**Definition of Relaxation**

Relaxation techniques are commonly recommended for stress-related disorders, including pain management.[1](#_ENREF_1),[2](#_ENREF_2) The physiological characteristics that define relaxation techniques are that they produce set of physiological responses termed the Relaxation Response. [3-5](#_ENREF_3) The changes seen during relaxation are in the opposite direction of the classic Fight or Flight response, a set of bodily changes in pain, hunger, fear, and rage that were first described by American physiologist Walter B. Cannon in 1929.[6](#_ENREF_6)

The relaxation response was modeled after the Transcendental Meditation technique (TM): "The studies of Transcendental Meditation suggested the existence of a physiological response which could be elicited by other techniques" (p. 115).[7](#_ENREF_7) The early research on Transcendental Meditation by Wallace and colleagues had found that it decreased O2 consumption, respiratory rate, heart rate, muscle tension, and blood pressure and increased skin resistance and EEG alpha waves to a greater extent than uninstructed rest while just sitting with eyes closed.[3-5](#_ENREF_3),[8](#_ENREF_8) These are basically a list of the changes said to constitute the relaxation response.[9-11](#_ENREF_9)

Techniques specifically mentioned as producing the relaxation response include Progressive Relaxation, Hypnosis, Shavasan (a yoga posture lying still, face up), Autogenic Training, Sentic Cycles (a self-induced emotional experience), Zen, Zazen, Yoga, Mindfulness, the Transcendental Meditation technique (TM), and various types of meditative prayer from Eastern and Western traditions.[7](#_ENREF_7),[9-11](#_ENREF_9)

Medical websites routinely include meditation as one of the recommended relaxation techniques for pain and other stress-related conditions,[1](#_ENREF_1),[2](#_ENREF_2) noting that Transcendental Meditation and mindfulness are the two most widely practiced and extensively researched meditation techniques.[1](#_ENREF_1)

**1.** University of Maryland Medical Center. Relaxation Techniques. 2011; <http://umm.edu/health/medical/altmed/treatment/relaxation-techniques#ixzz3WT2SxlvJ>

**2.** Mayo Clinic Staff. Relaxation techniques: Try these steps to reduce stress. *Mayo Clinic* 2014; <http://www.mayoclinic.org/healthy-lifestyle/stress-management/in-depth/relaxation-technique/art-20045368?pg=1>.

**3.** Wallace RK. Physiological effects of Transcendental Meditation. *Science.* 1970;167:1751–1754.

**4.** Wallace RK. The Physiology of Meditation. *Scientific American.* 1972;226:84-90.

**5.** Wallace RK, Benson H, Wilson AF. A wakeful hypometabolic physiologic state. *American Journal of Physiology.* 1971;221:795-799.

**6.** Cannon BW. *Bodily Changes in Pain, Hunger, Fear, and Rage*. New York: Appleton-Century-Crofts; 1929.

**7.** Beary J, Benson H. A simple psychophysiological technique which elicits the hypometabolic changes of the relaxation response. *Psychosom Medicine.* 1974;39(115-120).

**8.** Dillbeck MC, Abrams AI. The application of the Transcendental Meditation program to corrections: Meta-analysis. *International Journal of Comparative and Applied Criminal Justice.* 1987;11(1):111-132.

**9.** Benson H, Beary JF, Carol MP. The relaxation response

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**10.** Benson H. *The Relaxation Response*. New York: Simon and Schuster; 1975.

**11.** Benson H. The relaxation response: its subjective and objective historical precedents and physiology. *Trends in Neuroscience* 1983;July:281-284.