## DIFFERENCES IN RELAXATION BY MEANS OF GUIDED IMAGERY IN A HEALTHY COMMUNITY SAMPLE

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Objective • This study investigated differences in relaxation induced by guided imagery in healthy community samples. Methods • One hundred forty-eight people took part in our investigation. The mean age of the 50 males and 98 females was  $39.36 \pm 11.86$  years. We took saliva samples to measure salivary cortisol (SC) before the first session, after the first session, and after the second session. Subjects were asked to complete the short form of the Multiple Mood Scale (MMS) questionnaire before the first session and after the second session. The shortened form of Betts' Questionnaire upon Mental Imagery (QMI) was collected once before the first session, and vividness of the imagery was measured using a visual analogue scale once after the second session.

Results • SC levels were significantly decreased after the first session and after the second session in all participants. We found, most significantly, that age and QMI scores were strongly related to changes in SC level throughout the relaxation sessions. Conclusions • Unpleasant information, a cause of mental stress, is replaced by a comfortable image, and this replacement affects a participant's SC level. The greater one's imagery ability is, the more successful the displacement of stress and the shift toward a comfortable mental and emotional state will be. This study provides a basis for explaining the mechanism through which relaxation by means of guided imagery is effective in reducing stress. (Altern Ther Health Med. 2006;12(2):60-66.)

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n this study, we investigated how relaxation by means of guided imagery enables individuals to manage stress. Imagery creates a bridge between mind and body, linking perception; emotion; and psychological, physiological, and behavioral response.<sup>13</sup> Guided imagery, a mind-body

relaxation technique, is a behavioral and cognitive technique by which individuals exert active control over the focus of attention.<sup>4,5</sup> It has been used as a therapeutic process during which participants invoke a comforting image to connect with psychological processes outside conscious awareness for the purpose of achieving specific health goals.6 Relaxation using guided imagery has been applied to management of the following symptoms (or with specific groups of patients), and has been found to be effective in symptom management<sup>1</sup> and reduction<sup>7</sup> of chronic pain, headache,<sup>8</sup> for use in patients treated with chemotherapy,9 and for use in cancer patients in general.10 And some experiments performed after 1980 showed that imagery influences the physiological and immune measure. For example, one study showed that cell-specific mental imagery was associated with decreases in peripheral blood cell counts of lymphocytes and neutrophils.11 Other studies showed that subjects practicing relaxation alone and with imagery had a higher level of salivary immunoglobulin A (IgA) than the control group.12 A study in which relationships between absorption, imagery, and immune responses were examined found that more high than low absorbers responded to relaxation with mucosal immune imagery by producing higher mucosal IgA.13

The effects of imagery on stress and psychological distress in healthy adults have been explored in several studies, 14.15 and