

## Gender & Stress

Read the WebMD article overleaf. Then complete the table explaining why women and men may not run the same risks where it comes to stress. Once you have finished than, answer the questions below...

Difference	Explanation
On average, women have lower-risk lifestyles than men	
Women tend to adopt different coping strategies to men	
Women's biological stress responses differ to men's	

1. How does Susan's way of coping with stress differ to Mitchell's?
2. According to the study by Taylor et al (2002; Psychology Review), how do men and women differ in their coping responses?
3. Dr Williams, of the Behavioural Medicine Research Centre at Duke University, claims that men and women differ in their physiological stress responses. In which ways?
4. Taylor et al suggest that women's responses to stress might have an evolutionary component. What could be the evolutionary basis of women's stress responses?
5. Is Taylor et al's work supported or challenged by the work of Rena Repetti? Why?
6. Do the findings referred to throughout the article mean that all women are better at coping with stress than all men? Explain your answer.

## Gender & Stress

By Daryn Eller. First published in WebMD. Available from the WebMD feature archive [http://www.webmd.com/content/article/14/1689\\_51232.htm](http://www.webmd.com/content/article/14/1689_51232.htm)

Susan Sellers' life is harried; so is her husband Mitchell's. Together, the couple run a demanding and rapidly growing furnishings business in Santa Monica, Calif., and share responsibility for Eli, their 2 1/2-year-old son. Their days are long and pressured, and both feel the strain of life in a fast-moving era. Yet despite having equally tension-filled lives, the Sellers handle the stress in totally different ways.

"When I have a bad day, I'll come home and play with my son, then call friends and tell them about what happened," says Susan, 39, now pregnant with the couple's second child.

"When Mitch has a bad day, he won't talk about it. He internalizes everything." His behavior, though less aggressive, reminds her of her father's when she was growing up. "My father would come home from work and get really angry with us about little things, then stomp around the house."

The difference in coping styles in the Sellers' family could simply be due to their different personality styles. But it might also be owing to their different genders, suggests a new study published in the July 2000 issue of *Psychological Review*.

When researchers from UCLA analyzed data from hundreds of biological and behavioral studies (both human and animal), they concluded that females were more likely to deal with stress by "tending and befriending" -- that is, nurturing those around them and reaching out to others. Men, on the other hand, were more likely to sequester themselves or initiate a confrontation, behavior in line with the "fight or flight" response that's long been associated with stress.

Men and women's different reactions to stress might be more than just an interesting observation; it could account for differences

in their longevity and health. "Women enjoy a greater life expectancy than men," says Shelley E. Taylor, PhD, a professor of psychology at UCLA and lead author of the study. "One reason may be that the tend-and-befriend system protects them from some of the damaging effects of stress."

### The Hormone Connection

The researchers found that all signs point largely to oxytocin, a hormone that promotes both maternal and social behavior and enhances relaxation, as the key factor behind the gender difference.

When faced with stress, the body releases a number of different hormones, says Redford Williams, MD, director of the Behavioral Medicine Research Center at Duke University in Durham, N.C. Some of these hormones, notably cortisol and adrenaline, raise blood pressure and cholesterol levels and suppress the immune system, putting oft-stressed people at greater risk for everything from colds to cancer to heart disease. Some research also suggests that constant, long-term exposure to stress can lead to weight gain thanks to elevated cortisol levels.

Initially, women have the same response to stress as men, leaving them somewhat vulnerable to cortisol and adrenaline. But then women also begin secreting oxytocin from the pituitary gland, which helps scale back the production of cortisol and adrenaline, minimizing their harmful effects.

Interestingly, men also secrete oxytocin when under stress, but they produce it in lesser amounts than women do, and its effects are inhibited by male hormones such as testosterone.

The more relaxed behavior that oxytocin promotes also seems to offer some protection of its own. "Hostility has been shown over and over again to be health-damaging," says Williams. As another example of how women's convivial nature may be protective, William cites the fact that an older man's chance of dying after the death of his spouse rises substantially while a woman's risk increases only slightly. "That's

probably because women access a social network to help them get through the ordeal."

### Responses Evolved Over Time

Taylor and her colleagues believe men and women's differing responses to stress may have evolved to suit the needs of our earliest ancestors. Females, the researchers theorize, were probably better off laying low and tending to their offspring in the face of danger than fighting, which would have put both themselves and their children in harm's way. Likewise, affiliating with others might have been a more valuable strategy -- a kind of safety in numbers defense -- than fleeing and leaving their offspring without protection.

Many of the studies the researchers looked at indicate that our behavior still reflects these primitive mechanisms. In a 1997 study published in the *Journal of Family Psychology*, UCLA psychologist Rena Repetti found that on days that women reported their stress level at work was highest, their children reported that their mothers had been especially loving and nurturing.

In an earlier study, published in the *Journal of Personality and Social Psychology*, Repetti found that fathers who had conflict at work were likely to also have conflict at home on the same day. Likewise, when the fathers had highly stressful days, they tended to withdraw from their families.

Some men, of course, already do turn to friends and family in times of stress. As much as there are biological differences in the way men and women respond to stress, like all sex differences, there is some overlap, says Taylor. "Biology sets a range of responses and social experience determines where you fall into that range."

One friend of hers, in fact, said that he was happy to hear that tenders-and-befrienders have health advantages. After all, he says, he fits the description: He's the type of guy who, the minute he gets home from work, drops his briefcase and rolls around on the floor with his children. "If more men did that," says Taylor, "they'd be healthier, and so would their children."