

Five-Minute Stress Relief.com

Friendship Benefits the Brain

Studies have shown that friends who make you laugh and bring joy form a social support network that is a potent anti-stress coping factor. Even caring for and stroking a pet has been proven to lower heart rate and blood pressure.

In addition, friendly interactions have shown by researchers at the University of Zurich to release both hormones and pheromones that reduce stress. Hormones are potent "local" (internalized) chemicals that travel throughout your body to help regulate metabolism and behavior. Also your body also produces pheromones, which are long distance (working outside the body) chemicals that affect the hormones of those around you, causing an exciting or calming reaction.

In their study, the scientists first monitored men when their best friend was present, and then later when they were given a nasal dose of oxytocin, an anti-stress hormone. In documented animal studies, oxytocin has been observed to promote social attachment to others and to protect against stress. Oxytocin is a powerful hormone produced in humans when lovers are in a state of happy bliss.

The Role of Oxtocin

In the study at the University of Zurich, the men who were monitored showed that just the presence of their best friend was better than oxytocin alone at reducing stress. And the men who were given oxytocin while their best friend was also present showed significantly less anxiety and had lower cortisol levels.

Feeling Empathy Shows a Biologic Component

In the February *Journal of Nervous and Mental Diseases*, researchers from Massachusetts General Hospital reported the first physiologic evidence of shared emotions underlying the experience of empathy during live psychotherapy sessions.

During the psychotherapy sessions, patients and therapists were "wired up" to record their physiologic responses using skin conductance recordings – a commonly used measure of the sympathetic nervous system, which controls human arousal and provides a physiologic context for emotional experiences.

Also the sessions were videotaped and edited to certain moments of both high and low physiologic concordances. These moments (when patients' and therapists' levels of nervous system activity were most and least similar), were later reviewed by independent observers to identify the emotions, or lack of, being displayed.

Positive Emotions and High Physiologic Readings

The observers' data verified that the patients and therapists expressed more positive emotions during moments of high physiologic readings, as opposed to moments of low readings. The team leaders of the study proclaimed that their research's brain imaging data proves that humans are literally 'wired to connect' emotionally.

In addition, they felt validated to find evidence for a biological basis to the feelings of connection the participants experienced. By the way, the data revealed that therapists registered more empathy when they were listening, rather than talking – underscoring that true empathy is a receptive state of feeling unconditional acceptance and comforting.

Another Study Confirms the Benefits of Friendship

Researchers at the School of Medicine at the University of North Carolina performed a study of over 100 adults, which found that close contact with loved ones substantially reduced blood

pressure (24 points in systolic readings) and heart rate. The researchers concluded that their findings confirmed that each time we hug someone, we increase levels of oxytocin in the blood.

© 2009 Five-Minute Stress Relief - All Rights Reserved

Sources: Social Support and Oxytocin Interact to Suppress Cortisol and Subjective Responses to Psychosocial Stress *Biological Psychiatry* 2003 54:1389-1398 **Positive Affect and Health-related Neuroendocrine, Cardiovascular and Inflammatory Processes** *Proceedings of the National Academy of Sciences* May 3, 2005 vol. 102 no. 18 6508-6512 **For Better or Worse: Interpersonal Relationships and Individual Outcome** *American Journal of Psychiatry* 1998 May 155(5):582-9 **Physiologic Correlates of Perceived Therapist Empathy and Social-Emotional Process During Psychotherapy** *Journal of Nervous & Mental Disease* 195(2):103-111, February 2007 **Empathy-related Responding and Prosocial Behavior** *Novartis Foundation Symposium* 2007;278:71-80; discussion 80-96, 216-21 **Agreeableness, Empathy and Helping: a Person X Situation Perspective** *Journal of Personality and Social Psychology* 2007 Oct;93(4):583-99