

Study reveals how stress can make you sick

Researchers say chemical in blood is crucial pathway

WASHINGTON (AP) --It's no surprise that constant stress can make people sick, and now a team of researchers has figured out how.

A study focused on 119 men and women who were taking care of spouses with dementia. The health of the caregivers was compared with that of 106 people of similar ages who were not living under the stress of constant care giving.

Blood tests showed that a chemical called Interleukin-6 sharply increased in the blood of the stressed caregivers compared with blood of the others in the test. Previous studies have associated IL-6 with several diseases, including heart disease, arthritis, osteoporosis, type-2 diabetes and certain cancers.

The study also found the increase in IL-6 can linger in caregivers for as long as three years after a caregiver had ceased that role because of the spouse's death. Of the test group, 78 spouses died during the survey.

"This really makes a link to why chronic stress can actually kill people," said Janice Kiecolt-Glaser, professor of psychology and psychiatry at Ohio State University. "We haven't had a good mechanism before."

She explained that people under stress tend to respond by doing things that can increase their levels of IL-6.

For example, they may smoke or overeat; smoking raises IL-6 levels, and the chemical is secreted by fat cells. Stressed people also may not get enough exercise or sleep, she added. Exercise reduces IL-6, she said, and normal sleep helps regulate levels of the chemical.

It clearly points to the need to control stress better, she said.

The findings by the research group, headed by Kiecolt-Glaser and her husband, Ronald Glaser, a professor of molecular virology, immunology and medical genetics at Ohio State, appear in this week's issue of Proceedings of the National Academy of Sciences.