# Benchmarking for Best Practices for Multiple Behavior Changes in Employee and Other Populations

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### How Do We Know if Wellness Programs Work?

#### Many ways to evaluate worksite wellness programs:

- Organizational support
- Financial outcomes (i.e. claims savings)
- Participation
- Satisfaction
- Health impact
- Productivity and performance
- Value on investment (VOI)



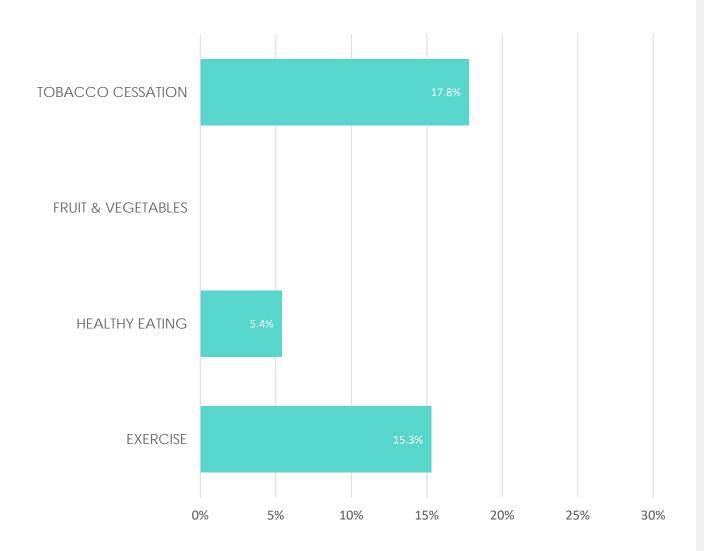
# How Do We Know if Wellness Programs Work?

# Engagement Participation Satisfaction Organizational support Health Health impact Behavior change Financial outcomes VOI/ROI



#### **Worksite Wellness Programs**

- Review of 59 studies reporting wellness programs containing Health Risk Assessment with feedback, plus other wellness components.
- Strong or sufficient evidence for meaningful effects for Exercise, Healthy Eating (fat reduction), and Tobacco Cessation
- Median participation rates 57.3% (IQI=44.2% 75.0%)





# TTM: A Population Approach to Wellness

- Identifies change processes that work best for each stage of change
- Stage-matched interventions shown to outperform one size fits all
- Uses methods for proactively reaching out to facilitate change
- Shown large impact on a population basis



#### **TTM Randomized Control Trials**

- Review of 14 studies using TTM computerized tailored interventions
- Studies provided 26 behavior outcome comparisons across 6 behaviors

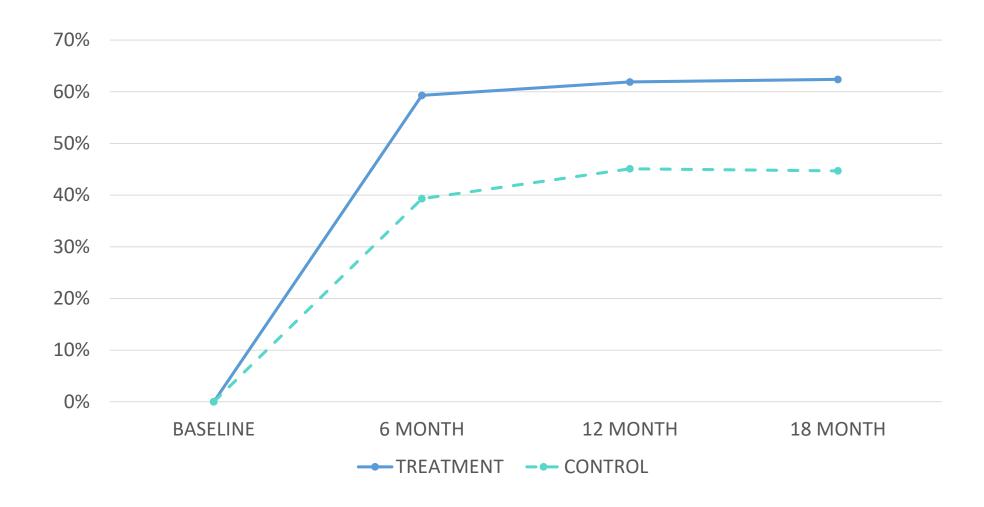


#### **Common Metrics**

- **Smoking Cessation** 24 hr. point prevalence
- **Regular Exercise** 150 minutes per week
- **Healthy Eating** reduced fat and calories
- Fruit & Vegetable Intake 4½ cups a day
- Stress Management effectively managing stress
- **Depression Prevention** effectively practicing depression prevention

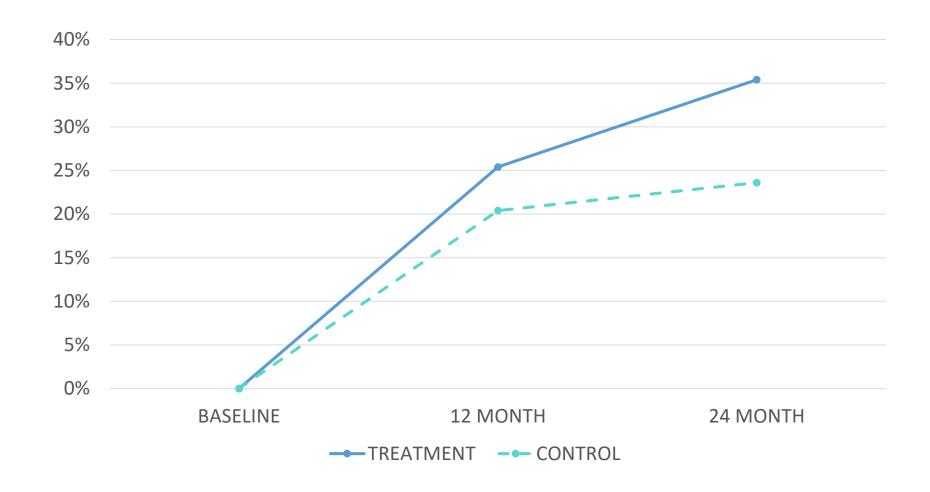


#### **Stress Management**



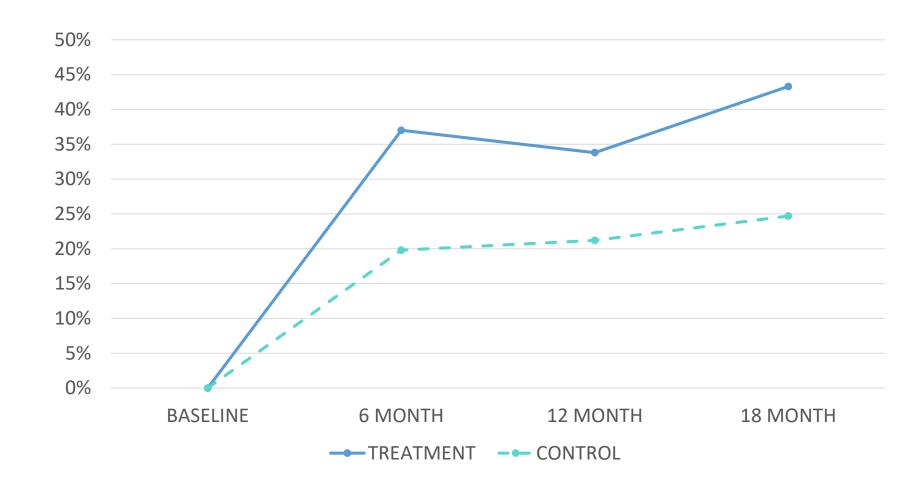


#### **Healthy Eating**





#### Regular Exercise

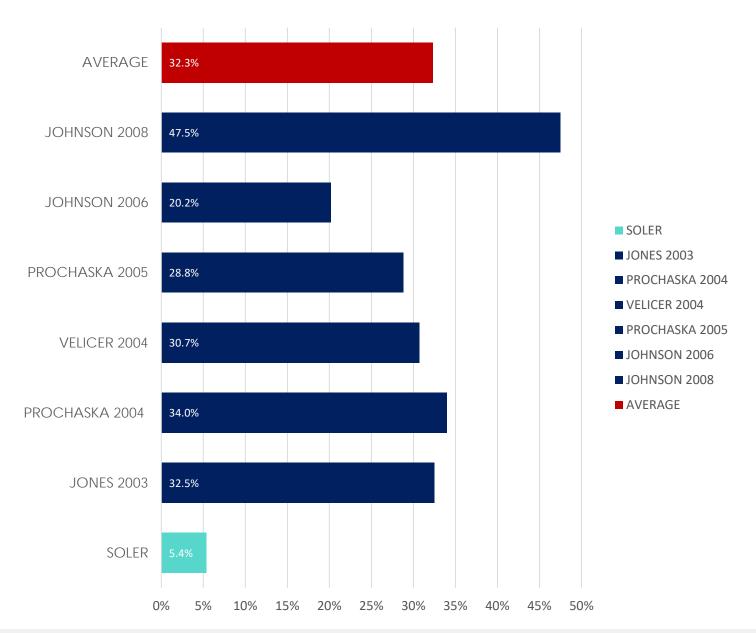




#### **Healthy Eating Outcomes**

• Range: 20.2% to 47.5%

• Average: 32.3%

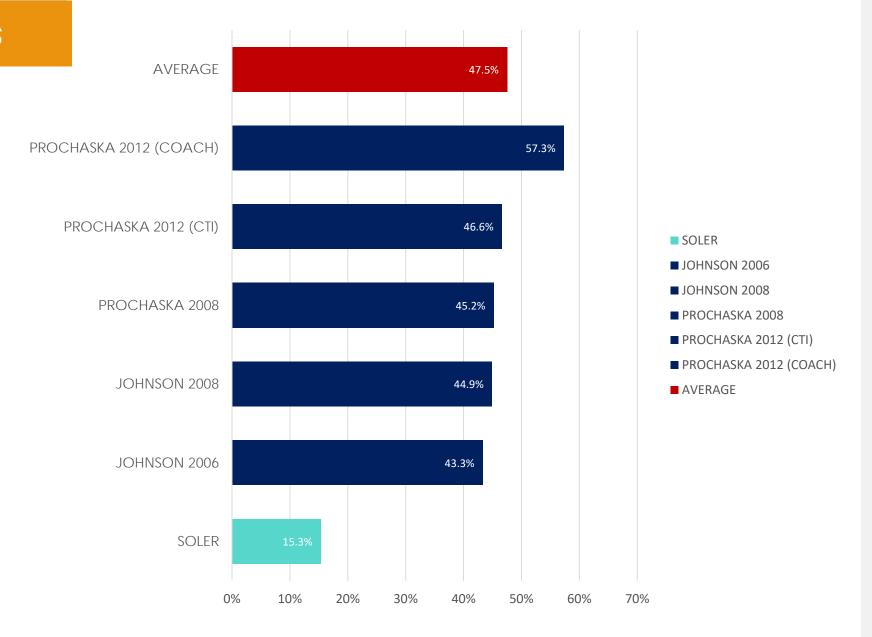




#### **Exercise Outcomes**

• Range: 43.3% to 57.3%

• Average: 47.5%

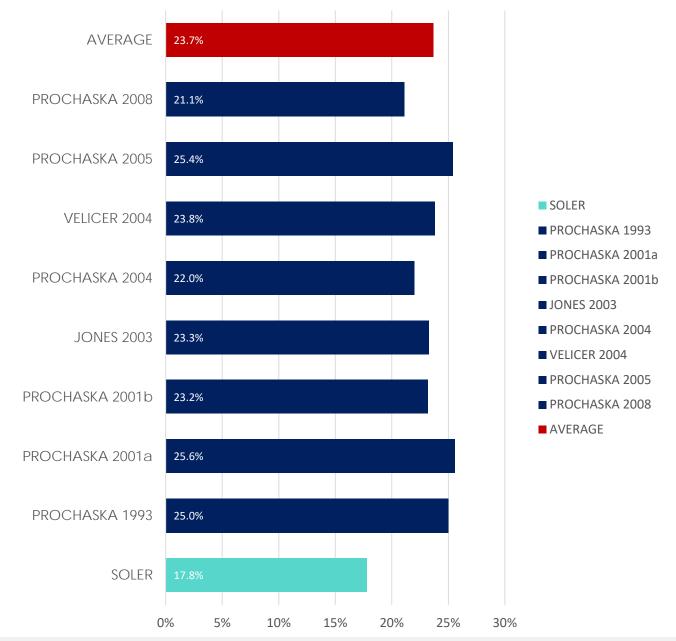




#### **Smoking Cessation Outcomes**

• Range: 21.1% to 25.6%

• Average: 23.7%

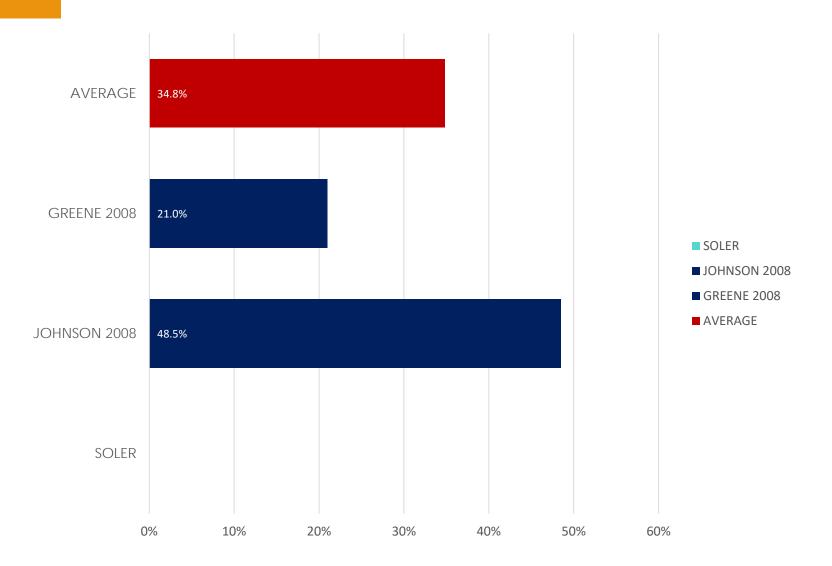




#### Fruit & Vegetable Outcomes

• Range: 21.0% to 48.5%

• Average: 34.8%

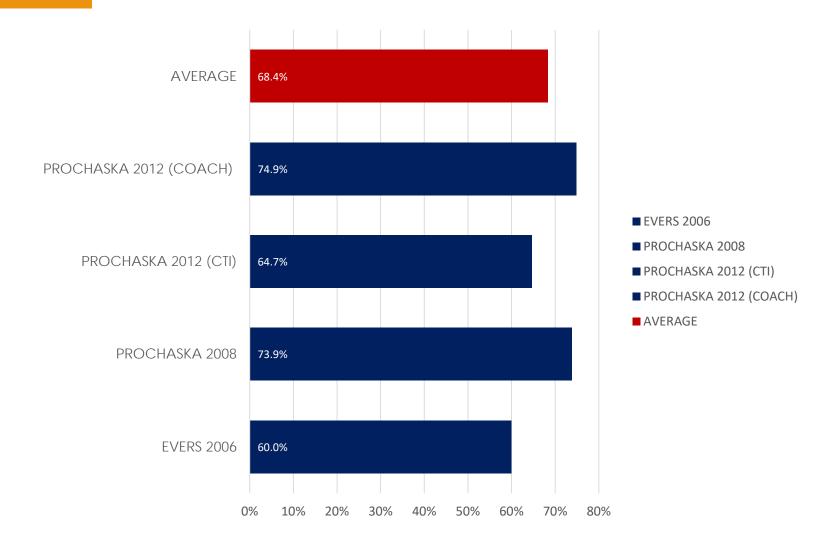




#### **Stress Management Outcomes**

• Range: 60.0% to 74.9%

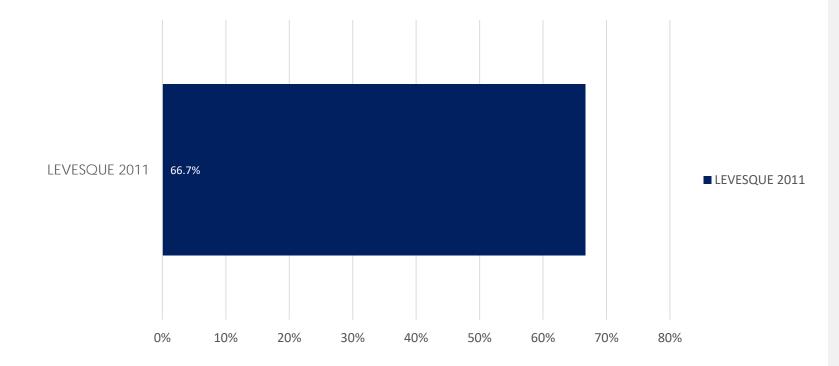
• Average: 68.4%





#### **Depression Outcomes**

• Levesque 2011: 66.7%



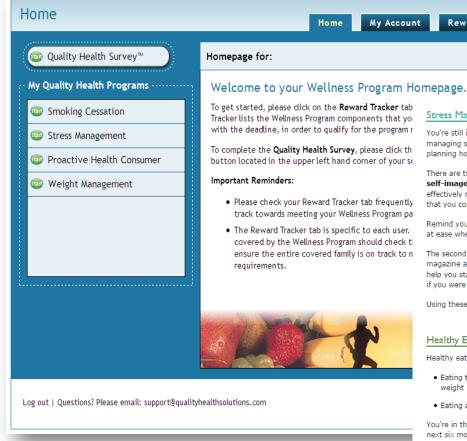


#### **Worksite Case Study**

- 6,544 employees and covered spouses from Oct 2005 through Dec 2010
  - Participants completed at least 2 Health Risk Interventions
  - To be included in this analyses, there had to be a minimum of 2 years between first and last HRI; the average was 4 years
- Incentivized for participation
  - Over 90% of the eligible sample participated



#### **Case Study Intervention**



#### Stress Management

Reward Tracker

You're still in the Contemplation stage and thinking about effectively managing stress within the next six months. This may be a good time to start planning how and when you'll start.

There are two important strategies to use in this state. First, think how your self-image could improve if you were to manages stress. For example, if you effectively managed stress, would you be in more control? Would you feel confident that you could handle problems?

Remind yourself as often as possible that you will feel better, more relaxed, and more at ease when you begin to use healthy ways to deal with stress.

The second strategy is to get the facts about stress. Pay attention to news stories, magazine articles, or books on stress and ways to manage it. Being more aware may help you start to think about how your outlook, health, and self-image might improve if you were effectively managing stress.

Using these strategies can help you get ready to change and live a healthier lifestyle.

#### Healthy Eating

Healthy eating means doing both of the following:

- . Eating the number of calories that allows you to reach and maintain a healthy
- . Eating a diet that is low in unhealthy saturated and trans fats.

You're in the Contemplation stage-you're once again intending to eat healthy in the next six months. Before, you were in the Preparation stage. You were making definite plans to cut down on calories and unhealthy fats.

Although this is a small step back, you're still thinking about making healthy changes to your eating habits. Making a new plan can help you move forward again.

An important strategy in this stage is to make a commitment to healthy eating. Promise yourself that soon you will reduce calories and unhealthy fats and believe in your ability to keep that promise.





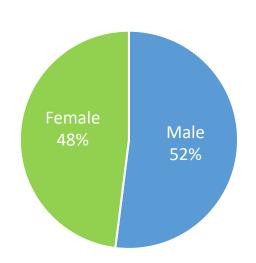
#### **Worksite Case Study**

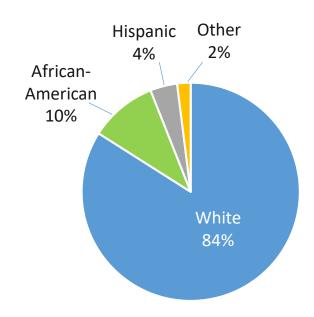
- Program participation was voluntary
- Incentivized by ability to enroll in preferred benefit plan if actively participated in the wellness program
- Participation defined as:
  - Annual Health Risk Intervention
  - Annual biometric screening
  - Enrollment and active participation in LifeStyle Management and/or condition management programs



#### **Case Study Intervention**

- 20 operating companies located in 8 states
- Mixed salaried and hourly jobs
- Average age 44
- Average BMI 28.1 (sd=6.3)





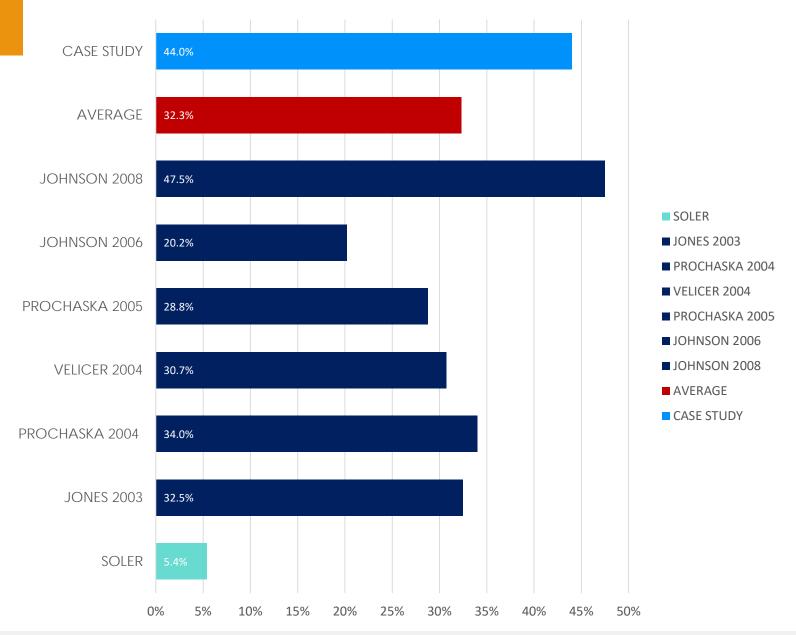


#### **Healthy Eating Outcomes**

• Range: 20.2% to 47.5%

• Average: 32.3%

• Case Study: 44.0%



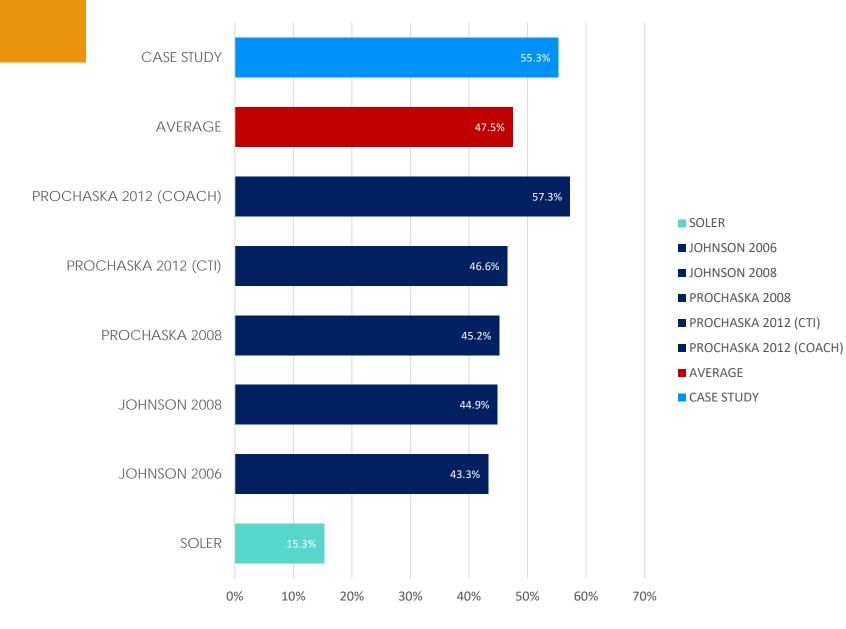


#### **Exercise Outcomes**

• Range: 43.3% to 57.3%

• Average: 47.5%

• Case Study: 55.3%



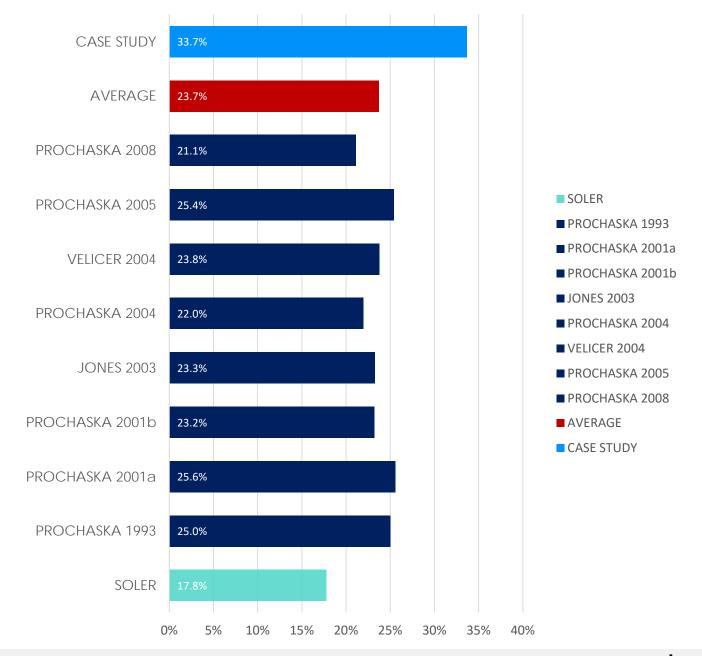


#### **Smoking Cessation Outcomes**

• Range: 21.1% to 25.6%

• Average: 23.7%

• Case Study: 33.7%



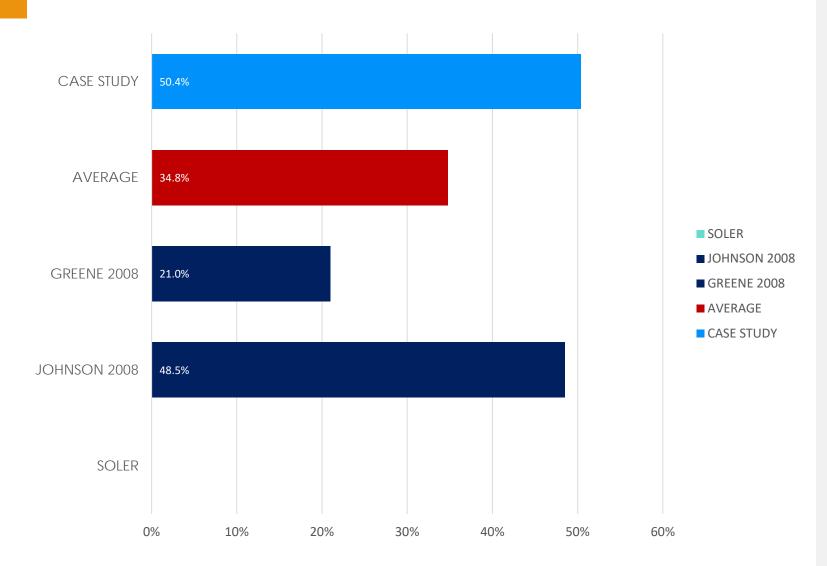


#### Fruit & Vegetable Outcomes

• Range: 21.0% to 48.5%

• Average: 34.8%

• Case Study: 50.4%



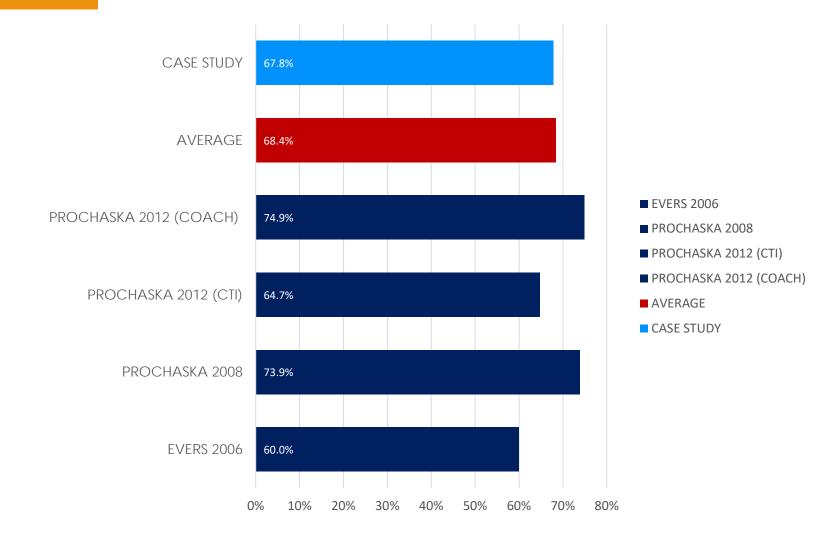


#### **Stress Management Outcomes**

• Range: 60.0% to 74.9%

• Average: 68.4%

• Case Study: 67.8%

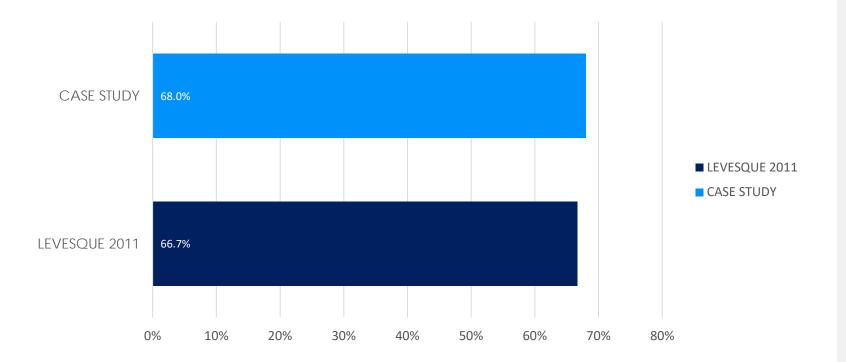




#### **Depression Outcomes**

• Levesque 2011: 66.7%

• Case Study: 68.0%





#### Summary of Case Study Outcomes

- 5 of 6 behaviors within the range of RCT outcomes
  - Smoking exceeded the range
- 4 behaviors were higher than the RCT average
  - Smoking, Exercise, Healthy Eating, Fruit & Vegetable
- 2 approximately equal to the RCT average
  - Stress Management, Depression Prevention



#### Why Successful?

- High participation
- Consistent program delivery, communications, and leadership commitment
- Participants allowed choice of behavior
- Ongoing treatment
- Co-action



#### **Benchmarking Wellness**

- Randomized clinical trials may be the gold standard, but not always possible
- Review of existing programs and previous RCTs can provide basis for expected effects
- These expected effects can be utilized over time to ensure implemented programs are performing



#### **Moving Beyond the Benchmark**

 As new program components are added, can compare to the benchmarks and previous results to ensure programs still having an impact



- Texting added to existing Smoking Cessation program
- Cessation rates found to be 40.3%
  - RCT average 23.7%
  - *Case study 33.7%*



## Wellness Programs: a word of caution

- Comparisons of programs without RCT need to be done cautiously
- Important to develop and implement programs that have built in assessment and evaluation
- Not all wellness programs work as well as others

