

# Recipe for Longevity: No Smoking, Lots of Friends

By LAURA BLUE Wednesday, Jul. 28, 2010



A healthy social life may be as good for your long-term health as avoiding cigarettes, according to a massive research review released Tuesday by the journal *PLoS Medicine*.

Researchers at Brigham Young University and the University of North Carolina at Chapel Hill pooled data from 148 studies on health outcomes and social relationships — every research paper on the topic they could find, involving more than 300,000 men and women across the developed world — and found that those with poor social connections had on average 50% higher odds of death in the study's follow-up period (an average of 7.5 years) than people with more robust social ties. **(See 10 smarter ways to reach your retirement goals.)**

That boost in longevity is about as large as the mortality difference observed between smokers and nonsmokers, the study's authors say. And it's larger than differences in the risk of death associated with many other well-known lifestyle factors, including lack of exercise and obesity. "This is not just a few studies here and there," says Julianne Holt-Lunstad, lead author on the review and an associate professor of psychology at Brigham Young University. "I'm hoping there will be recognition from the medical community, the public-health community and even the general public about the importance of this." **(See TIME's special report on how to live 100 years.)**

The friend effect did not appear to vary by sex or by age, with men and women of all ages and health statuses showing roughly equal benefit. Nor were lonely people unusually susceptible to any one disease in particular. **(Comment on this story.)**

But if it's true that we get by with a little help from our friends, then how, exactly, do our friends do it? That is, how does "social integration" — measured by surveys and questionnaires about friends, family size, marital status and the number of household residents — influence long life? The short answer is that we don't really know yet. "The truth of the matter is that the critical evidence on psychosocial processes and health have

come about only within the last 10 to 15 years — even though there's been a lot of theory on it since the 1970s," says psychology professor Bert Uchino at the University of Utah. **(See TIME's special report on how to not get sick.)**

That may help to explain why doctors, for the most part, have yet to embrace social support as a factor in good health, on par with smoking habits, diet or exercise. Without a good sense of the physiological mechanisms that may link feelings of loneliness, for instance, to biological markers like blood pressure and resting heart rate, it has been easy to dismiss the power of social connections as nothing more than an artifact of the data or, worse, as touchy-feely pseudoscience.

To be sure, the direct physical evidence of the health benefits of social support is much more preliminary than the population-level association reported by Holt-Lunstad. But the evidence is mounting, says Uchino, who has written widely on the physiological links between social life and health outcomes. (Uchino did not contribute to the new review in *PLoS Medicine*, but has collaborated with Holt-Lunstad on other projects and was, once upon a time, also her grad-school adviser.)

We turn to family and friends for obvious tangible support when we're sick — from help preparing meals to keeping track of pills, appointments and insurance forms. And caring about others may also prompt us to take better care of ourselves. "A really good example, of course, is someone who has a child," Uchino says. That new bond is often the impetus to quit smoking, to drink less or to curb any number of risky pastimes.

But the influence of social ties may be even more powerful than that. Social relationships, it seems, may also help our bodies help themselves.

Recent lab studies have shown that, in a stressful situation, blood pressure and heart rate will increase less when people are accompanied by a person who is close to them. Brain imaging also shows neurological differences between a person who is alone and a person who has support: in a lab-induced tense situation, brain activity in the anterior cingulate cortex, a region activated in times of stress, is attenuated when people have a close friend or relative alongside them. And it's not just adult stress. In an experiment published this spring, children who were allowed to talk to their mothers after a stressful encounter — giving an impromptu speech or doing math problems in public — showed increased levels of oxytocin, a neurotransmitter thought to dampen the hormonal stress response, compared with children who did not have contact with their mothers.

In one of the most famous experiments on health and social life, Sheldon Cohen at Carnegie Mellon University exposed hundreds of healthy volunteers to the common cold virus, then quarantined them for several days. Cohen showed that the study participants with more social connections and with more diverse social networks — that is, with friends from a variety of social contexts, such as work, sports teams and church — were less likely to develop a cold than the more socially isolated study participants.

The immune systems of people with lots of friends simply worked better, fighting off the cold virus often without symptoms. Studies suggest that the immune response may be affected by stress hormones — catecholamines and glucocorticoids — so that a strong social life thus affects immune function by helping people keep physiological stress in check.

But turning such research into full-fledged medical advice isn't easy. "It's hard to legislate social relationships," Holt-Lunstad says. "And we all know that some relationships are better than others, and not all relationships are entirely positive."

Since Holt-Lunstad's new study reviewed the statistical association between mortality risk and relationship quantity, rather than perceived quality, she wonders whether we wouldn't see even stronger benefits if we focused only on the good relationships. Bolstering these connections may ultimately help people stay healthier than trying to build connections between complete strangers, as in, say, a cancer support group. (Studies on the physical health benefits of support groups show mixed results.) "We need to pay better attention to naturally occurring relationships and to fostering those," Holt-Lunstad says.