

Quality health plans & benefits
Healthier living
Financial well-being
Intelligent solutions



Mind-body stress reduction

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April 25, 2012



Mindful Eating – The Raisin/ Chocolate Exercise





Evidence-based solutions for chronic and high stress

Why stress about stress?

- 87% of physicians report an increase in patients with stress symptoms*
- 36% of workers said they typically feel tense or stressed during their workday, with 20% reporting their average daily level of stress from work is 8, 9 or 10 on a 10-point scale**
- According to a ComPsych 2011 survey, weight loss and stress reduction topped the list of employee wellness concerns
- The American Psychological Association estimates 43% of US adults suffer adverse health effects from stress



*AAFP Recession Care Survey, May 2009 **APA Stress in the Workplace, March 2011

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Why is stress an issue?

Stress is:

- Aetna's #1 EAP call
- Top prevalent risk on Health Assessment
- High focus area in Aetna's online coaching programs
- In top 8 reasons for disability



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The “stress effect”



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Effects of chronic stress

- **The brain:** Decreased short-term and contextual memory, neuronal atrophy and destruction of neurons; learning and retention are impaired.
- **The immune system:** Worsened autoimmune and allergic conditions while suppressing healthy immune function
- **Cardiovascular:** Risk of coronary heart disease, elevated blood pressure, increased atherosclerosis and risk of myocardial infarction
- **Metabolic system:** Increased central obesity and insulin resistance, thereby increasing risk of diabetes

Disruptive biochemistry: elevated cortisol and suppressed serotonin.

This change compromises vital organs, leading to loss of function and disease.

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Aetna Mind-Body Stress Reduction research study

In 2010, Aetna conducted a randomized-control study on Mind-Body Stress Reduction – Chairman’s Initiatives

- Aetna collaborated with Duke Integrative Medicine, eMindful Inc. and the American Viniyoga Institute
- Study tested two, innovative mind-body approaches: mindfulness meditation and therapeutic yoga, against control group
- Studies included 239 Aetna employees in CA & CT
- Employees randomly assigned to 1of 5 study ‘arms’
- 96 assigned to mindfulness classes; 90 to yoga; 53 to control group
- Participation rates were average 87% for both therapeutic yoga and mindfulness classes



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Aetna Mind-Body Stress Reduction research study design



americanviniyogainstitute

Control Group

Waitlisted Controls

No Treatment Intervention Provided

In-person Mindfulness at Work

Treatment Group

Instructor Led Onsite Classes

Online Mindfulness at Work

Treatment Group

Instructor Led Online Classes

Viniyoga

Treatment Group

Instructor Led Onsite Classes

Viniyoga (with DVD)

Treatment Group

Instructor Led Onsite Classes

supplemented by home based Viniyoga DVD

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Mind-Body Stress Reduction research study results

- Significant improvements in perceived stress with 36% (mindfulness) and 33% (viniyoga) decreases in stress levels compared to 18% for the control
- Sleep difficulties decreased by 29% and 32% respectively compared to 18% for the control
- Significant improvement also realized for current pain levels in the yoga group, compared to control
- Breathing rate decreased more for the mindfulness participants compared to control
- Directionally favorable metrics demonstrated in productivity, insomnia and depression
- Online and in-person classes showed equivalent results and retention was better in the online classes
- Results achieved in about half the length of other commonly used mind-body interventions



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Aetna Mind-Body study intervention dosage comparison

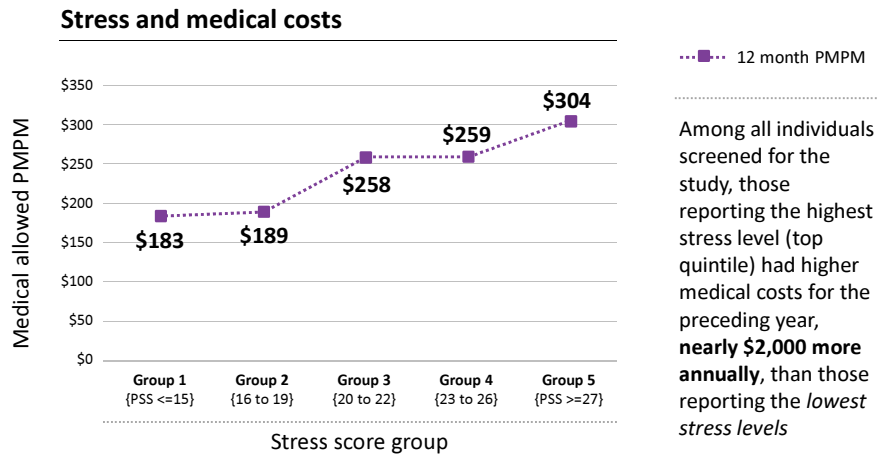
Both interventions achieved results in half the class hours compared to the industry gold standard of MBSR

| Mindfulness-Based Stress Reduction (MBSR) | Mindfulness at Work | Viniyoga Stress Reduction |
|--|---|---|
| 10 Week Course | 12 Week Course | 12 Week Course |
| 2.5 Hours / Week | 1 Hour / Week | 1 Hour / Week |
| 5 – 7 Hour Intensive | 2 Hour Intensive held during Week 10 | None |
| Total Class Time: 30 – 32 hours | Total Class Time: 14 hours | Total Class Time: 12 hours |
| 45 Minutes / Day at home practice commitment | Average 10 Minutes 3 times / Week actual at home practice | Average 15 Minutes 3 times / Week actual at home practice |

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Positive correlation between medical costs and participants' stress levels



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Mind-Body stress reduction research study publication

Journal of Occupational Health Psychology

“Effective and viable mind-body stress reduction in the workplace: A randomized controlled trial”

By Wolever, Ruth Q.; Bobinet, Kyra J.; McCabe, Kelley; Mackenzie, Elizabeth R.; Fekete, Erin; Kusnick, Catherine A.; Baime, Michael

Journal of Occupational Health Psychology, Vol 17(2), Apr 2012, 246-258



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Mindfulness at Work program (in coordination with eMindful)

Teachings

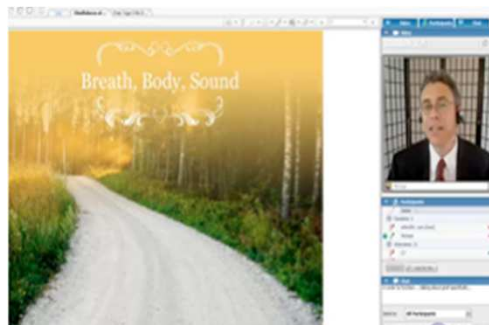
- Evidence-based stress management skills, including mindfulness awareness, breathing techniques, and emotion management
- How to be present, escape thoughts, physical feelings, or emotions that put them into a stress cycle
- How to choose a different approach

Course details

- Live, real-time online classes taught by experts
- Instructors and participants use video, audio and instant messaging / chat
- Includes 12 one-hour classes per session
- Maximum class size depends on offering

Mindfulness programs are not provided by Aetna, but only through a third party.

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Viniyoga Stress Reduction program (in coordination with AVI)

12 weekly *on-site* sessions, 1 hour each

- Progressively introduces tools for managing stress, including physical yoga postures, breathing techniques, guided relaxation and mental techniques

Helps participants:

- relieve musculoskeletal tension in back, neck and shoulders
- relieve headaches caused by musculoskeletal tension,
- improve sleep
- increase feelings of well-being
- improve coping strategies for dealing with stressful events and the subsequent negative symptoms of stress
- promote adoption of home and office strategies for reducing stress through yoga



Yoga programs are not provided by Aetna, but only through a third party.

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Two use-cases for employers

1 “Tough to Reach Mental Health”

- For highly skilled workforce with high levels of depression and stress-related conditions
- Overcomes stigma of seeking “help”
- Mindfulness shown effective for depression/ anxiety/ PTSD
- Improved self-efficacy means more self-management and less somatization

2 “Peak Performance Play”

- Employee retention of highly skilled workforce
- Improved concentration for complex tasks
- Improved mental and emotional stability
- Reduced stress

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Why introduce stress management programs?

Making the Business Case

- Companies who believe in a health & wellness culture are focused on strategic program investments that achieve positive employee health behavior change
- Innovative companies recognize stress management offers benefits beyond health & productivity and use as differentiator in creating “employer of choice”
- Addressing the linkage between stress, health, and medical cost may help employers to target the root cause of health behaviors that they are addressing separately today



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Thank you



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