



Holiday Trimmings Program Helps Participants Manage Weight During the Holiday Season

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Hearts Beat Back: The Heart of New Ulm Project is a collaborative partnership of Allina Hospitals & Clinics, the Minneapolis Heart Institute Foundation, the New Ulm Medical Center and the community of New Ulm.

Introduction and Program Description

The Heart of New Ulm Project (HONU) is a 10-year demonstration project aimed at reducing myocardial infarctions (MI) and modifiable heart disease risk factors in New Ulm, Minnesota. For more information, visit www.heartsbeatback.org.

In 2009, free heart health screenings were offered to all adult residents and held at worksites, the medical center, churches and other community venues. Participants completed a questionnaire and biometric measures (i.e., blood pressure, height, weight, waist circumference, fasting blood draw).

The 2009 screening results found that 73% of New Ulm's residents were either overweight or obese. These results prompted HONU to start a Community Health Challenge (CHC) program focused on helping residents lose weight.

Within the CHC, there are many components, including smaller challenges. One of the challenges in 2011 included *Holiday Trimmings*, an eight-week program focused on weight maintenance during the fall/winter holiday season. Registration was done in person at worksites, community settings, or online through the project's website.

Participants received weekly e-blasts with tips and resources for weight maintenance, or a packet of materials with the same information if they opted for non-electronic communication. For worksite participants, the program included weigh-in sessions.

Methods

All participants were required to complete a pre-program survey at enrollment. Community members self-reported their pre- and post-weight. Worksites were offered the option of having a HONU staff member onsite to conduct the pre- and post-weigh-in. Height for all participants was self-reported.

A total of 70 worksites were invited to participate: 12 participated in the program, 11 of those chose to have a HONU staff member conduct the onsite weigh-in (pre- and post-program).

Participants using the online materials were asked to do the surveys via Survey Monkey. Those not using the online materials filled out the pre-survey in person during registration and were mailed hard copies of the post-survey.

Analysis was conducted to compare people completing the program (indicated by post-survey) with those who did not (pre-survey). Among those who completed survey data, comparisons were done to examine changes in behavior with those who lost weight and those who did not. Analysis used frequencies and chi-squares to examine these data.

Data Charts

Table 1. Holiday Trimmings Enrollee Description and Comparison of Completers and Non Completers (pre-program survey data only)

	All Enrollees n = 509	Pre-program only n = 230	Pre- and Post-program (Completers) n = 279	P-Value*
Sex				
Males (%)	12.6	12.7	12.5	0.956
Females (%)	87.4	87.3	87.5	
Smoking				
Current (%)	5.4	4.9	5.8	0.019
Former (%)	38.8	32.4	44	
Never (%)	55.8	62.7	50.2	
Weight				
mean(sd) in lbs	176.6 (38.1)	175.7 (39.0)	177.3 (38.2)	0.592
BMI				
mean in kg/m ² (SD)	28.7 (5.8)	28.5 (6.1)	28.9 (5.6)	0.633
Obese: ≥ 30 (%)	33.5	33.2	33.7	0.341
Overweight: 25-29 (%)	35.1	32.3	37.4	
Healthy weight: < 25 (%)	31.4	34.5	28.9	
Fruit/ Veg Consumption (servings/day)				
Sufficient: ≥ 5 (%)	34.5	33.8	35.0	0.770
Insufficient: < 5 (%)	65.5	66.2	65.0	
Exercise: Meets minimum level of 150 minutes/ week at a moderate intensity equivalent				
Sufficient: ≥ 150 (%)	70.7	65.1	75.2	0.016
Insufficient: < 150 (%)	29.3	34.9	24.8	

*compares participants completing only pre-program survey with participants completing both pre- and post-program surveys

Table 2. Outcomes for Participants with Complete Pre- and Post-Program Data (n=279)

	Pre-survey	Post-survey	P-Value*
Weight			
mean(sd) in lbs	177.1 (38.1)	176.0 (37.8)	< 0.001
Lost (%)		51.7	
Maintained (%)		19.1	
Gained (%)		29.2	
Mean wt gained in lbs (min, max)		3.8 (0.6, 28.0)	
Mean wt lost in lbs (min, max)		-4.2 (-15, -0.6)	
Body Mass Index			
mean in kg/m ² (SD)	28.8 (5.6)	28.5 (5.5)	0.001
Obese: ≥ 30 (%)	33.7	31.0	0.152
Overweight: 25-29 (%)	36.4	39.9	
Healthy weight: < 25 (%)	29.8	29.1	

*compares pre- and post-survey measures for participants

Table 3. Change in Behaviors and Strategies for People who Lost Weight Compared to People Who Maintained or Gained Weight

	Lost weight (n=138)			Maintained or Gained weight (n=129)		
	Baseline	Post-Program	P-value	Baseline	Post-Program	P-value
BMI						
Mean (sd)	29.4 (6.0)	28.7 (5.8)	0.000	27.9 (5.1)	28.3 (5.1)	0.000
Normal	26.9	27.6		33.3	30.1	
Overweight	37.3	40.3		35.8	39.8	
Obese	35.8	32.1		30.9	30.1	
Fruit/ Veg Consumption (servings/day)						
Sufficient: ≥ 5 (%)	32.8	41.2	0.019	38.6	40.2	0.815
Insufficient: < 5 (%)	67.2	58.8		61.4	59.8	
Exercise: Meets minimum level of 150 minutes/week at a moderate intensity equivalent						
Sufficient: ≥ 150 (%)	70.8	75.4	0.238	79.8	76.6	0.541
Insufficient: < 150 (%)	29.2	24.6		20.2	23.4	
Weight Management Strategies (%)						
General Weight Management						
Self-weighing regularly	67.4	77.5	0.024	70.5	69.8	1.000
Tracking weight on a calendar	21	21	1.000	15.5	16.3	1.000
Tracking eating on a calendar	24.6	21	0.405	18.6	18.6	1.000
Physical Activity						
Scheduling exercise	48.6	53.6	0.360	48.1	51.2	0.572
Exercising with a friend or family	33.3	39.1	0.152	28.7	31	0.728
Signing up for an event	37	23.9	0.003	23.3	19.4	0.442
Tracking activity on a calendar	17.4	19.6	0.664	16.3	20.9	0.263
Doing seasonal sports	10.1	12.3	0.581	10.1	14	0.267
Incorporating exercise into daily activities (e.g., stairs)	65.2	69.6	0.461	69.8	65.1	0.377
Cooking Healthier						
Including more vegetables/fruits	80.4	82.6	0.678	84.5	86.8	0.664
Less salt	43.5	47.8	0.451	51.2	50.4	1.000
Less sugar	40.6	43.5	0.627	34.9	38.8	0.500
Whole wheat flour	25.4	25.4	1.000	24.8	26.4	0.856
Whole grain products	41.3	47.1	0.256	46.5	46.5	1.000
Using vegetable oil instead of butter	30.4	31.2	1.000	40.3	42.6	0.775
Lower-fat recipes	40.6	42	0.875	35.7	44.2	0.099
Eating Healthier						
Selecting foods low in calories/high in nutrients	55.1	59.4	0.430	54.3	52.7	0.871
Avoiding hidden calories in beverages	45.7	53.6	0.161	43.4	46.5	0.644
Avoiding appetizers at holiday parties	15.2	26.8	0.007	10.1	17.8	0.052
Portion control	60.9	75.4	0.003	65.1	66.7	0.871
Not skipping meals before a party	16.7	34.1	0.000	28.7	29.5	1.000
Not standing near the food table at a party	17.4	31.2	0.002	23.3	34.9	0.024

Results

Enrollment: 539 participants registered. Of these, 509 completed the pre-program survey. Participants were predominantly female (87%), and 68.8% were overweight or obese.

Retention: Participants who continued with the eight-week program (279 or 55% of enrollees) did not differ from those who dropped out (230 or 45% providing only a pre-program survey) based on weight, gender, fruit and vegetable consumption, or alcohol use. Those who completed the program had a higher percentage (75%) of sufficient exercise levels.

Weight outcomes: 70.8% either maintained (19.1%) or lost weight (51.7%). Weight outcomes were compared for those who enrolled through their worksite (n=95) and general community enrollees (n=172). Those enrolled through their worksite were more likely to lose weight (61% vs. 47%).

Strategies contributing to weight loss included: Not skipping meals before a party, portion control, not standing near a food table at a party, avoiding appetizers at holiday parties and self-weighing regularly. Those who lost weight had a significantly larger increase in daily fruit and vegetable consumption than those who maintained or gained weight.

Compared to those who maintained weight, those who lost weight during the program were more likely to have been overweight (BMI 1.5 points higher) and have lower levels of healthy behaviors at baseline.

Conclusions

While the program had low worksite enrollment, it retained 55% of the enrollees. The program was successful for the majority of enrollees who completed the program. Those enrolled at worksites exhibited more weight loss than those enrolling from the general community, indicating the program may be impacted by the weigh-in sessions and the social context of the worksites.

Weight management strategies that seemed most associated with weight loss focused on fruit and vegetable intake, eating behaviors and weight monitoring.

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