

## With Every Heartbeat is Life Pre/Post Test Results

# UAB Center for the Study of Community Health Evaluation and Assessment Unit



#### Introduction

The following report details the results of the My Health Habits Pre-and Post-tests completed by With Every Heartbeat is Life program participants across 11 participating congregations. A total of 124 pre-tests and 78 post-tests were completed and returned for analysis. For this reason, the following data is presented in terms of percentages rather than numbers, as presenting numbers would suggest false declines in results based on the lower number of post-tests completed compared to pre-tests.

The My Health Habits Pre- and Post-Tests consisted of five sections: Knowledge gain, Stages of Change, Actual Behavior Change, Confidence Change, and Program Feedback. Program Results are presented for each section below.

#### **Knowledge Gain**

Knowledge gain was measured by 21 knowledge-based questions pertaining to key workshop themes and facts. Overall scores showed a significant increase in knowledge in pre to post test. Results are provided for each question in the following table. For each question, a t-test was utilized to determine if changes in knowledge were considered statistically significant, meaning there is 95% probability that results reflect actual change and cannot be explained by chance. The following table provides the percentage of participants who correctly answered the question on the pre-test and post-test, and the Result column indicates whether the change is statistically significant.

Question	% Correct Pre	% Correct Post	Result
Q1/ Risk Factors for Heart	78.2	84.6	Increase not
Disease			significant
Q2/ Factors Affecting Blood	69.4	83.3	Increase not
Cholesterol			significant
Q3/ Risk Factors for Diabetes	71.8	75.6	Increase not
			significant
Q4/ Diabetes Symptoms	77.4	85.9	Increase not
			significant
Q5/ Stroke Signs	66.9	83.3	Significant increase in
			knowledge
Q6/ Heart Attack Signs	67.7	85.9	Significant increase in
			knowledge
Q7/ Heart Attacks True/False	75	83.3	Increase not
			significant
Q8/ Lowering Risk for Heart	85.5	88.5	Increase not
Disease			significant
Q9/ Smoking Cigarette Risk	77.4	80.8	Increase not

Question	% Correct Pre	% Correct Post	Result
			significant
Q10/ Ways to Lose Weight	89.7	90.3	Increase not
			significant
Q11/ Physical Activity	88.5	90.3	Increase not
Advantages			significant
Q12/ Serving Size of Cooked	48	63	Increase not
Vegetable			significant
Q13/Waist Measure of Woman	60.8	77.8	Significant increase
Q14/ Waist Measure of Man	26.7	31.9	Significant increase
Q15/ Physical Activity and	75.8	81.3	Increase not
Reducing Risk of Heart Disease			significant
Q16/ Blood Pressure	37.4	42.7	Increase not
Recognition Level			significant
Q17/ Blood Cholesterol Level	44.3	53.4	Increase not
Recognition			significant
Q18/ Fasting Blood Glucose	10.2	20.6	Increase not
Level Recognition			significant
Q19/ Drinking Alcohol and	61.5	84.2	Significant increase in
Blood Pressure			knowledge
Q20/ Secondhand smoke and	89.6	91	Increase not
Heart/Lung Disease			significant
Q21/ Reason for High Blood	92.1	92.7	Increase not
Pressure as Silent Killer			significant

#### **Stages of Change**

People act in different ways when they learn that they need to make changes to lower their chances of getting heart disease. Participants were presented with the following story and asked with which character they most related. Their responses indicate their readiness to implement behavior change, in accordance with the Stages of Change Model consisting of 5 stages:

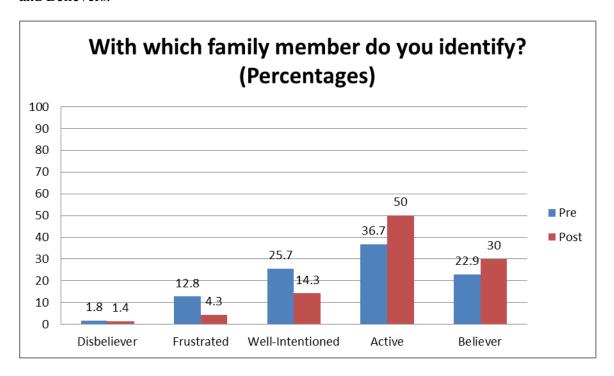
- 1. Precontemplation (in denial of need to change)
- 2. Contemplation (considering change)
- 3. Preparation (making plans and small changes)
- 4. Action (actively making changes)
- 5. Maintenance (maintaining change and avoiding relapse)

#### With Every Heartbeat is Life —the Harris Family

- a. Darnell: "I don't really care." [The Disbeliever] Darnell learns that he is at risk for heart disease, but he is not concerned about it. He gets upset when reminded about changing his unhealthy habits. He does not intend to make lifestyle changes for better health. "Nothing's going to happen to me."
- b. James: "I need to make changes, but I can't get started." [The Frustrated] James is frustrated because he's aware of his risk factors for heart disease but has been unable to control them. He feels trapped by life situations and wonders whether he can overcome the obstacles that prevent

- him from maintaining a heart healthy lifestyle. "Sometimes you can try as hard as you can, but if there's a brick wall standing between you and your goal, what can you do?" says James.
- c. Pam: "I am making plans." [The Well-Intentioned] Pam learns that she's at risk for heart disease and intends to take action, but every day she puts off making changes. She feels guilty because she knows she should take steps to improve her health. "Walking the walk is harder than talking the talk," says Pam.
- d. Ms. Diane: "I am taking action." [The Active] Ms. Diane (Grandma Harris) learns that she is at risk for heart disease and quickly draws an action plan. She gets information and attends classes to learn how to improve her health. Ms. Diane practices what she learns and feels optimistic and enthusiastic. She makes healthy lifestyle changes, sets reasonable goals, and helps others to do the same. "Once you know better, you owe it to yourself to do better," says Ms. Diane.
- e. Tina: "I stay on the healthy path." [The Believer] Tina is very motivated to make changes to improve her health. She knows it's easy to fall back to old habits. She makes plans to prevent setbacks, and she starts over again when necessary. Tina believes that she and her family can achieve a heart healthy lifestyle. She has a positive attitude towards life, asks for help when needed, and does not give up. "If I just believe it, then I can do it!" says Tina.

Results indicate a positive progression in stages of behavior change, however this change was not statistically significant. A decrease can be seen in the percentage of participants identifying as Disbeliever, Frustrated, and Well-Intentioned, and an increase in those identifying as Active and Believers.



#### **Participant Behavior Change**

The My Health Habits Pre/Post Test also assessed the frequency with which participants engage in health positive and negative health habits that are addressed in the With Every Heartbeat is Life Curriculum. The Pre/Post Test assessed the frequency Never/Almost Never, Sometimes, Most of the Time, All of the Time of ten (10) positive and seven (7) negative health behaviors. It should be noted that times when the increase is not significant, in some cases that may be due to the fact that many people were already practicing the healthy habit, leaving no room for significant change.

#### **Participant Behavior Change: Positive Behaviors**

Overall, the number of participants always/almost always engaging in positive behaviors significantly increased from pre- test to post-test. Results are provided for each question below.

Question	Result	
Question 1/ Servings of Fruit per day	Significant increase in positive behavior	
Question 2/ Servings of Vegetables per day	Significant increase in positive behavior	
Question 3/ More Vegetables over Meat	Increase not significant	
Question 4/ Bake or grill versus fry	Significant increase in positive behavior	
Question 5/ Reading nutrition facts	Significant increase in positive behavior	
Question 6/ Drain fat after cooking meat	Increase not significant	
Question 11/ Eating low/fat-free cheese/milk	Significant increase in positive behaviors	
Question 12/ Eating low/ fat- free salad dressing	Significant increase in positive behavior	
Question 13/ Exercise frequency (days per week)	Significant increase in positive behavior	
Question 14/ Asking People not to Smoke in Home	Increase not significant	

### **Participant Behavior Change: Negative Behaviors**

As a whole, the number of participants always/almost always engaging in negative behaviors significantly decreases for pre-test to post-test. Please note, a decrease in negative behaviors is the intended result and indicates program success. Results are provided for each question below.

Question	Result	
Question 7/ Drinking Regular Soda with Sugar	Decrease not significant	
Question 8/ Drinking Sugary Drinks	Significant decrease in negative behavior	
Question 9/ Buying Processed Meats	Decrease not significant	
Question 10/ Adding salt to food	Decrease not significant	
Question 15/ Smoking Cigarettes	Significant decrease in negative behavior	
Question 16/ Alcohol Frequency	Significant decrease in negative behavior	
Question 17/ Drinks of alcohol/ percentage	Decrease not significant	

#### **Habit Confidence Change**

The My Health Habits Pre/Post Test also asked participants to estimate their level of confidence in making specific healthy changes that were addressed in the curriculum. Overall, there was a statistically significant increase in confidence to implement healthy habits from pre- to post-test. Results for each habit are provided below.

Question	Result
Q18/ How confident are you in your ability to	Significant increase in confidence
cook heart healthy foods?	
Q19/ How confident are you in your ability to	Significant increase in confidence
read food labels to make healthier food	
choices?	
Q20/ How confident are you in your ability to	Significant increase in confidence
recognize the signs of a heart attack?	
Q21/ How confident are you in your ability to	Increase not significant
get our blood pressure checked once a year?	

#### **Participant Satisfaction with Program**

Finally, after completing the workshop series, participants were asked about their satisfaction with the WEHIL program and workshops. Results indicate that overall, participants were very satisfied with sessions. Results also suggest that participants would share the information learned with friends and family. Detailed results are provided below.

