

## **Female Responses to Stress: Tend and Befriend**

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A landmark UCLA study suggests friendships between women are special.

They shape who we are and who we are yet to be. They soothe our tumultuous inner world, fill the emotional gaps in our marriage, and help us remember who we really are. By the way, they may do even more.

Scientists now suspect that hanging out with our friends can actually counteract the kind of stomach-quivering stress most of us experience on a daily basis.

**A landmark UCLA study suggests that women respond to stress with a cascade of brain chemicals that cause us to make and maintain friendships with other women.** It's a stunning find that has turned five decades of stress research---most of it on men---upside down. Until this study was published, scientists generally believed that when people experience stress, they trigger a hormonal cascade that revs the body to either stand and fight or flee as fast as possible, explains Laura Cousin Klein, Ph.D., now an Assistant Professor of Bio-behavioral Health at Penn State University and one of the study's authors. It is an ancient survival mechanism left over from the time we were chased across the planet by saber-toothed tigers.

Now the researchers suspect that women have a larger behavioral repertoire than just fight or flight; In fact, says Dr. Klein, **it seems that when the hormone oxytocin is released as part of the stress response in a woman, it buffers the fight or flight response, and instead, encourages her to tend children and gather with other women.** When she actually engages in this tending or befriending behavior, studies suggest that more Oxytocin is released, which further counters stress and produces a calming effect. **This calming response does not occur in men, says Dr. Klein, because testosterone---which men produce in high levels when they are under stress---seems to reduce the effects of Oxytocin.** Estrogen, she adds, seems to enhance it.

The discovery that women respond to stress differently than men was made in a classic "aha" moment shared by two women scientists who were talking one day in a lab at UCLA. There was this joke that when the women who worked in the lab were stressed, they came in, cleaned the lab, had coffee, and bonded, says Dr. Klein. When the men were stressed, they holed up somewhere on their own. I commented one day to fellow researcher, Shelley Taylor, that nearly 90% of stress research is on males. I showed her the data from my lab, and the two of us knew instantly that we were onto something.

The women cleared their schedules and started meeting with one scientist after another from various research specialties. Very

quickly, Drs. Klein and Taylor discovered that by not including women in stress research, scientists had made a huge mistake: The fact that women respond to stress differently than men has significant implications for our health.

It may take some time for new studies to reveal all the ways that Oxytocin encourages us to care for children and hang out with other women, but the "tend and befriend" notion developed by Drs. Klein and Taylor may explain why women consistently outlive men. Study after study has found that social ties reduce our risk of disease by lowering blood pressure, heart rate, and cholesterol. There's no doubt, says Dr. Klein, that friends are helping us live longer.

In one study, for example, researchers found that people who had no friends increased their risk of death over a 6-month period. In another study, those who had the most friends over a 9-year period cut their risk of death by more than 60%. Friends are also helping us live better. The famed Nurses' Health Study from Harvard Medical School found that the more friends women had, the less likely they were to develop physical impairments as they aged, and the more likely they were to be leading a joyful life. In fact, the results were so significant, the researchers concluded, that not having close friends or confidants was as detrimental to your health as smoking or carrying extra weight!

And that's not all! When the researchers looked at how well the women functioned after the death of their spouse, they found that even in the face of this biggest stressor of all, those women who had a close friend and confidante were more likely to survive the experience without any new physical impairments or permanent loss of vitality. Those without friends were not always so fortunate. Yet, if friends counter the stress that seems to swallow up so much of our life these days, if they keep us healthy and even add years to our life, why is it so hard to find time to be with them?

That's a question that also troubles researcher Ruthellen Josselson, Ph.D., co-author of *Best Friends: The Pleasures and Perils of Girls' and Women's Friendships* (Three Rivers Press, 1998). Every time we get overly busy with work and family, the first thing we do is let go of friendships with other women, explains Dr. Josselson. We push them right to the back burner. That is really a mistake because women are such a source of strength to each other. We nurture one another. And we need to have unpressured space in which we can do the special kind of talk that women do when they're with other women. It's a very healing experience.

Taylor, S. E., Klein, L.C., Lewis, B. P., Gruenewald, T. L., Gurung, R.A.R., & Updegraff, J. A. (2000). Female Responses to Stress: Tend and Befriend, Not Fight or Flight" *Psychological Review*, 107(3),41-429