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Happiness helps people stay healthy

17:55 18 April 2005
[NewScientist.com news service](#)
Shaoni Bhattacharya

People who are happier in their daily lives have healthier levels of key body chemicals than those who muster few positive feelings, a new study suggests. This means happier people may have healthier hearts and cardiovascular systems, possibly cutting their risk of diseases like diabetes.

Previous studies have shown that depression is associated with health problems compared to average emotional states. But few studies have looked at the effects of positive moods on health. Now, researchers at University College London, UK, have linked everyday happiness with healthier levels of important body chemicals, such as the stress hormone cortisol.

"This study showed that whether people are happy or less happy in their everyday lives appears to have important effects on the markers of biological function known to be associated with disease," says clinical psychologist Jane Wardle, one of the research team. "Perhaps laughter is the best medicine," she adds.

"This is the best data to date that associates positive emotional feelings with good effects on your health," says Carol Shively, at Wake Forest University Baptist Medical Center in Winston-Salem, North Carolina, US. "We usually concentrate on things that are either bad or wrong, rather than good or right."

Civil subjects

The team studied 216 middle-aged men and women living in London, UK, who are part of the ongoing "Whitehall II" study of thousands of civil servants, led by Michael Marmot.

This subset was asked to rate how happy they had been feeling in the last five minutes at about 33 points during their working or leisure days. At these points, their heart rates and blood pressures were also measured by an automated system.

Saliva samples were also taken from the volunteers at eight points during a working day and a leisure day to test levels of the stress hormone cortisol. On one occasion, the subjects were invited into the lab and given a "mildly stressful" task to perform while their biological responses were measured. The team controlled for factors such as socioeconomic position, age and gender to try to tease out the effects of happiness alone on health.

"The happier you were, the lower your cortisol levels during the day," says Wardle. "For men, but not for women, the happier you were the lower your average heart rate was."

Cortisol is a stress hormone of which high levels are linked to conditions such as type II diabetes and hypertension. And lower heart rates are associated with good cardiovascular health.

Sticky blood

In addition, individuals who said they were happy nearly every time they were asked had lower levels of a blood protein called fibrinogen following the stressful task. This molecule makes blood "sticky" and is vital in the clotting process, but high concentrations can signal future coronary heart disease problems.

Shively notes that scientists have theorised that emotions enable individuals to respond appropriately to the environment. "Here's a great example of how happiness might be modulating responses to the environment. Happiness might be every bit as important as other emotions which get a lot more press, like anger or

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depression.”

Wardle adds that the way the brain functions during happy states “perhaps makes the little hassles and irritations of everyday life loom less large, so you don’t get such strong reactions to them”.

Journal reference: *Proceedings of the National Academy of Sciences* (DOI: 10.1073/pnas.0409174102)

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