A comparison of mindfulness-based stress reduction and an active control...

Posted At : March 27, 2013 4:39 PM | Posted By : Tim Brunson, PhD
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Full title: A comparison of mindfulness-based stress reduction and an active control in modulation of neurogenic inflammation.

Psychological stress is a major provocative factor of symptoms in chronic inflammatory conditions. In recent years, interest in addressing stress responsivity through meditation training in health-related domains has increased astoundingly, despite a paucity of evidence that reported benefits are specific to meditation practice. We designed the present study to rigorously compare an 8-week Mindfulness-Based Stress Reduction (MBSR) intervention to a well-matched active control intervention, the Health Enhancement Program (HEP) in ability to reduce psychological stress and experimentally-induced inflammation. The Trier Social Stress Test (TSST) was used to induce psychological stress and inflammation was produced using topical application of capsaicin cream to forearm skin. Immune and endocrine measures of inflammation and stress were collected both before and after MBSR training. Results show those randomized to MBSR and HEP training had comparable post-training stress-evoked cortisol responses, as well as equivalent reductions in self-reported psychological distress and physical symptoms. However, MBSR training resulted in a significantly smaller post-stress inflammatory response compared to HEP, despite equivalent levels of stress hormones. These results suggest behavioral interventions designed to reduce emotional reactivity may be of therapeutic benefit in chronic inflammatory conditions. Moreover, mindfulness practice, in particular, may be more efficacious in symptom relief than the well-being promoting activities cultivated in the HEP program.

Brain Behav Immun. 2013 Jan;27(1):174-84. doi: 10.1016/j.bbi.2012.10.013. Epub 2012 Oct 22.
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