

# "Love & Fear"

Submitted by Marnia Robinson on Sun, 2005-06-26 22:35. Reuniting Articles about Sex



Various spiritual teachings, such as A Course in Miracles,[1] say that there are only two fundamental emotions: love and fear. For the body, this is true. All mammals, including humans, have two opposing hormonal responses to stimuli. Threatening stimuli cause an increase of stress hormones—adrenaline and cortisol. Soothing or reassuring stimuli cause an increase in oxytocin.

An immediate threat triggers the fight-or-flight response associated with adrenaline. Adrenaline steps up heart rate, increases respiration, activates muscles, and promotes hyper-alertness. Long-term stress (more than 15 minutes) increases a different stress hormone: cortisol. Cortisol, too, makes us hyper-vigilant, but its evolutionary functions are quite different than the temporary jolt of adrenaline designed to propel us out of danger.

The stress encountered by mammals—and our hunter-gatherer forefathers—was chiefly physical, not emotional. The most common physical stressors were probably starvation, severe gastro-intestinal illness, and critical injury. To cope with such emergencies, cortisol begins to break down non-essential organs and tissues to feed vital organs. When cortisol stays at high levels, it automatically digests bones, muscles and joints to obtain key nutrients to maintain the nervous system and vital internal organs. Another side-effect is that it makes us hungry, causing us to reach for high-calorie foods.



Today our biggest long-term stressors are emotional and mental, not physical. In effect, we are a “new” scientific experiment. We face threats in the form of potential job loss, the pressure of commuting in heavy traffic, a barrage of fear-producing media, relationship disharmony in a marriage, etc. Even though these are not physical threats, our body has only one, automatic response: more cortisol. Cortisol is very hard on the body, so all these threats indirectly become physical threats.



Fortunately, we have a built-in mechanism for countering stress, which forms the basis of our alternative response to stimuli. It entails another hormone, called oxytocin. Apart from its functions of inducing emotional bonding, labor, and lactation, oxytocin counters the effects of cortisol. This anti-stress effect of oxytocin is a recent discovery, and very exciting, because it points the way to better health by entirely natural means.

### Fear - Cortisol

Aggression  
Arousal, Anxiety, Feeling stressed-out  
Activates addictions  
Suppresses libido  
Associated with depression  
Can be toxic to brain cells  
Breaks down muscles, bones and joints  
Weakens immune system  
Increases pain  
Clogs arteries, Promotes heart disease and high blood pressure  
Obesity, Diabetes, Osteoporosis

### Love - Oxytocin

Anti-stress hormone  
Feeling calm and connected, Increased curiosity  
Lessens cravings & addictions  
Increases sexual receptivity  
Positive feelings  
Facilitates learning  
Repairs, heals and restores  
Faster wound healing  
Diminishes sense of pain  
Lowers blood pressure, Protects against heart disease  
---

As you can see from the chart above, nearly all the negative effects of stress on the body and mind are related to elevated levels of cortisol. These include: chronic anxiety and depression, emotional over-reaction, negativity, weight gain, heart disease, high blood pressure, and weakened immunity. Oxytocin, by countering cortisol, can ameliorate all of these conditions—as well as some others (see list of recent discoveries at end of article).

Numerous activities produce more oxytocin: meditation, yoga, exercise, massage, caring for a pet, joining a support group, worshipping, and so forth. Yet one of the most important avenues for decreasing stress and increasing levels of oxytocin lies in our intimate relationships. In *Love & Survival*, Dr. Dean Ornish points out that love and intimacy are such powerful determinants of health that if they were produced in pill form, doctors who failed to proscribe them to unhealthy patients would be guilty of malpractice.



Incidentally, one might wonder why we can't just take oxytocin pills to increase levels of this helpful hormone. Unfortunately, oxytocin doesn't cross the body's "blood/brain barrier." We must produce it naturally in the brain to improve our outlook on life (or have it injected with great precision into a tiny area of the brain using the special equipment...not terribly practical).



Oxytocin has been nicknamed the "bonding hormone" and the "cuddle hormone." We produce it naturally when we love, are loved, nurture another, give selflessly, or engage in affectionate touch. It is not the neurochemical behind lust or burning sexual desire, although it is associated with sexual responsiveness.

When we choose to make love by avoiding the stress-producing cycle of highs and lows of conventional sex with its attendant anger, resentment and discouragement—and substitute a very selfless, affectionate, more balanced form of lovemaking—we can greatly improve our health and wellbeing. This shift takes time, and the effects are subtle at first. Yet consistency can lead to profound improvements in wellbeing in a surprisingly short time.

Oxytocin equates with love; we could not fall in love without it. Cortisol equates with fear. These different hormones generate these opposing emotions, just as the emotions of love and fear trigger the production of these respective hormones. In other words, neurochemicals and behavior are circular. This means that with a bit of awareness and determination we can consciously direct our behavior toward the production of beneficial hormones.

By the way, oxytocin is a very unique neurochemical; the more oxytocin we make, the stronger our body and mind respond to it. Our nerve cells actually sprout more oxytocin receptors, making them more sensitive to its effects. It grows easier and easier to be loving. Oxytocin is the neurochemical basis for the adage, “The more you give, the more you get.”

Love tends to breed more love, and fear tends to breed more fear. It’s up to us.



- [www.reuniting.info/science/oxytocin\\_cortisol\\_love\\_fear](http://www.reuniting.info/science/oxytocin_cortisol_love_fear)

#### REFERENCES:

Recent findings demonstrating the power of oxytocin (links to the abstracts mentioned



here may be found in the "Research" section):

- Oxytocin reduces fear. Increased levels of oxytocin inhibit the fight or flight response in the brain. (Huber, 2005)

- Oxytocin speeds healing. Wounded hamsters heal twice as fast when they are paired with a sibling, rather than left in isolation (DeVries, 2004).
- Oxytocin reduces antisocial behavior. The administration of oxytocin normalized social behaviors in animals exhibiting schizophrenia. (Lee, 2005)
- Oxytocin promotes healthy social behavior. Administration of oxytocin reduces symptoms of autism. (Hollander, 2003)
- Oxytocin reduces cravings. When scientists administered it to rodents who were addicted to cocaine, morphine, or heroin, the rats opted for less drugs, or showed fewer symptoms of withdrawal. (Kovacs, 1998)
- Oxytocin calms. A single rat injected with oxytocin has a calming effect on a cage full of anxious rats. (Agren, 2002)
- Oxytocin appears to be a major reason that SSRI's ease depression, perhaps because high levels of cortisol are the chief culprits in depression and anxiety disorders. (Uvnas-Moberg, 1999)
- Oxytocin increases sexual receptivity and counteracts impotence, which may explain why this other way of making love remains pleasurable. (Pedersen, C.A., 2002), (Arletti, 1997)
- Oxytocin counteracts the effects of cortisol, the stress hormone. Increased levels of oxytocin in the brain decrease levels of blood cortisol. (Legros, 2003)
- Oxytocin may increase longevity. Companionship can increase longevity—even among those who are HIV positive (Young, 2004). Oxytocin may also explain why, among various species of primates, care-giving parents (whether male or female) live significantly longer. (Cal Tech, 1998)