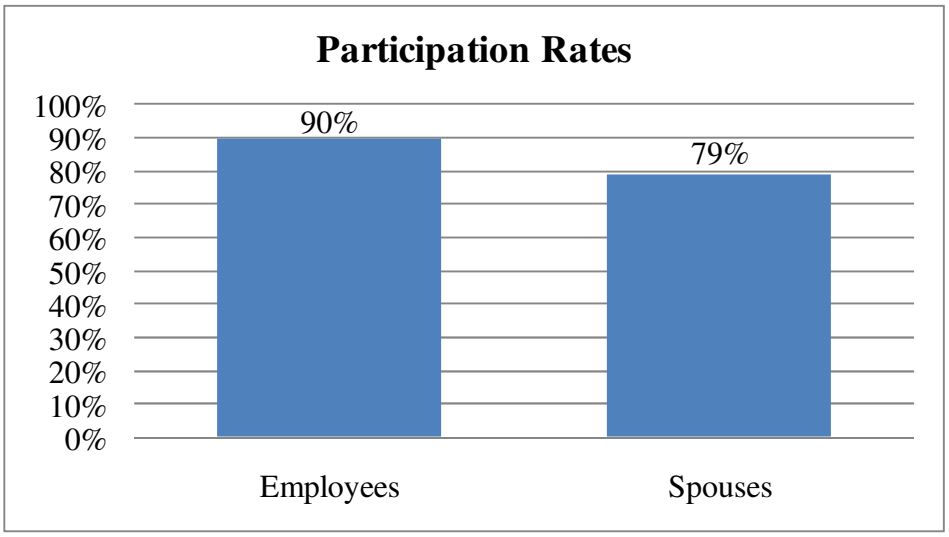
C. Evaluation Methodology:

Health Risk Assessment participation rates for eligible employees were analyzed over five years, from September 1, 2005 to September 1, 2010. Spouses became eligible starting in 2008. A total of 6,196 employees were included in this assessment over five years. Participation rates are illustrated in the chart below.

Figure 1. Participation Rates for Health Risk Assessment



Time frames defined from Time1 through Time5 are noted below:

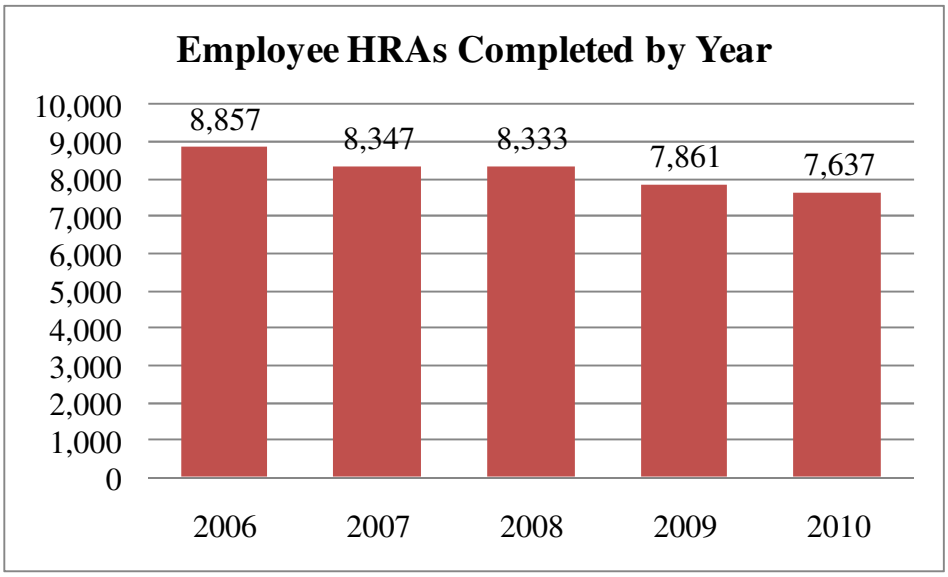
- Time1: September 1, 2005 to August 31, 2006
- Time2: September 1, 2006 to August 31, 2007
- Time3: September 1, 2007 to August 31, 2008
- Time4: September 1, 2008 to August 31, 2009
- Time5: September 1, 2009 to August 31, 2010

Risk factors assessed were:

- Blood pressure
- Body Mass Index (BMI)
- Cholesterol
- Depression
- Fitness
- Glucose
- Stress
- Tobacco use

Over the five years, periodic analyses were conducted to determine the prevalence of risk factors among employees and spouses as well as a multiple risk factor summary. The sample sizes for each time period are outlined in the chart below:

Figure 2. Number of Employees Who Completed an HRA by Year



It is important to note that there was a decrease in the eligible population as illustrated above in Figure 2. The reason for the decline in HRA's completed by eligible employees was due to a reduction in the workforce as a result of the economic downturn.

Risk factors, noted above, were assessed for 6,196 employees at all time intervals (Time1 through Time5). In addition, multiple risk factors were assessed for spouses between Time1 (September, 2007 to August, 2008) and Time3 (September, 2009 to August, 2010). Multiple risk categories included 0-4 risks, 5-6 risks, and 7 or more risks. Changes between Time1 and Time3 were recorded and statistically significant changes were found. Lastly, an assessment of the current HRA results was conducted for 2010 (Time5) and included 7,637 (87.9%) participants out of 8,691 eligible employees. This population was assessed on 14 risk factors based on their work schedule (days, shift work, and other) to determine which schedule had the lowest number of risks. The 14 risk factors included:

- Alcohol use
- Blood pressure
- Body Mass Index (BMI)
- Cholesterol
- Depression
- Fitness
- Fruit & vegetables
- Glucose
- Job satisfaction
- Life satisfaction
- Perception of health
- Seatbelt use
- Stress
- Tobacco use

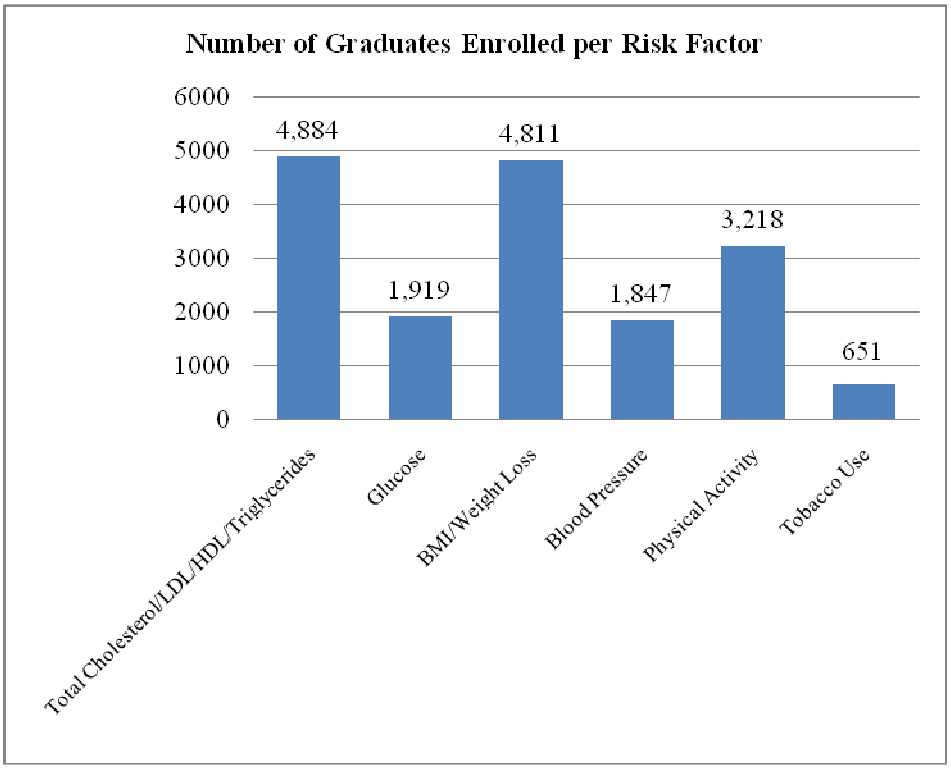
The HealthE Living program – onsite face-to-face coaching program was evaluated from 2003 to 2010 and included 5,827 Eastman HealthE Living Graduates. Graduates steadily increased over most years. Graduate rates ranged from 212 graduates (3.6%) in 2003 to 1,661 graduates (28.5%) in 2009 and then dropped slightly with 1,446 graduates (24.8%) in 2010. Overall there are 1,636 one-time graduates, 911 two-time graduates, 451 three-time graduates, 193 four-time graduates, 38 five-time graduates, and 9 six-time graduates. In summary, 1,602 participants

repeated the program and addressed multiple risks or needed additional help with their primary risk factor. Over seven years 5,827 graduates went through the program. The following health conditions were addressed in the program:

- Total cholesterol
- HDL cholesterol
- LDL cholesterol
- Triglycerides
- Glucose
- BMI
- Systolic blood pressure
- Diastolic blood pressure
- Physical activity
- Weight loss

Of the 5,826 total graduates, 4,884 were enrolled for total, LDL, HDL cholesterol, and/or triglycerides; 1,919 were enrolled for glucose; 4,811 were enrolled for BMI and/or weight loss; 1,847 were enrolled for blood pressure; 3,218 were enrolled for physical activity; and lastly, 651 were enrolled for tobacco use. A breakdown of graduates and risks are noted below.

Figure 3. Number of Graduates Enrolled for Each Health Condition



Throughout the HealthE Living Program analysis a multiple risk summary was conducted to determine the average number of risks (health conditions listed above) from the beginning of the program to completion. A statistically significant difference was found, meaning that a participant had a 95% chance of being a successful completer if they adhered to the program and followed the suggested protocol. Number of risks was divided into seven categories:

- 0 risks
- 1 risk
- 2 risks
- 3 risks
- 4 risks
- 5 risks
- 6 risks

In addition, each health condition (noted above) enrollment was examined to determine how many graduates either lowered their risk status or stayed in the low-risk category. Risk status included: low, moderate, and high. All health conditions were assessed overall and in the current year, 2010 for risk status change. A statistically significant difference, using a t-test to determine a p-value, was found among all health conditions except glucose. An overall change in risk status for all graduates (5,827) and health conditions was also assessed.

An ROI analysis was conducted in 2010 to assess the effect of health risks and disease migration. The study examined those who were engaged in the program versus those who were not. Medical and drug claims data from September 2003 through December 2008 was analyzed as well. This study included a reference group with no or minimal participation and four treatment groups: HealthE Living (health coaching) graduates of at least one year, fitness center faithful – 24 visits in one year, physical activity program adherents – at least two programs, and education program users – at least two other health improvement programs. The *no or minimal participation group* was categorized together due to the high HRA participation rate. To use a control group of Eastman non-participants, we had to do a comparative analysis considering mere HRA takers as part of the control group with the assumption that whatever the results, we were likely underestimating the true effect of services. The study was a case control group design that case matched participants and non-participants. Participants and non-participants were matched on age, gender, employee status, insurance plan, baseline claims, and other variables through propensity scoring. There were no significant differences between participants and non-participants after case matching showing both populations had similar demographics. A regression analysis was used on pre- and post-claims. There was a cost difference for case matched control and treatment populations. Each of the treatment groups were analyzed from 2004-2008. Claims savings were compared to the reference group for each treatment category. Expenses were also measured to show the return on investment for each treatment group. Overall spending on medical and drug claims increased for both groups over the study period but participants had significantly lower claims costs than non-participants.

D. Results:

The following are participation rates for the various Eastman programs:

- Health Risk Assessment – 87.9% (2010)
- HealthE Living – 1,446 graduated (2010); 2011 enrollment over 1,700 (will continue to increase over the next month)
- Biometric Screening – 7,754 completed screenings in 2010
- Fitness Center Visits 2010 – 122,144 visits
- Group Fitness Visits 2010 – 18,136 visits
- BodE Mass Project 2010 – 974 registered; 2011 – 1,623 registered
- Walk This Way 2010– 716 registered
- Eastman Triathlon – Spring – 220 registered; Fall – 310 registered
- Website Utilization – 84,818 logins

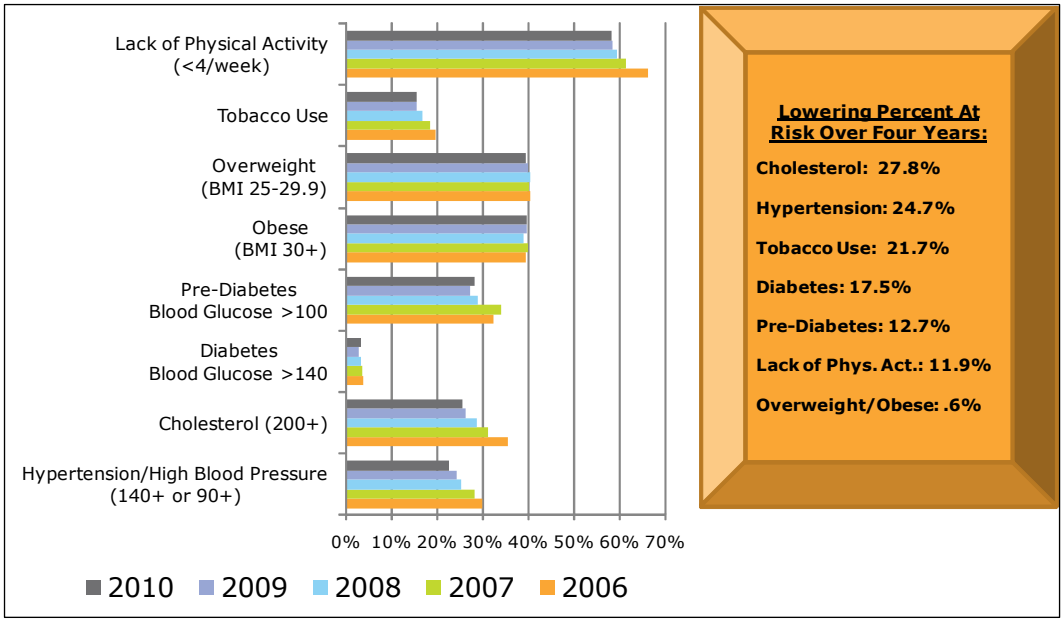
Over the past five years Eastman had an average employee Health Risk Assessment participation rate of 90%. In addition, the HRA participants from Time1 to Time5 demonstrated a consistent decrease in the average number of risks. Mean changes between Time1 and Time5/Time4 and Time5 showed statistically significant decreases. It was found that the average number of primary risk factors between Time1 and Time5 continued to steadily decrease from 3.20 to 3.03. Out of the eligible participants, there was a net decrease in the low risk category for 454 (8%) participants. Of the low risk participants, 80.1% remained in the low risk category. Additionally, when examining the average number of multiple risk factors of spouses from Time1 to Time3, there were statistically significant (p=0.000) changes from Time1 (3.56) to Time3 (3.38). The number of risk factors and change in percentage from Time1 to Time3 is below.

- Time1
  - 0-4 risks: 73.0%
  - 5-6 risks: 22.9%
  - 7+ risks: 4.2%

- Time3
  - 0-4 risks: 75.9%
  - 5-6 risks: 20.5%
  - 7+ risks: 3.6%

For those participants in the current year, 2010, the top three risk factors were found to be cholesterol, BMI, and fruit and vegetable consumption. The day shift participants had the lowest prevalence in 10 out of 14 risk factors when compared to shift workers. Overall, the 2010 HRA participants, for all three work schedules – days, shift workers, and other –in the low risk category equaled (days = 70.5%, shift workers = 59.1%, other = 70.6%). These results provide insight into programming for shift workers as well as resource allocation justification. At Eastman Chemical Company, our analyses have helped us place a renewed emphasis on our programming for the shift work population, in addition to day shift workers.

Figure 4. HRA Participation Employee Results for 2006-2010



The average number of risks from Time1 to Time2 decreased among all graduates (i.e. first time and repeat graduates) within the HealthE Living Program (onsite face-to-face health coaching). The number of risks among all graduates decreased significantly from 2.97 risks at baseline to 2.80 risks, using a t-test. Among all the graduates, 45.27% either reduced or controlled their risks while participating in the HealthE Living Program. Each health condition was assessed over all years (2003-2010) and for the current year, 2010. A statistical significant change resulted when comparing the beginning to completion of the program, for the assessment of the current year, 2010, and/or both for each health condition. The following is a breakdown of each health condition and its results.

- Total cholesterol
  - All Years
    - Beginning HRA Average: 192.17 mg/dl
    - Graduate HRA Average: 186.67 mg/dl*
    - 328 reduced high risk status (191 moved to moderate; 137 moved to low-risk)
    - 661 reduced risk from moderate to low-risk
  - 2010
    - Beginning HRA Average: 185.28 mg/dl
    - Graduate HRA Average: 181.37 mg/dl*
    - 55 reduced high risk status (38 moved to moderate; 17 moved to low-risk)
    - 143 reduced risk from moderate to low-risk
- HDL Cholesterol
  - All Years
    - Beginning HRA Average: 41.79 mg/dl
    - Graduate HRA Average: 42.70 mg/dl*
    - 640 reduced high risk status (615 moved to moderate; 25 moved to low-risk)
    - 184 reduced risk from moderate to low-risk

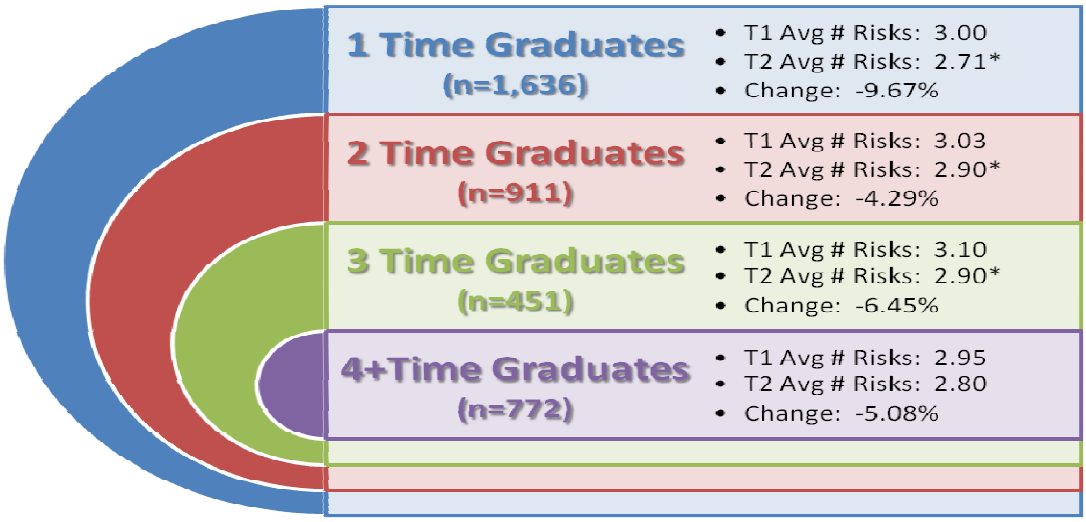
    - 2010
        - Beginning HRA Average: 40.86 mg/dl
        - Graduate HRA Average: 40.65 mg/dl
        - 117 reduced high risk status (113 moved to moderate; 4 moved to low-risk)
        - 30 reduced risk from moderate to low-risk
- LDL Cholesterol
    - All Years
        - Beginning HRA Average: 119.51 mg/dl
        - Graduate HRA Average: 115.15 mg/dl*
        - 696 reduced high risk status (520 moved to moderate; 176 moved to low-risk)
        - 496 reduced risk from moderate to low-risk
    - 2010
        - Beginning HRA Average: 115.15 mg/dl
        - Graduate HRA Average: 112.68 mg/dl*
        - 141 reduced high risk status (120 moved to moderate; 21 moved to low-risk)
        - 108 reduced risk from moderate to low-risk
- Triglycerides
    - All Years
        - Beginning HRA Average: 165.08 mg/dl
        - Graduate HRA Average: 149.59 mg/dl*
        - 693 reduced high risk status (297 moved to moderate; 396 moved to low-risk)
        - 493 reduced risk from moderate to low-risk
    - 2010
        - Beginning HRA Average: 153.51 mg/dl
        - Graduate HRA Average: 143.40 mg/dl*
        - 146 reduced high risk status (63 moved to moderate; 83 moved to low-risk)
        - 131 reduced risk from moderate to low-risk
- Glucose
    - All Years
        - Beginning HRA Average: 117.94 mg/dl
        - Graduate HRA Average: 106.23 mg/dl*
        - 242 reduced high risk status (122 moved to moderate; 120 moved to low-risk)
        - 784 reduced risk from moderate to low-risk
    - 2010
        - Beginning HRA Average: 116.12 mg/dl
        - Graduate HRA Average: 105.21 mg/dl*
        - 42 reduced high risk status (20 moved to moderate; 22 moved to low-risk)
        - 212 reduced risk from moderate to low-risk
- BMI
    - All Years
        - Beginning HRA Average: 31.06
        - Graduate HRA Average: 31.14*
        - 293 reduced high risk status (282 moved to overweight; 11 moved to healthy)
        - 175 reduced risk from overweigh to healthy
    - 2010
        - Beginning HRA Average: 31.33
        - Graduate HRA Average: 31.28
        - 75 reduced high risk status (70 moved to overweight; 5 moved to healthy)

        - 42 reduced risk from overweigh to healthy
- Weight Loss
    - All Years
        - 48.20% lost weight
        - Average weight loss: 8.67 lbs
        - Total pounds lost: 20,097.40 lbs
    - 2010
        - 43.46% lost weight
        - Average weight loss: 9.67 lbs
        - Total pounds lost: 5,010 lbs
- Systolic Blood Pressure
    - All Years
        - Beginning HRA Average: 146.10 mm/Hg
        - Graduate HRA Average: 136.41 mm/Hg*
        - 832 reduced high risk status (675 moved to moderate; 157 moved to low-risk)
        - 57 reduced risk from moderate to low-risk
    - 2010
        - Beginning HRA Average: 144.59 mm/Hg
        - Graduate HRA Average: 136.62 mm/Hg*
        - 140 reduced high risk status (116 moved to moderate; 24 moved to low-risk)
        - 9 reduced risk from moderate to low-risk
- Diastolic Blood Pressure
    - All Years
        - Beginning HRA Average: 88.16 mm/Hg
        - Graduate HRA Average: 82.16 mm/Hg*
        - 656 reduced high risk status (424 moved to moderate; 232 moved to low-risk)
        - 259 reduced risk from moderate to low-risk
    - 2010
        - Beginning HRA Average: 87.05 mm/Hg
        - Graduate HRA Average: 82.87 mm/Hg*
        - 118 reduced high risk status (78 moved to moderate; 40 moved to low-risk)
        - 47 reduced risk from moderate to low-risk
- Physical Activity
    - All Years
        - Beginning HRA Average: 2.06 days/week
        - Graduate HRA Average: 3.05 days/week *
        - 614 reduced high risk status by increasing activity to ≥ 2 days/week (387 moved to moderate; 227 moved to low-risk)
        - 849 reduced risk from moderate to low-risk by increasing activity to ≥ 4 days/week
    - 2010
        - Beginning HRA Average: 2.20days/week
        - Graduate HRA Average: 2.86 days/week*
        - 108 reduced high risk status by increasing activity to ≥ 2 days/week (79 moved to moderate; 29 moved to low-risk)
        - 200 reduced risk from moderate to low-risk by increasing activity to ≥ 4 days/week

- Tobacco Use
  - All Years
    - Beginning HRA Average: 100% used tobacco (high risk)
    - Graduate HRA Average: 20.43% (133) moved to low-risk (don't use tobacco)
  - 2010
    - Beginning HRA Average: 100% high risk (used tobacco)
    - Graduate HRA Average: 13.82% (21) moved to low-risk (don't use tobacco)

  * Statistically significant (using t-test)

Figure 5. Repeat Graduate Risk Change



*Statistically significant (using t-test)

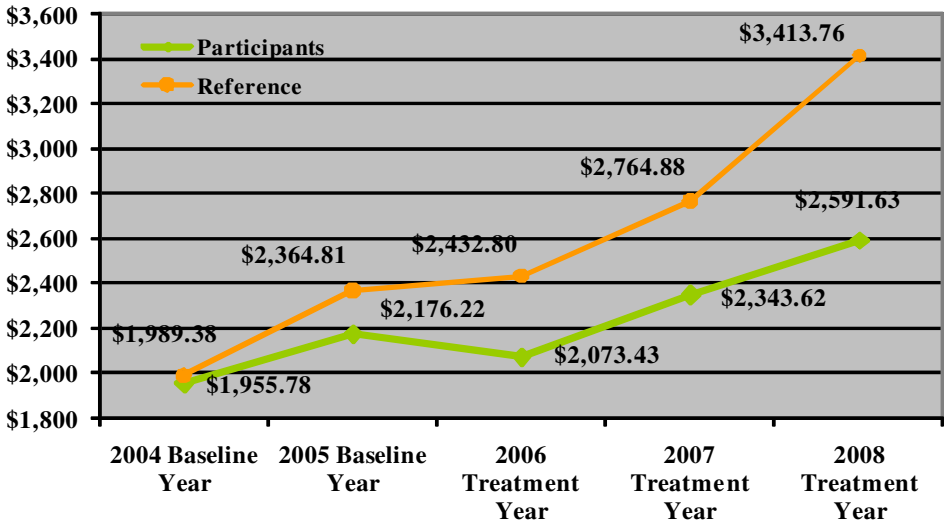
In 2010, HealthFitness completed an ROI study for Eastman that demonstrated a $3.20 return for every dollar invested in the program after three years. When taking incentives into consideration, Eastman saw a $3.62 return for every $1.00 spent on the programs. A total medical and drug claims savings of $6.38 million, among participants, was documented during this evaluation period (2005-2008). While the overall spending on medical and drug claims is increasing for both participants and non-participants, participants are holding claims increases to a minimum and are significantly lower than non-participants. Each treatment group was examined for claims savings and return on investment.

- Health Coaching
  - Claims savings: 11.28% (participants) compared to 28.25% (reference)
  - ROI: 1.11
  - PEPY Savings: $400
- Fitness Center Use
  - Claims savings: 37.97% (participants) compared to 138.63% (reference)
  - ROI: 6.48
  - PEPY Savings: $876
- Physical Activity Program
  - Claims savings: 47.12% (participants) compared to 86.83% (reference)
  - ROI: 5.22

    - PEPY Savings: $431
- Educational Program
    - Claims savings: 40.15% (participants) compared to 84.39% (reference)
    - ROI: 12.47
    - PEPY Savings: $384

This study shows the relative value of engagement and suggests that participation is not enough; employees need to be engaged.

Figure 6. ROI Analysis Summary Results



All data reflects compliance with HIPPA, GINA, as well as ADA and other employment laws.