



GATEWAY TO FITNESS



Year II Final Evaluation Report July 2007

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Executive Summary

BACKGROUND

The Gateway to Fitness program is a joint partnership of the San Francisco Beacon Initiative, Kaiser Permanente, The California Endowment and Team-Up for Youth. These organizations have come together to support a new fitness and nutrition program offered at the eight sites of the San Francisco Beacon Initiative, a citywide youth development program. The three key goals of the Gateway to Fitness program are:

1. To increase the physical activity of youth 10-15 years of age through a variety of community-based youth sports and recreation activities;
2. To provide culturally-appropriate nutrition education through hands-on food preparation and cooking classes; and
3. To foster parental support and involvement through joint activities and parent-focused events such as awards celebrations and group dinners.

EVALUATION

The Gateway to Fitness evaluation addressed both process and outcome questions through data collection methods that included: 1) Pre/Post/Follow-up Surveys; 2) Parent Interviews (Year 1 only); 3) Participant Focus groups (Year 1 only); and 4) Contract Management System records data.

KEY FINDINGS

Highlights of findings are presented below.

Physical Activity

- Many participants entered the program with a high level of self-reported physical activity.
- The number of times participants exercised in the previous week increased from pre to posttest for strenuous, moderate and mild types of activities. The percentage of participants exercising two or more hours the previous day also increased. These were statistically significant changes.
- One-quarter of participants for whom BMI percentile was available were either at-risk or were overweight. These youth also realized increases in physical activity.
- On the posttest and follow-up surveys a little over half of youth stated they were more physically active than before they started Gateway.

Healthy Eating

- On the posttest nearly the solid majority of youth felt that Gateway had helped them to find healthy food that they liked to eat and learn to prepared healthy food for snacks and meals.
- Almost half of youth at follow-up report not eating fast food in the last week.

Support

- The great majority of students shared that their families are supportive of their efforts to eat healthy and be physically active.
- Friends were notably less supportive than were parents and Gateway staff for eating healthy and being physically active.

*Gateway to Fitness Year Two Evaluation Report
July, 2007*

- The large majority of participants reported making new friends and feeling better about themselves as a result of the Gateway program.

Impact on Family

- Over half of youth reported on the posttest that their family was buying healthier food at the store and had been eating healthier since Gateway.

Introduction

Resource Development Associates has prepared the following report to present the findings of the first two years of Gateway to Fitness Program, a health and fitness initiative designed for youth ages 10-15 through the San Francisco Beacon Initiative.

BACKGROUND

The Gateway to Fitness program is a joint partnership of the San Francisco Beacon Initiative, Kaiser Permanente, The California Endowment and Team-Up for Youth. These organizations came together to support a new fitness and nutrition program offered at the eight sites of the San Francisco Beacon Initiative, a citywide youth development program.¹

This Final Evaluation Report of the first two years of the program relies on data primarily from participant surveys. In addition, during the first program year parent interviews and youth participant focus groups provided feedback on program implementation. A web-based participant management system provides information on enrollment. These approaches were used to measure progress toward the three key goals of the Gateway to Fitness program:

1. To increase the physical activity of youth 10-15 years of age through a variety of community-based youth sports and recreation activities;
2. To provide culturally-appropriate nutrition education through hands-on food preparation and cooking classes; and
3. To foster parental support and involvement through joint activities and parent-focused events such as awards celebrations and group dinners.

BEST PRACTICES

There are currently two programs in the San Francisco Bay Area employing best practices in fitness and nutrition for youth.

1. *Sports, Play and Active Recreation for Kids* (SPARK) provides school assessment, curricula, and staff training with the goal of increasing the quantity and improving the quality of physical activity (www.sparkpe.org). SPARK has been cited in the Surgeon General's Report on Physical Activity and Health as a "school based solution" to childhood obesity and is registered as a research-tested intervention program with the National Cancer Institute. This program is in use at the Oakland and Berkeley Unified School Districts.
2. *California Adolescent Nutrition and Fitness Program (CANFit)* is a Berkeley based non-profit organization that provides training, education and outreach to youth workers and youth on nutrition and fitness serving youth of color, 10-14 years old (www.canfit.org). CANFit has been chosen by The California Endowment to provide training to communities involved in the foundation's Healthy Eating, Active Communities Initiative.

The literature on health programs for children and youth also highlights some best practice approaches to be considered when implementing a fitness program.

¹ Source for background and planning information: *Gateway to Fitness Interim Progress Report, September 13, 2005* prepared by David MacGillis, OMI/Excelsior Beacon Site Director and Director of School Based Services, YMCA.

An article describing a sixteen-week school-based fitness/nutrition/support program for adolescent girls concludes that interventions aimed at increasing the rate of physical activity among adolescent girls might be made more effective by: 1. Developing support from friends, families and caring adults (including teachers); 2. Addressing real and perceived time constraints to engaging in physical activities; and 3. Improving girls' confidence in their ability to engage in physical activity.²

An exploratory study on overweight youth by the same author concludes with ten recommendations for school-based weight control programs.³ An effective program should:

1. Have a leader who understands the difficulties faced by overweight teens. Try to have a leader or co-leader who is or has been overweight.
2. Provide a supportive, caring, and accepting environment for participants.
3. Have discussions on non-weight related issues aimed at helping participants to feel better about themselves. Relate to participants as teens not only as overweight teens.
4. Make the program fun! Avoid sitting around too much and have lots of physical activity.
5. Offer out-of-classroom and out-of-school activities such as walking in the park, going to the YMCA as a group, playing softball, jazzercise classes, shopping together, and healthy picnics.
6. Include activities aimed at increasing nutritional knowledge and skills including food tasting, food preparation, and identification of low-cost foods.
7. Be sensitive to the social stigma associated with being overweight in program recruitment and planning.
8. Try to reduce technical barriers to participating by offering the program at convenient time, at low or no cost, and by providing transportation if necessary.
9. In program evaluation, assess improvements in self-perceptions; eating and exercise skills and behaviors; perceived social support from the group; in addition to weight loss and maintenance.
10. Involve youth in all stages of planning — prior to program implementation and throughout the program.

² Neumark-Sztainer, D. Factors associated with changes in physical activity: A cohort study of inactive adolescent girls, *Archives of Pediatric and Adolescent Medicine*, v157; p 803-10, August 2003 as quoted in Karl Miller, Changing Level so Physical Activity in Adolescent Girls; *American Family Physician*; v69(4), 2004.

³ Neumark-Sztainer, D. & Mary Story, M.. Recommendations from Overweight Youth Regarding School-Based Weight Control Programs. *The Journal of School Health*, v67, p428-33, December 1997.

PLANNING

An overview planning process resulted in specific Gateway program goals and outcomes, an evaluation design, and strategies for provider education. Minor modifications were made based on feedback from sites and the Year 1 evaluation report. The following table reflects the most up-to-date program requirements:

Program duration:	Two 6-12 week-sessions (Fall and Spring)
Participants per site:	20-30 youth age 10-15
Physical activity:	45 minutes of activity, 3 times a week
Nutrition education:	Culturally relevant cooking class with nutrition content, once a week.
Parent involvement:	Program orientation and nutrition workshop
Referrals:	Point person assigned to do intake on Kaiser Permanente referrals (Year 1 only)

The next phase of planning took place at the community level. Input from youth, parents and the community went into the design of a Gateway program specific to the needs and interests of participants at each Beacon Initiative site. Thus, each plan and the way it is implemented, while guided by the above program requirements, is also informed by the cultural and racial/ethnic mix of its participants as well as the existing structure of the overall host Beacon program.

The Beacon Centers received Gateway planning support from Team-Up for Youth and from Kaiser's nutritionists. A technical assistance workshop was held in the early fall of the first project year.

Implementation

PARTICIPANT RECRUITMENT

Recruitment of youth into the program occurs primarily at the eight Beacon Centers. Kaiser Permanente developed brochures for the program, which were distributed at the Beacon Centers and in the waiting rooms of Kaiser Permanente pediatric clinics alongside a large poster advertising the program. Programs also relied on promotion by program staff to enroll youth. Beacon staff have noted that word-of-mouth, referrals from siblings and cousins, and encouraging friends to join together were helpful recruitment strategies.

KAISER REFERRALS

One of the features of Gateway recruitment was the ability of Kaiser physicians to refer their young patients who they feel could benefit from the program directly to a Beacon Center close to or in their neighborhood. In Year 1 of Gateway a Kaiser health educator served as the point person to assist physicians in making these referrals. An administrative assistant at the San Francisco Beacon Initiative served as the point person in ensuring that all eight Beacon sites received their referrals from Kaiser. The Kaiser health educator position was vacated in Year 2, which largely eliminated the referral process.

In Year 1 a combined total of 46 Kaiser Permanente referrals were made to the Beacons: 27 in the fall and 19 in the spring. However, this resulted in only 11 youth actually enrolling in the program. A large number of these referrals were for ten year olds, who are generally in elementary school and ineligible for middle school programs. Communication with the family after the Kaiser referral is made was another difficulty encountered by program staff. Parents did not return repeated calls by staff attempting to follow-up on the referral. In the spring Kaiser provided additional contact information to the Beacon sites, which staff reported to find helpful. The experiences from Year 1 indicated the need for a good fit between the requirements of the program and characteristics of the youth being referred as well as strong communication between the individual coordinating referrals and the organization to which the individual is being referred.

PROGRAM LENGTH AND ROLLOUT OF COMPONENTS

Seven of the eight Beacon Initiative sites implemented their first Gateway session in Fall 2005 and the remaining site began Gateway programming in Spring 2006. Gateway was originally envisioned as a 6-8 week program. In the fall sessions, sites extended this up to 10 and even 12 weeks to parallel their regular sessions in timing and duration. Most of the sites implemented a 6-8 week program in the spring sessions.

All sites are required to implement both nutrition and fitness components. Every Gateway site is expected to offer a cooking class in which they seek to incorporate nutrition education. This is probably the activity that both presented the most logistical and planning challenges as well as the greatest opportunity for incorporating cultural traditions. Sports activities are a mainstay of any after school program. However, Gateway induces Beacon sites to explore more non-traditional fitness activities as a way to make exercise more accessible and attractive to a larger group. Beacon ability to put all Gateway components in place simultaneously varied from site to site. Some had both fitness and cooking/nutrition pieces in place, while others had started with one component and added the other when the required staff have come on board.

ENROLLMENT AND DEMOGRAPHICS

Data on enrollment and participant demographics were obtained from the web-based Contract Management System the Beacon Centers use to document client services. Staff from the Beacon Centers enter participant information and attendance onto this system. Each site identified Gateway programming with a special code. The evaluators obtained downloaded reports of all participants who attended one at least one of the Gateway classes. See Figure 1.

- Enrollment varied in each of the four sessions: 263 youth in Fall 2005, 401 in Spring 2006, 232 in Fall 2006, and 176 in Spring 2007. Gateway enrollment was affected by many of the same issues that impacted programming: changes in site location, changeover in site directors as well as the host community based agency that partners with the Beacon initiative, and school district policy changes in host schools.
- There were more male than female participants each session varying from 57% to 63% of the enrolled students.
- Although the program was initially targeted to the 11-15 age group, 24% of Fall 2005 participants were under the age of eleven at the beginning of the school year. As a result of the demand for a program of this type at the lower grade levels, Gateway was expanded to accept youth as young as ten years of age. The average age of participants was 12 years.
- The largest racial/ethnic groups served by Gateway are African-American and Asian followed by Latino. The specific distribution varied from somewhat by session.

Figure 1: Participant Demographics by Gateway Session

	Fall 2005 (n=263)		Spring 2006 (n=401)		Fall 2006 (n=232)		Spring 2007 (n=176)	
	N	%	N	%	N	%	N	%
Gender:								
Male	166	63%	227	57%	134	58%	112	64%
Female	97	37%	173	43%	98	42%	61	35%
Age (average)	11.7 years		11.8 years		12.2 years		11.8 years	
Race/ethnicity:								
African-American	94	36%	166	41%	53	23%	54	31%
Asian	99	38%	102	25%	102	44%	44	25%
Hispanic/Latino	24	9%	57	14%	33	14%	40	23%
Pacific Islander	19	7%	38	10%	11	5%	24	14%
White	7	3%	6	1%	14	6%	7	4%
Other/multiracial	20	7%	32	8%	19	8%	7	4%
Beacon site:								
Bayview	68	26%	151	38%	36	15%	15	9%
Chinatown	36	14%	25	6%	11	5%	9	5%
Mission	23	9%	34	8%	37	16%	14	8%
OMI/Excelsior	14	5%	27	7%	18	8%	22	13%
Richmond Village	24	9%	26	6%	28	12%	11	6%
Sunset Neighborhood	57	22%	67	17%	81	35%	30	17%
Visitacion Valley	41	15%	35	9%	21	9%	48	27%
Western Addition	---	---	36	9%	0	0%	27	15%

Evaluation Methodology

The Gateway to Fitness evaluation addresses both process and outcome questions through a variety of data collection methods.

PROCESS EVALUATION

The process component of the evaluation provides an assessment of who the program has served and program implementation issues including participant satisfaction. Sources of data include the Contract Management System the Beacon Centers use to document client services as well as phone check-ins with project directors. In Year 1 the evaluation also conducted parent interviews and participant satisfaction focus groups.

OUTCOME EVALUATION

The outcome component of the evaluation is designed to measure the impact the program has on participants and the extent to which the program is meeting its goals and objectives.

- *Pre- and Post-tests:* Instruments to collect self-reported impressions, attitudes, and behavior were administered at the beginning of program participation and at the end of each session, to ascertain if changes have occurred.
- *Follow-up Survey:* To measure the long-term impact of the program, a six-month follow-up survey was administered to youth who participate in the fall sessions (Year 1 and Year 2) and were still enrolled in the Beacon in the spring, though not necessarily enrolled in the Gateway program itself.

Each program sites came up with different names for Gateway. Because youth may know their Gateway program by a different name it was generically referred to in the surveys as "your Beacon afterschool fitness program."

DATA ANALYSIS

Only participants with matched pre and posttests were included in the resulting dataset (N=292). Requiring both a matched pre and posttest assures that the individual was present for the entire session. Although youth can participate in Gateway for multiple sessions a participant was represented only once (their first session) in this dataset for analysis purposes. Thus, if a participant takes tests in both the fall and spring we will use the assessment from the fall, their first Gateway experience. Also included in this dataset are 82 follow-up assessments of fall participants.

For each data item only those respondents who answer the question at both the pretest and posttest are included in the analysis. This assures maximum comparability of results. Frequency distributions with percentages are provided. For this reason the totals for an item between pretest and posttest will be the same. Because not all respondents answered each question the totals will vary from item to item. In addition some questions were added in Year 2 based on the experiences from Year 1. These items will also have smaller totals.

Statistically significant differences of proportions in categorical variables are tested using the z-test (Bonferoni method, $p < .05$).

Findings

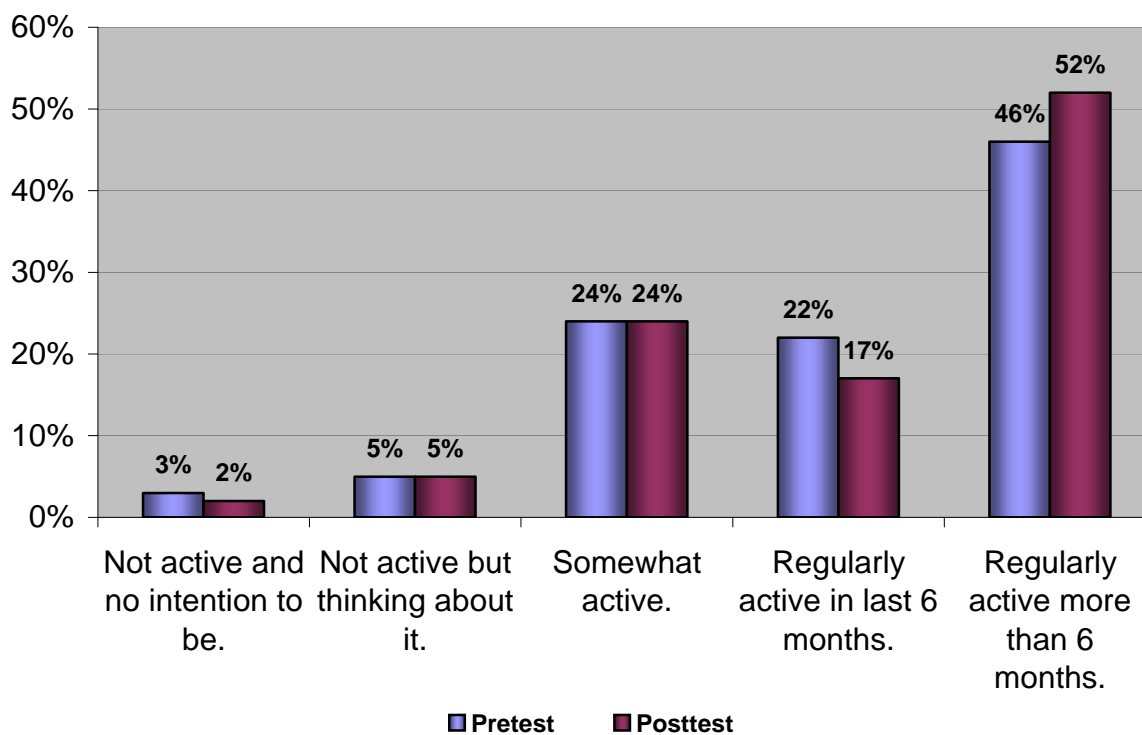
PHYSICAL ACTIVITY PRACTICES

The goal of Gateway is to increase fitness levels, particularly for those who are inactive outside of their school physical education classes. To establish their current activity level and interest to change participants were asked to select the statement that best describes them:

- a) "I am not physically active and do not intend to become active."
- b) "I am not physically active, but I am thinking about starting."
- c) "I am somewhat physically active, but not on a regular basis."
- d) "I am regularly physically active but have only been so within the past six months."
- e) "I am regularly physically active and have been for longer than six months."

Self-reported baseline activity levels were high for the majority of Gateway participants, with 68% of youth on the pretest and 69% on the posttest reporting that they are regularly physically active either in the last six months or for more than six months. There was a small net shift of six percentage points of youth who were regularly active in the last 6 months to regularly active more than 6 months. See Figure 2.

Figure 2: Physical Activity and Intention to Change (N=268)



Recent physical activity was measured for two time periods, the first being the number of hours they were physically active outside of their PE class the previous day. **Forty-two percent of pretest respondents reported they were active two or more hours, and on the posttest that group increased to 52%**, a statistically significant increase ($p < .05$). See Figure 3.

Key Finding: Physical activity increased among Gateway participants.

Figure 3: Physical Activity Yesterday

Question	Response	Pretest		Posttest	
		Number	Percent	Number	Percent
<i>How many hours were you active yesterday?</i>	Less than two hours*	166	58.2%	138	48.4%
	Two hours or more*	119	41.8%	147	51.6%
	Total	285	100.0%	285	100.0%

The second measure was the number of times in the past week they were physically active outside of school PE classes. Physical activity was classified into three types based on the amount of work required: a) Strenuous - soccer, jogging, aerobic dancing, etc; b) Moderate – walking quickly, martial arts, dancing; and c) Mild – yoga, walking slowly, bowling. Responses were banded into three categories for analysis. Some respondents provided extremely high numbers making averaging the numbers a less accurate approach. Categories created for analysis were: 0-4 times, 5-9 times, and 10 times or more. The number of youth exercising four times or fewer decreased significantly for each form of exercise ($p < .05$). The number exercising 5-9 times also increased for all forms and for strenuous and mild exercise this difference was statistically significant ($p < .05$). The greatest difference was seen in youth engaging in mild forms of exercise. The proportion of 5-9 times in the past week increased from 35% to 53% while those exercising 0-4 times decreased from 36% to 24%. Those exercising 10 or more times decreased slightly. Figure 4.

Figure 4: Physical Activity in Last Week

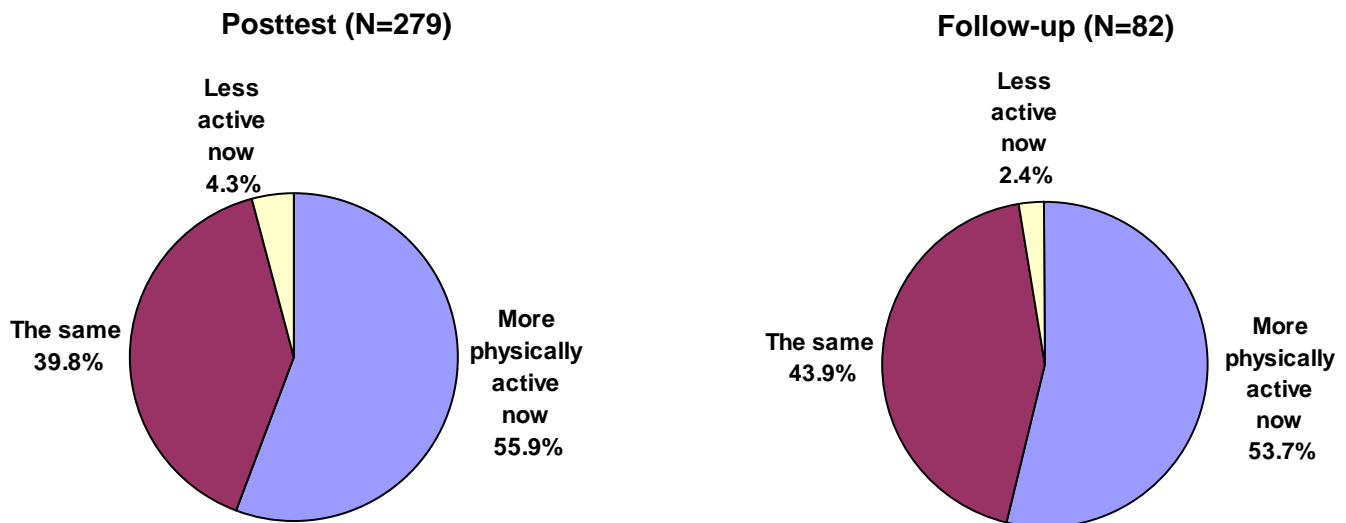
Question	Response	Pretest		Posttest	
		Number	Percent	Number	Percent
<i>Mild exercise in last week.</i>	0-4 times*	73	36.3%	49	24.4%
	5-9 times*	70	34.8%	107	53.2%
	10 times or more	58	28.9%	45	22.4%
	Total	201	100.0%	201	100.0%
<i>Moderate exercise in last week.</i>	0-4 times*	86	41.7%	66	32.0%
	5-9 times	76	36.9%	95	46.1%
	10 times or more	44	21.4%	45	21.8%
	Total	206	100.0%	206	100.0%
<i>Strenuous exercise in last week.</i>	0-4 times*	82	38.7%	58	27.4%
	5-9 times*	84	39.6%	113	53.3%
	10 times or more	46	21.7%	41	19.3%
	Total	212	100.0%	212	100.0%

* Bold text indicates statistically significant difference in proportions between pretest and posttest (p<.05).

Key Finding: Gateway participants continue to be physically active 6 months after the program.

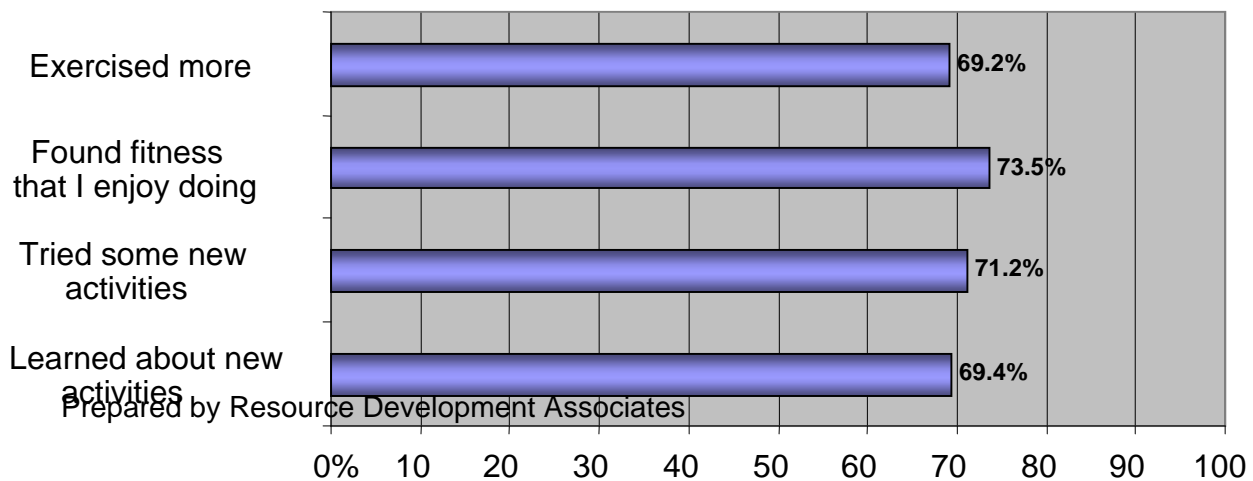
Self-reported retrospective assessment of the impact of Gateway on activity levels supported these finding further. One-half of youth (56%) reported on the posttest that they are more active now as compared to before they started their fitness program. **This impact appears to be sustained as 54% of youth at follow-up again reported that they are more physically active now.** See Figure 5.

Figure 5: Physical Activity Now as Compared to Before Gateway



One of the objectives of Gateway was to introduce youth to a variety of fitness activities. At the posttest participants were asked to what extent their Beacon fitness program helped them learn about and try new fitness activities. The percentage of respondents who responded *some* or *a lot* (as opposed to *not at all* or *a little*) are shown in Figure 6. Results indicate that the program was largely successful in this endeavor as the large majority of youth responded that at their Beacon they had found fitness activities they enjoy doing (74%), tried new activities (71%), learned about new fitness activities (69%), and exercised more (69%).

Figure 6: Since Participating in the Beacon Afterschool Fitness Program, I have . . . (percent of youth responding some or a lot to fitness items)



PHYSICAL ACTIVITY BY BODY MASS INDEX RISK

Body Mass Index (BMI) is a number calculated from a child's weight and height. BMI is a reliable indicator of body fatness for most children and teens. BMI does not measure body fat directly, but research has shown that BMI correlates to direct measures of body fat. The English formula for calculating BMI is: $\text{Weight in pounds} \div \text{Height in inches} \div \text{Height in inches} \times 703 = \text{BMI}$.⁴

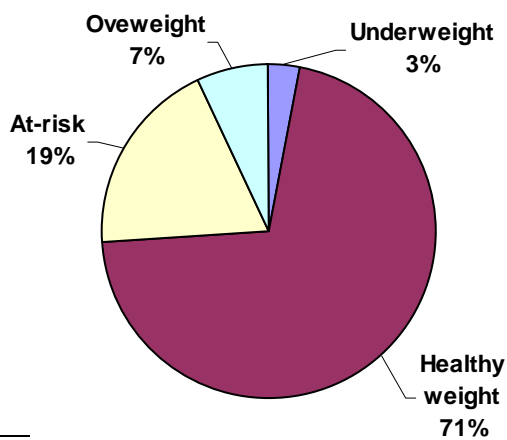
After BMI is calculated for children and teens, the BMI number is plotted on the CDC BMI-for-age growth charts (for either girls or boys) to obtain a percentile ranking. Percentiles are the most commonly used indicator to assess the size and growth patterns of individual children in the United States. The percentile indicates the relative position of the child's BMI number among children of the same sex and age. The growth charts show the weight status categories used with children and teens (underweight, healthy weight, at risk of overweight, and overweight). BMI-for-age weight status categories and the corresponding percentiles are shown in the following table.

Weight Status Category	Percentile Range
Underweight	Less than the 5 th percentile
Healthy weight	5 th percentile to less than the 85 th percentile
At risk of overweight	85 th to less than the 95 th percentile
Overweight	Equal to or greater than the 95 th percentile

Sites were asked to report body mass index (BMI) percentiles at the time of program entry and received assistance with this from Kaiser staff. Because BMI was not intended for use as an outcome for Gateway this information was not collected again.

The process for collecting this information improved greatly over the course of the project. Of the 292 records in the dataset on which this report is based we have BMI's for 197 youth. Of those, 52 (26%) met the percentile cutoff for either being at-risk or are currently considered overweight, 71% are of healthy weight, and 3% are underweight. See Figure 7.

Figure 7: BMI Weight Status Category at Pretest (N=197)



⁴ http://www.cdc.gov/nccdphp/dnpa/bmi/childrens_BMI/about_childrens_BMI.htm

This evaluation sought to determine if Gateway is equally effective for those who are overweight or at-risk for being overweight as compared to participants of healthy weight levels. For most of the physical activity indicators youth in both groups saw improvements, though not always to the same degree.

Key Finding: Gateway is effective for participants who are at healthy and at-risk weight levels, but to a different degree.

- The proportion of at-risk+ youth who exercised two or more hours the previous day increased though not to the same extent as the healthy weight youth. See Figure 8.

Figure 8: Physical Activity Yesterday by BMI Status

	HEALTHY/UNDERWEIGHT				AT-RISK+			
	Pretest		Posttest		Pretest		Posttest	
	N	%	N	%	N	%	N	%
<i>How many hours were you active yesterday?</i>								
Less than two hours	87	60.4%	68	47.2%	25	50.0%	22	44.0%
Two hours or more	57	39.6%	76	52.8%	25	50.0%	28	56.0%
Total	144	100.0%	144	100.0%	50	100.0%	50	100.0%

- Increases in mild and moderate exercise 5-9 times in the last week increased greatly for both BMI groups. See Figure 9.
- Change in strenuous exercise is the indicator for which the two BMI groups diverged. Healthy weight youth increased in the 5-9 times category while at-risk+ decreased in this form of exercise.

Figure 9: Physical Activity in Last Week by BMI Status

	HEALTHY/UNDERWEIGHT				AT-RISK+			
	Pretest		Posttest		Pretest		Posttest	
	N	%	N	%	N	%	N	%
<i>Mild exercise in last week.</i>								
0-4 times	34	29.8%	26	22.8%	12	34.3%	10	28.6%
5-9 times	47	41.2%	64	56.1%	14	40.0%	21	60.0%
10 times or more	33	28.9%	24	21.1%	9	25.7%	4	11.4%
Total	114	100.0%	114	100.0%	35	100.0%	35	100.0%
<i>Moderate exercise in last week.</i>								
0-4 times	43	36.8%	31	26.5%	19	51.4%	16	43.2%
5-9 times	46	39.3%	57	48.7%	13	35.1%	18	48.6%
10 times or more	28	23.9%	29	24.8%	5	13.5%	3	8.1%
Total	117	100.0%	117	100.0%	37	100.0%	37	100.0%
<i>Strenuous exercise in last week.</i>								
0-4 times	41	35.0%	25	21.4%	10	26.3%	15	39.5%
	51	43.6%	67	57.3%	18	47.4%	17	44.7%

5-9 times	25	21.4%	25	21.4%	10	26.3%	6	15.8%
10 times or more	117	100.0%	117	100.0%	38	100.0%	38	100.0%
Total								

GYM MEMBERSHIP

Membership and attendance at a gym was seen as a path to continued physical activity upon graduation from Gateway. Toward that end the YMCA of

Key Finding: Many Gateway participants have not taken advantage of the free gym membership.

San Francisco offered a free youth and adult membership to each participant completing the Gateway to Fitness program. **Of this sample of matched pre and posttest respondents 13 youth increased their gym membership representing an increase of almost five percentage points.** Fifteen of the 76

youth surveyed at follow-up maintained a membership. Twelve youth also confirmed at follow-up that their parents joined the YMCA (Figure 10).

Figure 10: Gym Membership

	Pretest		Posttest		Follow-up	
	N	%	N	%	N	%
<i>Do you belong to a fitness club or gym?</i>						
Yes	68	24.6%	81	29.3%	15	19.7%
No	208	75.4%	195	70.7%	61	80.3%
Total	276	100.0%	276	100.0%	76	100.0%
<i>Did you parent join the YMCA? (asked at follow-up only)</i>						
Yes	----	----	----	----	12	16.0%
No	----	----	----	----	44	58.7%
Don't know	----	----	----	----	19	25.3%
Total	----	----	----	----	75	100.0%

During focus groups conducted at the end of the fall session of Year 1 some youth stated that they were very interested in the YMCA memberships for access to swimming pools. This was seconded in the parent interviews. However, others commented that they are unlikely to go to a gym after school as that would conflict with the time they spend in their Beacon program. This is a likely explanation for at least part of the lower than expected change in gym membership. It was suggested by Gateway staff that High School students might be more likely to use a YMCA membership than Middle School students.

Parents interviewed during the first year were very interested in adult YMCA memberships. Some said that they would like to join a gym but are hindered by the expense. However, in the fall of the Year 1 only one of the six parents interviewed reported having received information on the availability of the free gym membership.

FOOD SELECTION AND PREPARATION- ATTITUDES AND SKILLS

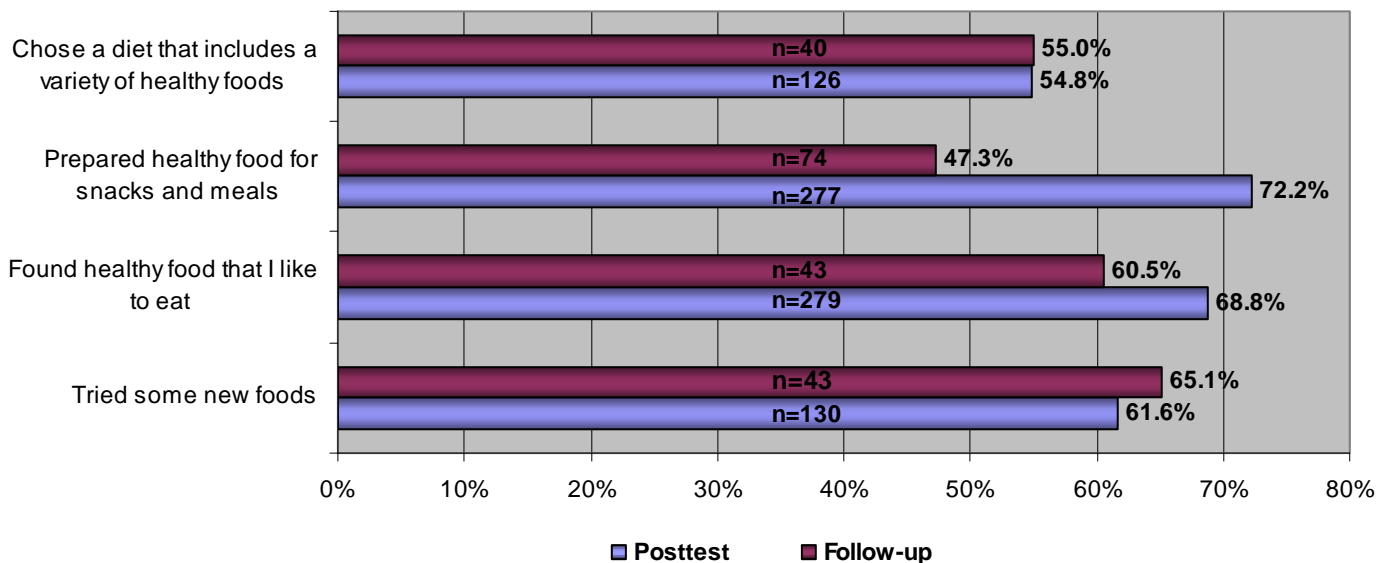
The Gateway to Fitness Program established a set of nutritional messages to be addressed by all of the sites. Activities reinforced these important food selection, preparation and consumption attitudes and skills. The goal is for youth to consider selecting a variety of foods and eating healthy as valued and integral to their lifestyle.

When reflecting back on the value of the program, a good portion of participants felt that it did have a positive impact on their eating. At the posttest and at follow-up participants were asked to what extent their Beacon fitness program helped them to prepare and try new foods. The percentage of respondents who responded *some* or *a lot* (as opposed to *not at all* or *a little*) are shown in Figure 11.

Many participants did attribute improved nutritional practices to Gateway. Results indicate that the program was largely successful in introducing their nutritional message as the majority of youth responded that since participating in their Beacon Afterschool Fitness Program they had tried some new foods (62% at posttest; 65% at follow-up) and found healthy food that they liked to eat (69% at posttest; 60% at follow-up). A greater proportion at the posttest agreed a lot or some that they have prepared healthy food for snacks and meals (72% at posttest, 47% at follow-up). A little over half agreed that since participating in their Beacon they chose a diet that includes a variety of healthy foods (55% at both posttest and follow-up).

Key Finding: Gateway was successful in introducing nutritional messages to the majority of youth.

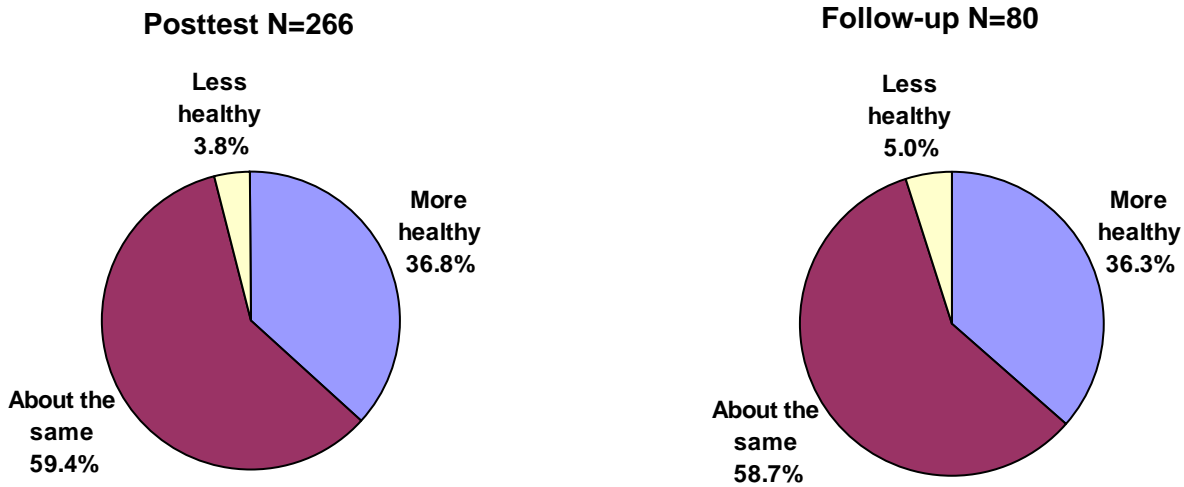
Figure 11: Since Participating in the Beacon Afterschool Fitness Program, I have . . .
(percent of youth responding *some* or *a lot* to nutrition items)



At the posttest and follow-up survey youth were asked, “Compared to before you started your Beacon Afterschool Fitness Program are your eating habits now more healthy, about the same, or less healthy?” Thirty-seven percent of posttest respondents at the posttest and 36% at follow-up reported that compared to before they started their Beacon Afterschool Fitness

Program their eating habits are more healthy. A little over half of respondents felt it was the same. See Figure 12.

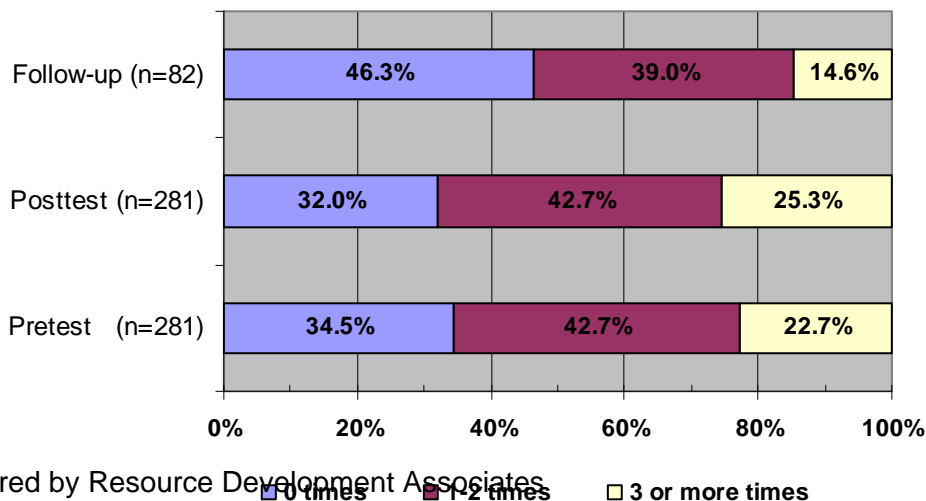
Figure 12: Eating Habits as Compared to Before Gateway



Students shared that they liked the cooking classes and particularly enjoyed bringing the recipes home and cooking for their families. This was a consistent comment from parent interviews and in participant focus groups. However, staff reported that students still wanted to eat “unhealthy” foods.

The Kaiser nutrition curriculum recommends eating fast food no more than two times a month. As shown in Figure 13 below, self-report of fast food consumption is low at baseline with 77% of pretest respondents reporting eating fast food two or fewer times in the last week and changed little at posttest. Notably, at follow-up nearly half (46%) of respondents reported not having eaten fast food at all in the last week. However, the subgroup of 82 youth who formed the follow-up group had lower fast food consumption at the pretest that the overall group – 85% reporting eating fast food two or fewer times in the last week.

Figure 13: Fast Food Consumed in Last Week



Gateway activities are intended to teach about unhealthy foods to avoid and healthful foods to consume. A major theme is eating a variety of healthy foods. At the pretest and posttest assessment youth were asked to indicate the number of times in the previous day they consumed items from specific food categories. There was very little movement in food consumption from pre to posttest (Figure 14). The change from pre to posttest for servings of whole grains was the only one to have a statistically significant change ($p < .05$). It is notable that on average youth are drinking a combination of three servings of soda and other sweetened drinks combined. Consumption of fried food is also high with one-quarter of respondents reporting three or more servings in the previous day. The average number of servings for fruit and vegetables was consistent with the recommended two or more servings per day.

Key Finding: Consumption of soda & other sweetened drinks and fried food continues to be high among participants.

Figure 14: Food Consumption Yesterday

<i>(recommended servings/day)</i>		0 times	1-2 times	3-4 times	5+ times	Avg
Milk, yogurt, cheese or tofu (3)	pre	16% (44)	46% (128)	23% (65)	15% (42)	2.17
	post	16% (45)	46% (127)	19% (53)	19% (54)	2.28
Fried foods (0)	pre	31% (85)	43% (118)	16% (43)	10% (26)	1.60
	post	27% (72)	50% (135)	15% (42)	8% (23)	1.68
Fruit (2)	pre	7% (20)	42% (111)	24% (65)	27% (71)	2.75
	post	9% (24)	33% (88)	38% (101)	20% (54)	2.81
Vegetables and salad (2.5)	pre	11% (30)	44% (119)	25% (68)	19% (52)	2.50
	post	13% (34)	42% (112)	29% (78)	17% (45)	2.49
Whole grain bread, pasta (5-6 all grains)	pre	14% (36)	39% (113)	26% (64)	21% (59)	2.51
	post	6% (16)	36% (98)	36% (97)	22% (61)	2.87
Lean meat, beans, nuts, fish (4-5)	pre	16% (44)	41% (110)	27% (72)	16% (45)	2.35
	post	13% (36)	44% (118)	30% (81)	13% (36)	2.40
Soda (0)	pre	37% (99)	33% (88)	16% (42)	14% (38)	1.71
	post	29% (78)	40% (107)	17% (46)	14% (36)	1.81
Juice, other sweetened drink (1)	pre	23% (62)	38% (100)	23% (62)	16% (42)	2.13
	post	28% (74)	36% (96)	20% (53)	16% (43)	2.04
Water	pre	4% (12)	21% (57)	23% (63)	52% (140)	3.71
	post	5% (13)	22% (61)	26% (70)	47% (128)	3.59

SUPPORT FOR CONTINUED PHYSICAL ACTIVITY AND HEALTHY EATING

One of the core goals of Gateway is to foster parental support and involvement. The great majority of students shared that their families are supportive of their efforts to eat healthy and be physically active. The baseline level of support from families was high and increased somewhat during the program. **At the posttest an overwhelming majority of youth, 83%, said that it was very much or pretty much true that their family helps them to eat healthy foods and**

Key Finding: Families are supportive of participant's efforts to eat healthy and be physically active.

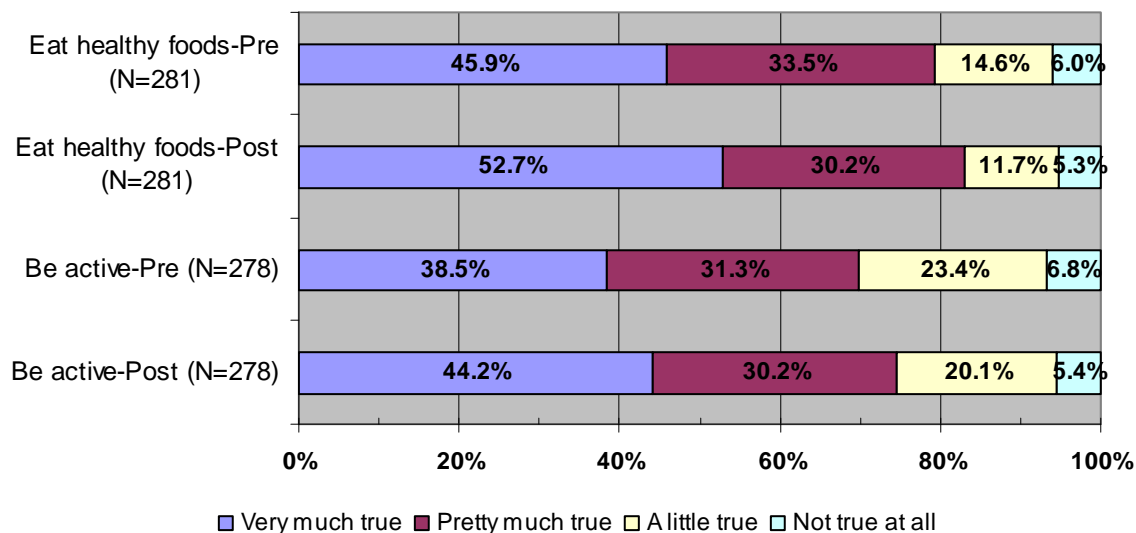
74% were supportive of their being active. See Figure 15. A few students were able to identify some specific changes in their family's food preparation such as using less oil. Interviews with parents during Year 1 indicate that they are very aware and supportive of efforts of the program to improve nutrition and increase physical activity. Some of the comments from parents were as follows:

"We are trying to stay away from chips, not buying certain things (junk food) anymore."

"We have a treadmill and now the family takes turns using it."

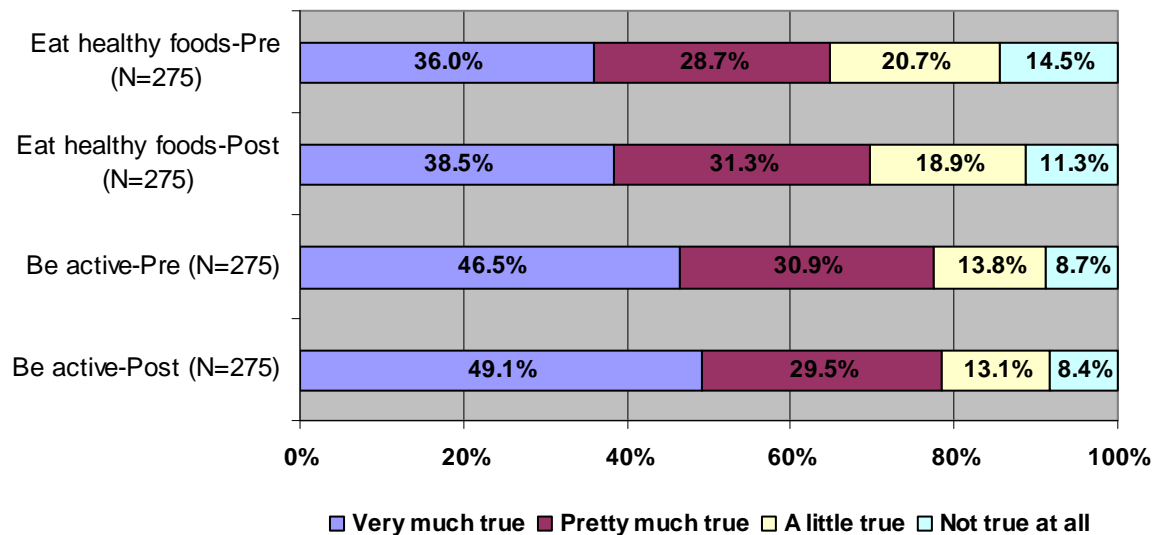
These strong indicators emerge despite the difficulties many sites had in implementing the family component of the program, which sought to foster parental support and involvement through joint activities and parent-focused events

Figure 15: Family Support: My family helps me to . . .



Participants also found help from Beacon staff. From the beginning youth perceived strong support from staff for fitness and nutrition goals and this was sustained during the program. At the posttest 70% of youth felt it was *very much or pretty much true* that adults at their Beacon help them to eat healthy foods and 79% were supportive of their being active. See Figure 16.

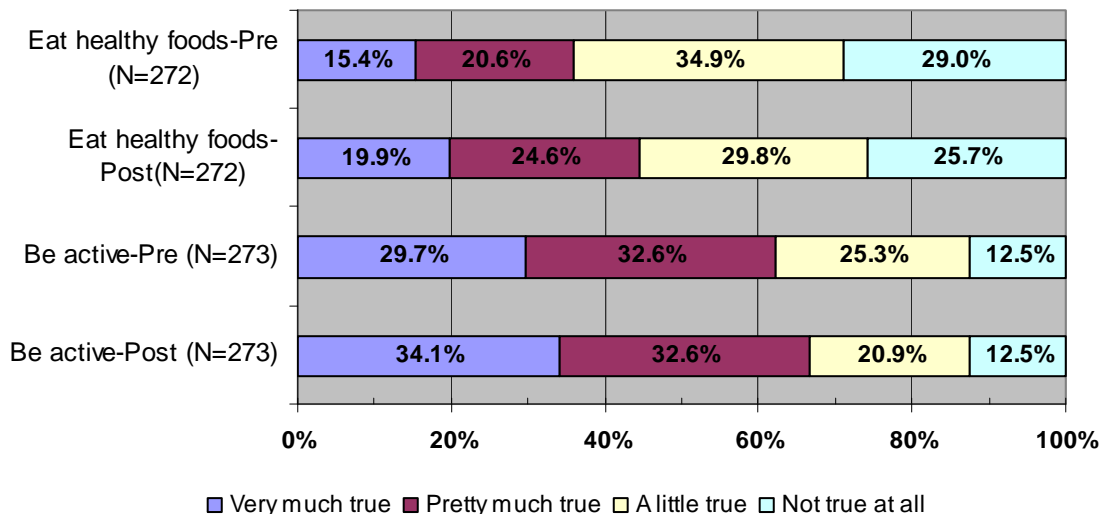
Figure 16: Beacon Support: Adults at my Beacon help me to . . .



Support from friends was not nearly as strong as that from family and staff. A little less than half (45%) felt at the posttest that it was *very much* or *pretty much true* that friends help them to eat healthy and 67% thought they received help from friends to be active. See Figure 17.

Key Finding: Peers are the least supportive of participant's efforts to eat healthy.

Figure 17: Support from Friends: I have friends who help me to . . .



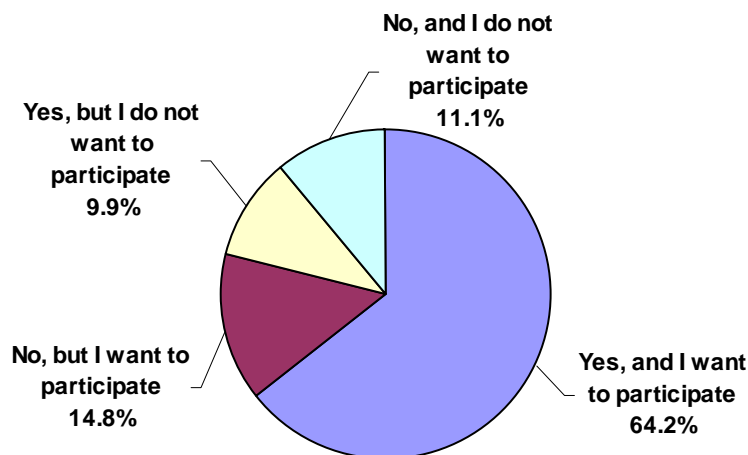
Three important findings from the posttest point to additional asset building benefits of the program:

- Sixty-nine percent of posttest respondents agreed *a lot* or *some* that they had made new friends at Gateway.

- Seventy-three percent of participants agreed *a lot* or *some* that their Beacon Afterschool Fitness Program has helped them to feel better about themselves.
- Seventy-seven percent of youth report that youth participants treat each other with respect all or most of the time.

In addition, of youth who completed a follow-up survey 79% were either current Gateway participants having re-enrolled or wanted to participate indicating a strong level of general satisfaction with the program. See Figure 18.

Figure 18: Participation in Gateway at Follow-up



IMPACT ON FAMILY'S FITNESS LEVEL AND NUTRITIONAL HABITS

An indirect but intended outcome of Gateway is that as families learn about Gateway and grow in their support of their child's efforts to improving their eating habit and increase physical activity levels that their own nutrition and activity levels will improve. On the posttest and follow-up survey we asked youth about their family's purchase and consumption of food as well as activity levels since they began participating in the program.

From the perspective of many youth participants, family purchasing and eating habits changed as a result of participation in Gateway. When asked if their family bought healthier food at the store, 66% felt this was *very much or pretty much true* on the posttest and 51% agreed on the follow-up survey. Sixty-one percent on the posttest indicated that it was *very much or pretty much true* that their family has been eating healthier food. One half, 51%, of those on the follow-up survey felt that their family was eating healthier food. The impact on family fitness levels is more modest. Forty-five percent of posttest and 36% of survey respondents felt that it was *very*

Key Finding: Family food purchases and eating habits were perceived to have changed more than family fitness levels as a result of participation in Gateway.

much or pretty much true that their family has been more active since they participated in Gateway. See Figure 19.

Figure 19: Impact on Family Fitness and Nutrition

<i>Since participating in the Beacon Afterschool Fitness Program . . .</i>				
	Posttest		Follow-up	
	N	%	N	%
<i>My family has bought healthier food at the store.</i>				
Very much true	41	33.3%	19	23.5%
Pretty much true	40	32.5%	22	27.2%
A little true	20	16.3%	22	27.2%
Not true at all	22	17.9%	18	22.2%
Total	123	100.0%	81	100.0%
<i>My family has been eating healthier food.</i>				
Very much true	41	33.1%	13	16.3%
Pretty much true	35	28.2%	28	35.0%
A little true	29	23.4%	20	25.0%
Not true at all	19	15.3%	19	23.8%
Total	124	100.0%	80	100.0%
<i>My family has been more physically active.</i>				
Very much true	23	18.3%	7	8.6%
Pretty much true	34	27.0%	22	27.2%
A little true	41	32.5%	29	35.8%
Not true at all	28	22.2%	23	28.4%
Total	126	100.0%	81	100.0%

Discussion

SUMMARY OF FINDINGS

The Gateway to Fitness program provides nutrition and physical fitness programming to elementary and middle school youth in eight San Francisco Beacon afterschool sites. Many students entered the program with positive attitudes toward being physically active and eating healthy. Gateway benefits even these youth by providing opportunities to be physically active as well as offering hands-on lessons in healthy food preparation.

Selected highlights of findings are presented below.

Physical Activity

- Many participants entered the program with a high level of self-reported physical activity.
- The number of times participants exercised in the previous week increased from pre to posttest for strenuous, moderate and mild types of activities. The percentage of participants exercising two or more hours the previous day also increased. These were statistically significant changes.
- One-quarter of participants for whom BMI percentile was available were either at-risk or were overweight. These youth also realized increases in physical activity.
- On the posttest and follow-up surveys a little over half of youth stated they were more physically active than before they started Gateway.

Healthy Eating

- On the posttest nearly the solid majority of youth felt that Gateway had helped them to find healthy food that they liked to eat and learn to prepared healthy food for snacks and meals.
- Almost half of youth at follow-up report not eating fast food in the last week.

Support

- The great majority of students shared that their families are supportive of their efforts to eat healthy and be physically active.
- Friends were notably less supportive than were parents and Gateway staff for eating healthy and being physically active.
- The large majority of participants reported making new friends and feeling better about themselves as a result of the Gateway program.

Impact on Family

- Over half of youth reported on the posttest that their family was buying healthier food at the store and had been eating healthier since Gateway.

CHALLENGES AND RECOMMENDATIONS

Youth participants enjoyed the activities of the Gateway program as evidenced by comments on the surveys as well as re-enrollment rates in the program. One of the benefits of Gateway was its encouragement for seeking out new fitness activities other than traditional sports. Many of the sites were successful in introducing youth to fun activities. Some sites learned that they needed to develop gender specific programming to meet the needs of all

participants. Yet throughout the two years gender disparities in program enrollment continued with more boys being involved than girls.

Some Gateway sites also struggled with the family participation component. Although this is a challenging element to implement, a family approach to nutrition and fitness is the key to change in this age group. A recent study published in the *Journal of the American Medical Association* demonstrated the additional benefits of involving the family in behavioral change. In this study the group of youth in the program that provided additional family services reduced their BMI index while the comparison group, which received traditional weight management intervention experienced an increase in BMI.

With the increased media attention given to childhood obesity convincing parents to participate in quality programming may become easier. The strong support from families, particularly for healthier eating, as reported by participants is even more reason to bolster this Gateway component. It is also consistent with the Beacon Initiative's goal of increasing engagement with the community. However, sites need to creatively pursue a variety of avenues to convey this information (See San Francisco Beacon Initiative Caregiver Satisfaction and Participation Report). It is clear that what information has been conveyed to youth has trickled home to their families. This evaluation also pointed to how little youth can rely on their peers to support healthy eating habits.

Stronger changes were observed for outcomes related to physical activity than for nutritional practices. This may be reflective of the difficulty some sites experienced implementing this component. While some were able to conduct food preparation classes, others reportedly only provided healthy snacks. While that beneficial it is not adequate for teaching youth how to select healthy food and prepare their own snacks and meals. During Year 1 the Kaiser nutritionist and health educator providing support for Gateway developed a healthy nutrition and physical activity program curriculum designed specifically for youth age 8-12 years, *First Class Fitness (2006)*. This is a resource that sites can use to structure their nutritional messaging. Additional efforts to provide hands-on food preparation experiences for those sites which did not fully implement this component has value both for its value as an enjoyable and independence building activity for youth.

The Gateway to Fitness program was set up as a component of an existing eight-site comprehensive afterschool program. As such, challenges to Gateway implementation paralleled those of the overall program including, sometimes limited, access to facilities, modest funding (though Gateway received additional targeted funding for planning and implementation), as well as changes in staff and host agencies. Thus the reported changes are not those of a highly controlled abundantly funded experiment but of a true to life on-the-ground program. Despite these challenges Gateway demonstrated positive change in self-reported behaviors and high ratings of participant satisfaction. With additional targeted site-specific technical assistance and financial support as well as stability for those sites which have experienced many structural changes, it is likely that the impact of this program can be greatly increased. In addition, the current strategies by the Beacon Initiative to build capacity and improve the overall quality of individual Beacon Centers can only strengthen the Gateway Program.