

# **Example Health Program Outcomes**

## **Executive Summary**

# Conclusion- participants reported an improved mood, measured a decrease in blood pressure, and on average completed 15 mins of specific training a week

Average number of sessions completed each week by participants: 1.5 (15mins total a week)

Average improvement in mood pre and post exercise 22%

- Where a low mood was recorded average improvement pre and post exercise 31%

Average improvement in mood from baseline to one month follow up: 24%

Average improvement in systolic blood pressure 3mm/Hg (8% reduction in coronary risks)

Average improvement in diastolic blood pressure 5mm/Hg (38% improvement in coronary related risks)

#### **Key reporting metrics**

Pre and post exercise measures were taken on the day of initial testing and also once the 4week intervention period of exercise training was completed. Each week participants participated in a 10 minute exercise completing a 1min ascent of stairs followed by a recovery phase where they would descend back to the initial floor by a lift. This would correspond to 1min of exercise at 15/20 intensity rate, followed by 1.5mins of recovery, completed x 5 in total.

- 1. Pre and post exercise measures were taken across the following variables:
- Analogue Mood Scale

2. Pre and post intervention measures were taken across the following variable:

- Blood Pressure
- Exercise rate per week

Each variable is discussed in line with its reference to employee/employer benefits and health outcomes.

#### 1. Analogue Mood Scale

Mood in the workplace, particularly state based mood (stable over time) and trait based mood (specific to an instance) can both mitigate favourable work outcomes long term (state based) and day to day (trait based). The analogue mood scale looks at a baseline measure of mood (from 1-10) or hypothetically the state based mood and then remeasures again after exercise.

Pre exercise mood score average: 6.1

Post exercise mood score average: 7.825 The exercise testing and programming specialists



Percentage change in mood score after exercise: 22%

The pre exercise mood scale in this instance was high compared to previous measures of mood in the workplace, suggesting a high state mood in employees.

The post exercise mood scale demonstrates a 22% improvement in mood after intensive exercise which is again high.

Interestingly a covariate exists with low mood score, meaning if mood is low (5 or below) then an average mood improvement of 31% was cited.

At baseline average mood score change was 19% After one month of exercise training the average mood score change was 25%

This finding may demonstrate how over time exercise increases the mood score change, making exercise more potent to improving mood.

Thus exercise improves mood dramatically in the work place, especially in those with lower mood scores with the effect increasing over time.

### 2. Pre and Post Blood Pressure

Blood pressure consists of systolic (heart contracting) and diastolic (heart not contracting) measures, such as 120/80 being 'optimal'. - A 20 mm Hg increase in systolic pressure conferred to a 56% increased risk for heart failure and related risks in one cited study - Data from overviews of observational studies and randomized trials suggest that a 2 mm/Hg reduction in diastolic blood pressure would result in a 15% reduction in risk of stroke and heart attacks

Pre intervention blood systolic pressure average: 139 mm/Hg Pre intervention blood diastolic pressure average: 95 mm/Hg

Post intervention blood systolic pressure average: 136 mm/Hg

Post intervention blood diastolic pressure average: 90 mm/Hg

Systolic average improvement: 3mm/Hg (average of 8% reduction in coronary related risks)

Diastolic average improvement: 5mm/Hg (average of a 38% improvement in coronary related risks)

#### 3. Exercise rates per week

Exercise is positively correlated with health outcomes and well-being.

The average amount of exercise sessions completed (each 10mins each) was 1.5 sessions per week

The recommended amount was 2 x 10mins of exercise a week, which is comparable to 1hr of moderate exercise such as walking.