310		5.65	2002

#### Adolescents

Among adolescents there were significant pretest-to-posttest improvements for "Heart-Healthy Eating Knowledge", self-reported "Heart-Healthy Behavior, Attitude, and Intention," as well as "Overweight/Obesity Knowledge," after controlling for year.

Comparing the level of improvement by year, 2003 adolescent participants showed significantly greater improvement than 2002 participants in "Heart-Healthy Eating Knowledge" and "Overweight/Obesity Attitude." Adolescents in 2002, however, showed significantly greater improvement in "Heart-Healthy Eating Attitude" than 2003 participants.

After controlling for pretest/posttest changes, 2002 participants achieved significantly higher scores than 2003 participants in the section "Overweight/Obesity Knowledge." Conversely, 2003 participants earned significantly higher scores than 2002 participants in "Heart-Healthy Eating Knowledge" and "Overweight/Obesity Attitude," after controlling for pretest/posttest changes.

				Pre/Post Improvement	Year With Greater	Year With Best Scores
				(controlling for year effect)		(controlling for pre/post change)
Heart-Healthy Eating Knowledge	N	Pre Mean	Post Mean	(In <b>bold</b> if dif	ference is statisticall	y significant)
2002	92	74.6%	77.6%	YES	2003	2003
2003	341	77.0%	85.0%	120	2000	2000
Overweight/Obesity Knowledge						
2002	83	61.8%	68.9%	YES	2002	2002
2003	349	59.1%	64.3%	120	2002	2002
Heart-Healthy Eating Attitude						
2002	93	2.63	2.93	YES	2002	2003
2003	367	2.74	2.83	120	2002	2000
Overweight/Obesity Attitude						
2002	91	2.52	2.34	NO	2003	2003
2003	363	2.67	2.74	110	2000	2000

				Pre/Post Improvement (controlling for year effect)	Year With Greater Improvement	Year With Best Scores (controlling for pre/post change)
Heart-Healthy Eating Behavior						
2002	89	36.4%	56.1%	YES	2002	2003
2003	327	43.4%	58.6%	120	2002	2000
Heart-Healthy Eating Intention						
2002	91	44.6%	60.0%	YES	2003	2002
2003	367	43.8%	60.2%	120	2003	2002
Physical Activity Level					·	
2002	91	3.45	3.75	NO	2002	2002
2003	350	3.30	3.40	140	2002	2002

#### Adults

Adult participants showed a statistically significant improvement from pretest to posttest in every section of the questionnaire, after controlling for year.

Comparing the level of improvement by year, the 2002 adults demonstrated significantly greater improvement than the 2003 adults in three sections: "Physical Activity Attitude," "High Blood Pressure Knowledge," and the physical activity "SIT Score." The 2003 adults, however, showed significantly greater improvement in "Cholesterol Knowledge" than the 2002 group.

After controlling for pretest/posttest differences, the 2003 adult group demonstrated significantly better scores in 8 out of 12 sections: "Overweight/Obesity Knowledge," "Overweight/Obesity Attitude," "Heart-Healthy Eating Behavior," "Physical Activity Level," "Physical Activity Attitude," "High Blood Pressure Knowledge," "Cholesterol Knowledge," and the physical activity "SIT Score."

				Pre/Post Improvement (controlling for year effect)	Year With Greater Improvement	Year With Best Scores (controlling for pre/post change)	
Heart-Healthy Eating Knowledge	In hold it dittarance is statistically significant						
2002	292	61.9%	70.8%	YES	2003	2002	
2003	818	58.2%	70.5%	120		2002	
Overweight/Obesity Knowledge							
2002	290	66.0%	72.1%	YES	2003	2003	
2003	797	66.6%	75.9%	120	2003	2000	
Heart-Healthy Eating Attitude							
2002	289	3.26	3.40	YES	2003	2002	
2003	773	3.22	3.39	123	2000	2002	

				Pre/Post Improvement (controlling for year effect)	Year With Greater Improvement	Year With Best Scores (controlling for pre/post change)
Overweight/Obesity Attitude						
2002	292	2.76	2.90	YES	2002	2003
2003	781	2.82	2.95		2002	2000
Heart-Healthy Eating Behavior						
2002	290	2.14	2.36	YES	2003	2003
2003	757	2.27	2.54		2000	2000
Physical Activity Level						
2002	324	5.74	6.96	YES	2002	2003
2003	717	6.98	8.06	120	2002	2000
Physical Activity Attitude						
2002	315	2.94	3.16	YES	2002	2003
2003	647	3.15	3.29			
Physical Activity Knowledge						
2002	309	83.9%	90.6%	YES	2002	2003
2003	689	85.2%	90.7%			
High Blood Pressure Knowledge						
2002	296	57.4%	64.0%	YES	2002	2003
2003	597	59.3%	73.4%	120	2002	2003
Cholesterol Knowledge						
2002	290	71.5%	78.0%	YES	2003	2003
2003	566	71.8%	83.8%	120	2000	2000
FIT Score						
2002	250	7.62	9.56	YES	2002	2002
2003	593	7.41	8.58	120	2002	2002
SIT Score						
2002	259	40.10	31.89	YES	2002	2003
2003	617	34.65	31.23			

## VII. Conclusion

Based on the results of the 141 programs presented in chapters IV–VI of this report, the 2003 Hearts N' Parks program was a success, similar to the 2002 program. As in 2002, almost all indicators of heart-healthy eating knowledge, attitudes, self-reported behavior, and physical activity—measured among approximately 2,800 participants before and after their programs—demonstrated significant improvement from pretest to posttest. In total, based on the number of questionnaires received, more than 3,700 children, adolescents, and adults participated in the Hearts N' Parks programs detailed in this report.

#### Children

- A total of 60 children's programs with 2,140 participants were implemented; of these, 1,735 participants completed both pre- and posttests.
- Results indicated significant improvement by children in all areas of heart-healthy eating, which included knowledge, self-reported behavior, and intention—suggesting increased ability and willingness of children to identify and choose healthy foods over less healthy ones.
- Scores in physical activity attitude also increased significantly, suggesting an increase in children's interest in various kinds of physical activities while participating in Hearts N' Parks programs.
- Children reported learning a wide range of new activities during the programs—an average of five per child—and a majority of children said they "got better" at such heart-healthy activities as basketball, various exercises and games, jump rope, soccer, and swimming.
- Most children reported higher numbers of activities that they "got better at" and "want to play again" after their programs than they reported as activities that they "had done in the past week" and "wanted to learn" before the programs. This suggests that their interest in various kinds of physical activities grew while participating in Hearts N' Parks programs.
- The significant improvements observed in children's programs apply to the older group of 10–11-year-olds, but are more pronounced among younger children (9 years and younger). This is a good indication that Hearts N' Parks program content is able to connect with children even at an early age.
- Observed independently, both boys' and girls' results are positive but show little difference from each other.
- Across the 2-year period (2002–2003), children showed improvement in every section (excluding "Things I Like and Things I Do" and "Things I Learned and Did Last Summer," which cannot be analyzed for pretest to posttest change). Children's improvement in "Heart-Healthy Eating Knowledge" was significantly greater in 2003 than in 2002.

• The standout program sites in 2003 were Las Vegas (NV), "Kids Kamp/Camp Odyssey," Prince George's County (MD), "Summer Camp," Oldsmar (FL), "Summer Camp," and Adrian (MI), "Summer Playground," which posted impressive results in almost every section, showing better than average pretest-to-posttest improvement. Children at the Tamarac (FL), program "Summer Shape Up," reported the highest numbers of any program regarding activities they "got better at" (10), "learned" (12), and "would like to play again" (12).

### Adolescents

- A total of 21 adolescent programs with 446 participants were implemented; of these, 367 participants completed both pre- and posttests.
- Magnet Centers succeeded in following the recommendations of the 2002 report by increasing the number of adolescent programs from 8 to 21.
- The 21 adolescent programs with pre- and posttest data showed significant improvement in 6 of the 7 performance areas, most notably in the categories of "Heart-Healthy Eating Behavior" and "Heart-Healthy Eating Intention," as in 2002.
- In contrast to 2002, boys scored better than girls in most areas.
- Adolescents (14 years and older) earned higher scores in most knowledge, attitude, and self-reported behavior areas, and demonstrated more improvement from pre- to posttest than younger adolescents, 12–13 years of age.
- Overall, adolescents' scores in 2003 showed significantly greater improvement than in 2002 in the areas of "Heart-Healthy Eating Knowledge" and "Overweight/Obesity Attitude." Scores in 2002 improved significantly more than 2003 scores in "Heart-Healthy Eating Attitude." Over the 2-year period, significant pretest-to-posttest improvements were demonstrated in knowledge, attitude, intention, and self-reported behavior regarding "Heart-Healthy Eating," as well as "Overweight/Obesity Knowledge."
- The Gary (IN), "Come Out and Play," Roswell (GA), "Youth Baseball 2," and Prince George's County (MD), "Soccer Teams" programs posted the most significant gains in performance out of the 21 adolescent programs.

#### **Adults**

- A total of 61 adult programs with 1,130 participants were implemented; of these, 818 participants completed both pre- and posttests.
- Adult program participants—69 percent female (down from 78 percent in 2002)—demonstrated similar results to those of 2002. In general, they finished their programs with more knowledge about heart-healthy nutrition, overweight/obesity risks, engaging in proper physical activity, causes of high blood pressure, and controlling high blood cholesterol.

- Posttest scores suggest far healthier attitudes toward overweight/obesity, eating habits, and
  physical activity; a significant increase in how frequently adults report making healthy food
  choices; and significantly increased time reported doing moderate physical activity.
- Adults over 60 years of age posted better scores in self-reported attitude and behavior-related sections, while adults 60 and younger demonstrated better knowledge in most areas of heart health and physical activity.
- Adults without college education showed significantly greater improvement than those with some college education.
- The only two sections where 2003 improvements significantly exceeded those of 2002 were "High Blood Pressure Knowledge" and "Cholesterol Knowledge." Participants' improvement in 2002 was greater than 2003 in "Physical Activity Attitude" and self-reported "SIT Score." Within all individual sections, however, there was consistent improvement over the 2-year period.
- In keeping with the goal of increasing adult male participation, the percentage of men participating in Hearts N' Parks adult programs grew from 22 percent in 2002 to 31 percent in 2003.
- Among single sites, the Springfield (MO), "Cox Healthy Lifestyles," and Prince George's County (MD), "Morning Milers," demonstrated significant posttest improvement in most areas of heart health.

#### **Data Collection and Recommendations**

Hearts N' Parks data collection methods (e.g., spreadsheets, Web-based tracking, and reporting) continue for the most part to be efficient means of collecting, cleaning, and organizing data from almost 150 different programs across the country. Some problems with incoming data, however, required considerable attention from project staff, due to mistakes by new and inexperienced staff at program sites, and the use of outdated software. The 2002 Hearts N' Parks evaluation report called for Magnet Center personnel to be "more fastidious in the area of data collection and entry," and the 2003 data sample indicates progress in this area. While approximately twothirds of the 2002 data sample was appropriately matched for pretest-to-posttest analysis, the 2003 data set is matched up for approximately three-fourths of the participant sample. Correspondingly, participants filled out individual sections more thoroughly than they did in 2002, which meant that more section scores were computed and fewer data were considered invalid. Coupled with an increase of more than double the number of programs in 2002, the 2003 data sample provides a much more reliable framework for observing the progress of all programs. Nonetheless, the fact that approximately one-fourth of Hearts N' Parks participants did not complete both the pretest and posttest shows that there is still room for improvement. Training program site personnel about the importance of proper data collection and submission methods should continue to be a priority.

Another recommendation of the 2002 report was to seek an increase in the number of adult males who participate in Hearts N' Parks. Programs in 2003 showed progress here, due in part to the

all-male Albuquerque program, "Heart-Healthy Eating for Men," which helped the percentage of men overall rise from 21 percent to 31 percent. Even at 31 percent, adult men are underrepresented, so future programs should continue to increase adult-male participation.

This report confirms that the second full year of Hearts N' Parks was an unequivocal success, and that performance objectives were again achieved. Specific improvements noted for 2003 are as follows:

- The number of programs that submitted data grew from 68 to 141, an average of 3 per Magnet Center site;
- The number of participants measured for pretest-to-posttest analysis increased from approximately 1,200 in 2002 to 2,800 in 2003;
- The number of subject areas (knowledge, behavior, etc.) in which participants demonstrated statistically significant improvement increased from 2002 to 2003 among all age groups; and
- Program personnel made progress in correcting data collection and program recruitment disparities (i.e., unmatched data, low adult-male participation, low adolescent participation).

The results of the first 2 full years of Hearts N' Parks demonstrate the ability of community-based organizations such as park and recreation departments to positively impact heart-healthy knowledge and behavior changes among residents of all ages. The success of the programs is in large part due to the dedication of park and recreation professionals who are committed to educating the community about the principles of heart-healthy eating and physical activity. Many have become role models for heart-healthy behavior and have worked tirelessly to engage their communities in this effort.

# VIII. Appendix

The following tables include the average pre- and posttest scores of all individual items within the different sections of the questionnaires for 2003. Every item answered in each questionnaire reviewed from all 142 programs is counted, without regard to whether participants completed both pretest and posttest. All percentage scores represent the percentage of correct or healthy answers chosen for that item. Other scoring measurements are indicated by section.

For example, in the first section below, a total of 2,002 children answered the first question in the pretest section "Heart-Healthy Eating Knowledge." A total of 74.9 percent answered the question correctly, and the standard deviation of scores was 0.434.

#### Children's Questionnaire Items

		N	Mean Score	Std. Deviation
Pretest Heart-Healthy Eating Knowledge				
	1	2,002	74.9%	0.434
	2	2,025	77.8%	0.416
	3	2,006	50.4%	0.500
	4	1,982	36.0%	0.480
	5	1,988	47.0%	0.499
	6	1,979	68.5%	0.465
	7	1,994	76.1%	0.426
Posttest Heart-Healthy Eating Knowledge		•		
, ,	1	1,789	93.7%	0.242
	2	1,796	94.4%	0.229
	3	1,793	78.0%	0.415
	4	1,770	67.3%	0.469
	5	1,780	74.8%	0.434
	6	1,774	91.9%	0.273
	7	1,779	96.7%	0.178
Pretest Heart-Healthy Eating Behavior				
	1	1,982	32.4%	0.468
	2	1,990	51.5%	0.500
	3	1,992	53.0%	0.499
	4	1,965	37.0%	0.483
	5	1,967	53.8%	0.499
	6	1,956	36.6%	0.482
	7	1,960	33.6%	0.472
Posttest Heart-Healthy Eating Behavior				
	1	1,787	44.5%	0.497
	2	1,794	66.5%	0.472
	3	1,795	66.2%	0.473
	4	1,763	52.6%	0.499
	5	1,770	66.4%	0.472
	6	1,763	46.0%	0.499
	7	1,774	47.0%	0.499

# **Children's Questionnaire Items**

		N	Mean Score	Std. Deviation
Pretest Heart-Healthy Eating Intention				
	1	2,022	33.2%	0.471
	2	2,002	55.4%	0.497
	3	1,995	28.2%	0.450
	4	1,988	32.9%	0.470
	5	1,995	56.8%	0.495
	6	1,983	45.5%	0.498
	7	1,984	28.4%	0.451
Posttest Heart-Healthy Eating Intention				
	1	1,797	44.6%	0.497
	2	1,779	64.6%	0.478
	3	1,784	39.6%	0.489
	4	1,773	45.7%	0.498
	5	1,775	73.1%	0.444
	6	1,772	60.2%	0.490
	7	1,766	44.5%	0.497
Pretest Physical Activity Attitude (0–2 pts. each	)			
	1	1,521	1.12	0.742
	2	1,518	1.76	0.533
	3	1,515	1.53	0.664
	4	1,517	1.42	0.733
	5	1,519	1.44	0.701
	6	1,519	1.71	0.545
Posttest Physical Activity Attitude		· · ·		
,	1	1,359	1.20	0.740
	2	1,359	1.74	0.543
	3	1,359	1.60	0.606
	4	1,359	1.50	0.685
	5	1,357	1.53	0.642
	6	1,342	1.73	0.507

Things I Like and Things I Do N=1,555

Pretest	I Like To Do This	I've Done This in the Past Week	I Would Like To Learn How To Do This
Softball/baseball	57.7%	24.1%	22.4%
Basketball	63.6%	31.3%	19.6%
Biking	73.7%	31.1%	11.4%
Bowling	69.5%	20.3%	16.8%
Dancing	54.9%	28.0%	18.0%
Exercises	63.9%	45.7%	10.0%
Football	49.1%	24.8%	26.9%
Games	75.4%	39.4%	12.9%
Jump Rope	61.7%	32.7%	15.8%
Roller Skating	64.1%	25.1%	22.8%
Soccer	58.5%	26.2%	22.6%
Swimming	75.1%	31.2%	14.9%
Tennis	42.8%	21.5%	34.1%
Volleyball	48.1%	18.8%	32.0%
Average Number of Activities	8.58	4.00	2.80

Things I Learned and Did This Summer N=1,354

Posttest	Something New I Learned	I Got Better at This	l Would Like To Play This Again
Softball/baseball	37.4%	32.4%	38.2%
Basketball	37.1%	36.9%	42.5%
Biking	37.0%	32.4%	41.4%
Bowling	38.3%	32.9%	41.2%
Dancing	34.6%	30.1%	35.2%
Exercises	37.9%	47.3%	37.3%
Football	35.6%	28.1%	38.4%
Games	41.9%	42.1%	44.5%
Jump Rope	37.5%	39.0%	37.7%
Roller Skating	38.7%	32.2%	40.7%
Soccer	37.9%	35.6%	42.2%
Swimming	39.7%	38.2%	46.0%
Tennis	35.7%	27.0%	39.0%
Volleyball	36.9%	28.0%	39.5%
Average Number of Activities	5.26	4.82	5.64

# **Adolescent Questionnaire Items**

		N	Mean Score	Std. Deviation
Pretest Heart-Healthy Eating Knowledge				
	1	409	69.4%	0.461
	2	441	52.8%	0.500
	3	441	82.8%	0.378
	4	439	45.6%	0.499
	5	393	91.9%	0.274
	6	398	94.5%	0.229
	7	394	79.7%	0.403
	8	396	61.4%	0.488
	9	397	69.3%	0.462
	10	398	93.0%	0.256
	11	395	93.7%	0.244
	12	387	87.6%	0.330
<b>Posttest</b> Heart-Healthy Eating Knowledge				
	1	367	77.1%	0.421
	2	373	63.5%	0.482
	3	374	88.5%	0.319
	4	374	59.6%	0.491
	5	360	96.1%	0.194
	6	362	97.0%	0.172
	7	359	85.5%	0.352
	8	358	77.4%	0.419
	9	363	78.5%	0.411
	10	359	94.7%	0.224
	11	361	95.8%	0.200
	12	359	92.8%	0.260
Pretest Overweight/Obesity Knowledge				
	1	406	30.3%	0.460
	2	406	36.5%	0.482
	3	406	84.0%	0.367
	4	406	55.9%	0.497
	5	406	81.5%	0.389
	6	406	84.7%	0.360
	7	402	37.3%	0.484
	8	405	72.1%	0.449
	9	405	48.6%	0.500
Posttest Overweight/Obesity Knowledge				
	1	357	33.9%	0.474
	2	358	51.4%	0.501
	3	356	86.0%	0.348
	4	358	66.5%	0.473
	5	355	81.4%	0.390
	6	356	84.0%	0.367
	7	356	47.8%	0.500
	8	356	75.3%	0.432
	9	357	53.2%	0.500

# **Adolescent Questionnaire Items**

		N	Mean Score	Std. Deviation
Pretest Heart-Healthy Eating Attitude (1-	4 pts. ea	ıch)		
	1	438	2.95	0.747
	2	437	3.12	0.819
	3	436	2.96	0.782
	4	437	2.54	0.958
	5	436	2.38	0.986
	6	437	3.12	0.843
	7	434	2.27	0.882
	8	436	2.28	0.873
	9	435	2.70	0.860
	10	434	3.23	0.909
<b>Posttest</b> Heart-Healthy Eating Attitude				
	1	372	3.06	0.690
	2	371	3.18	0.728
	3	371	3.07	0.744
	4	371	2.76	0.921
	5	372	2.44	0.913
	6	372	3.00	0.842
	7	371	2.27	0.837
	8	370	2.40	0.872
	9	370	2.78	0.831
	10	373	3.29	0.824
Pretest Overweight/Obesity Attitude (1-4	pts. eac	:h)		
	1	433	2.76	0.875
	2	433	2.95	0.836
	3	434	2.48	0.879
	4	436	2.50	0.943
	5	435	2.92	0.886
	6	433	2.44	0.944
	7	435	2.59	0.900
	8	435	2.84	1.016
Posttest Overweight/Obesity Attitude				
	1	371	2.81	0.874
	2	368	2.98	0.788
	3	364	2.62	0.862
	4	367	2.50	0.902
	5	368	2.87	0.774
	6	369	2.47	0.827
	7	369	2.69	0.846
	8	369	2.92	0.962
<b>Pretest</b> Heart-Healthy Eating Behavior				
	1	392	29.3%	0.456
	2	392	43.4%	0.496
	3	390	52.1%	0.500
	4	395	47.8%	0.500
	5	384	64.3%	0.480
	6	387	32.8%	0.470
	7	380	44.5%	0.498
	8	388	39.7%	0.490

# **Adolescent Questionnaire Items**

		N	Mean Score	Std. Deviation
Posttest Heart-Healthy Eating Behavior				
	1	354	43.8%	0.497
	2	354	59.3%	0.492
	3	353	63.5%	0.482
	4	354	67.5%	0.469
	5	353	74.2%	0.438
	6	351	54.7%	0.498
	7	353	48.2%	0.500
	8	353	53.3%	0.500
Pretest Heart-Healthy Eating Intention				
	1	437	23.8%	0.426
	2	434	72.8%	0.445
	3	431	34.3%	0.475
	4	436	34.9%	0.477
	5	437	58.8%	0.493
	6	437	55.1%	0.498
	7	439	28.2%	0.451
Posttest Heart-Healthy Eating Intention				
	1	369	45.0%	0.498
	2	370	75.1%	0.433
	3	368	52.7%	0.500
	4	371	55.0%	0.498
	5	371	76.3%	0.426
	6	371	67.1%	0.470
	7	372	50.0%	0.501
Pretest Physical Activity Level (0-1 pts. for	r 1, 2, 3	, and 5; 0–	2 pts. for 4)	
	1	422	0.66	0.475
	2	422	0.45	0.498
	3	398	0.38	0.486
	4	414	1.24	0.850
	5	423	0.66	0.474
Posttest Physical Activity Level				
· ·	1	366	0.68	0.466
	2	364	0.43	0.496
	3	330	0.43	0.496
	4	354	1.23	0.856
	5	359	0.71	0.454

		N	Mean Score	Std. Deviation
Pretest Heart-Healthy Eating Knowledge				
	1	1,006	76.2%	0.426
	2	988	36.0%	0.480
	3	1,003	87.3%	0.333
	4	1,006	23.4%	0.423
	5	1,028	59.4%	0.491
	6	1,024	67.4%	0.469
<b>Posttest</b> Heart-Healthy Eating Knowledge				
	1	812	84.7%	0.360
	2	797	54.7%	0.498
	3	810	91.5%	0.279
	4	822	36.1%	0.481
	5	824	72.8%	0.445
	6	823	83.7%	0.369
Pretest Overweight/Obesity Knowledge				
	1	984	39.0%	0.488
	2	1,000	50.0%	0.500
	3	1,001	97.4%	0.159
	4	1,000	80.7%	0.395
	5	1,007	93.8%	0.240
	6	1,011	96.0%	0.195
	7	1,005	15.4%	0.361
	8	999	85.8%	0.349
	9	991	41.4%	0.493
Posttest Overweight/Obesity Knowledge				
	1	798	53.0%	0.499
	2	812	62.9%	0.483
	3	812	99.0%	0.099
	4	812	88.7%	0.317
	5	815	95.6%	0.206
	6	817	97.6%	0.155
	7	814	36.7%	0.482
	8	816	90.7%	0.291
	9	813	56.0%	0.497
Pretest Heart-Healthy Eating Attitude (1–4				
, ,	1	, 971	3.61	0.650
	2	962	3.41	0.759
	3	968	3.72	0.558
	4	959	3.34	0.818
	5	965	2.42	0.946
	6	967	2.90	0.941

		N	Mean Score	Std. Deviation
Posttest Heart-Healthy Eating Attitude				
	1	815	3.74	0.502
	2	809	3.51	0.664
	3	808	3.79	0.467
	4	808	3.54	0.657
	5	811	2.67	0.966
	6	810	3.08	0.902
Pretest Overweight/Obesity Attitude (1–4	pts. eac	ch)		
	1	974	2.85	0.926
	2	971	3.05	0.804
	3	965	2.70	0.930
	4	968	2.71	0.889
	5	973	2.98	0.826
	6	973	2.57	0.914
	7	970	2.91	0.803
	8	970	3.04	0.854
Posttest Overweight/Obesity Attitude				
	1	810	2.93	0.884
	2	814	3.14	0.706
	3	813	2.85	0.852
	4	809	2.79	0.868
	5	811	3.00	0.798
	6	815	2.70	0.833
	7	813	3.07	0.751
	8	814	3.11	0.813
Pretest Heart-Healthy Eating Behavior (0-	-4 pts. e	each)		
	1	725	1.75	1.466
	2	923	2.65	1.606
	3	931	1.92	1.392
	4	908	2.02	1.336
	5	938	2.31	1.403
	6	947	2.44	1.182
	7	957	2.67	0.984
<b>Posttest</b> Heart-Healthy Eating Behavior				
	1	604	2.12	1.414
	2	786	2.90	1.451
	3	775	2.22	1.373
	4	769	2.28	1.225
	5	797	2.55	1.304
	6	807	2.64	1.007
	7	808	2.80	0.943

		N	Mean Score	Std. Deviation
Pretest Physical Activity Level (0–1 pt	i. for 1–5; 0–	-4 pts. for 6	6; 0–3 pts. for 7)	
	1	930	0.79	0.410
	2	921	0.74	0.439
	3	925	0.75	0.433
	4	928	0.65	0.478
	5	928	0.77	0.418
	6	892	2.17	1.298
	7	893	1.17	1.106
Posttest Physical Activity Level				
	1	740	0.91	0.279
	2	733	0.81	0.390
	3	732	0.87	0.333
	4	734	0.75	0.435
	5	729	0.83	0.377
	6	740	2.50	1.196
	7	740	1.43	1.020
Pretest Physical Activity Attitude (1–4	pts. each)			
,	1	793	2.74	1.051
	2	801	2.76	1.096
	3	813	3.32	0.951
	4	810	3.45	0.866
	5	799	3.39	0.993
	6	806	3.19	1.006
	7	807	3.24	0.994
	8	803	2.93	1.066
	9	811	3.13	1.074
	10	801	3.21	0.961
	11	801	2.66	1.133
	12	800	3.29	0.918
	13	805	3.52	0.822
	14	766	2.95	1.205
Posttest Physical Activity Attitude				
	1	696	2.90	0.965
	2	703	2.95	1.031
	3	704	3.40	0.819
	4	703	3.51	0.768
	5	704	3.60	0.766
	6	702	3.34	0.878
	7	705	3.32	0.889
	8	703	3.17	0.950
	9	703	3.33	0.925
	10	705 705	3.35	0.865
	11	703	2.87	1.029
	11	103	2.01	1.023

		N	Mean Score	Std. Deviation
	12	703	3.34	0.874
	13	702	3.54	0.780
	14	672	2.91	1.223
Pretest Physical Activity Knowledge				
	1	867	96.9%	0.174
	2	870	92.3%	0.267
	3	866	84.2%	0.365
	4	866	88.9%	0.314
	5	858	40.2%	0.491
	6	866	85.6%	0.352
	7	868	94.8%	0.222
	8	868	87.0%	0.337
	9	866	88.5%	0.320
	10	860	89.9%	0.302
	11	862	84.0%	0.367
	12	863	96.4%	0.186
Posttest Physical Activity Knowledge				
	1	713	98.9%	0.105
	2	713	96.1%	0.194
	3	710	94.8%	0.222
	4	711	94.0%	0.239
	5	709	52.2%	0.500
	6	712	91.0%	0.286
	7	713	95.9%	0.198
	8	710	89.7%	0.304
	9	712	95.2%	0.213
	10	712	92.3%	0.267
	11	711	89.0%	0.313
	12	711	97.6%	0.153
Pretest High Blood Pressure Knowledge				
g g	1	769	91.4%	0.280
	2	764	15.6%	0.363
	3	754	49.5%	0.500
	4	769	72.8%	0.445
	5	758	59.8%	0.491
	6	763	10.0%	0.300
	7	759	64.6%	0.479
	8	768	71.7%	0.451
	9	765	81.7%	0.387
	10	753	80.9%	0.394
	11	763	44.7%	0.498
	12	766	14.1%	0.348
	13	768	81.9%	0.385
	14	763	84.5%	0.362

	N	Mean Score	Std. Deviation
Posttest High Blood Pressure Knowledge			
1	642	96.1%	0.194
2	639	38.8%	0.488
3	628	68.6%	0.464
4	637	83.0%	0.376
5	634	76.3%	0.425
6	638	35.3%	0.478
7	635	73.7%	0.441
8	640	84.5%	0.362
9	635	91.8%	0.274
10	633	86.7%	0.340
11	633	65.2%	0.477
12	638	37.3%	0.484
13	639	90.0%	0.300
14	638	89.5%	0.307
Pretest Cholesterol Knowledge			
1	746	93.7%	0.243
2	741	22.4%	0.417
3	737	26.3%	0.441
4	735	78.4%	0.412
5	740	84.2%	0.365
6	737	74.2%	0.438
7	738	74.7%	0.435
8	737	82.1%	0.384
9	743	85.5%	0.353
10	741	86.5%	0.342
11	742	93.8%	0.241
12	740	62.7%	0.484
Posttest Cholesterol Knowledge			
1	611	98.4%	0.127
2	611	39.8%	0.490
3	609	41.7%	0.493
4	608	91.0%	0.287
5	612	92.6%	0.261
6	609	90.3%	0.296
7	610	87.5%	0.331
8	611	92.0%	0.272
9	610	95.1%	0.216
10	607	94.2%	0.233
11	608	98.2%	0.133
12	612	82.8%	0.377

	N	Mean Score	Std. Deviation
Pretest FIT Score (hours per week)			
Total FIT score	737	7.55	8.22
Bicycling	737	0.23	0.76
Bowling	737	0.09	0.50
Chores	737	1.56	4.46
Dancing/aerobics	737	0.62	1.46
Golfing	737	0.12	0.67
Jogging/stairs/treadmill	737	0.59	1.39
Pushups/situps	737	0.35	1.07
Roller blading, skating	737	0.03	0.48
Team or organized sports	737	0.21	1.13
Walking/hiking	737	2.28	3.69
Water sports (swimming)	737	0.37	2.39
Weightlifting	737	0.47	1.39
Winter sports (snow skiing)	737	0.03	0.26
Other physical activities	737	0.59	2.96
Pretest SIT Score			
Total SIT score	776	33.40	24.10
TV	776	12.16	12.27
Computer	776	5.11	8.17
Work (nonmanual labor)	776	10.14	16.28
Reading	776	4.40	6.19
Movies	776	1.59	3.70
Posttest FIT Score			
Total FIT score	656	8.45	8.16
Bicycling	656	0.35	1.01
Bowling	656	0.11	0.62
Chores	656	1.60	4.15
Dancing/aerobics	656	0.74	1.44
Golfing	656	0.22	1.05
Jogging/stairs/treadmill	656	0.70	1.48
Pushups/situps	656	0.40	1.20
Roller blading, skating	656	0.01	0.18
Team or organized sports	656	0.18	0.88
Walking/hiking	656	2.56	3.82
Water sports (swimming)	656	0.33	1.13
Weightlifting	656	0.62	1.68
Winter sports (snow skiing)	656	0.02	0.29
Other physical activities	656	0.60	2.77

	N	Mean Score	Std. Deviation
Posttest SIT Score Section			
Total SIT score	657	30.89	22.57
TV	657	10.63	10.18
Computer	657	5.08	7.87
Work (nonmanual Labor)	657	10.10	15.79
Reading	657	3.85	5.30
Movies	657	1.23	3.21