

## Black Tea Soothes Away Stress

ScienceDaily (Oct. 4, 2006) — Daily cups of tea can help you recover more quickly from the stresses of everyday life, according to a new study by UCL (University College London) researchers. New scientific evidence shows that black tea has an effect on stress hormone levels in the body.

The study, published in the journal *Psychopharmacology*, found that people who drank tea were able to de-stress more quickly than those who drank a fake tea substitute. Furthermore, the study participants – who drank a black tea concoction four times a day for six weeks – were found to have lower levels of the stress hormone cortisol in their blood after a stressful event, compared with a control group who drank the fake or placebo tea for the same period of time.

In the study, 75 young male regular tea drinkers were split into two groups and monitored for six weeks. They all gave up their normal tea, coffee and caffeinated beverages, then one group was given a fruit-flavoured caffeinated tea mixture made up of the constituents of an average cup of black tea. The other group – the control group – was given a caffeinated placebo identical in taste, but devoid of the active tea ingredients. All drinks were tea-coloured, but were designed to mask some of the normal sensory cues associated with tea drinking (such as smell, taste and familiarity of the brew), to eliminate confounding factors such as the ‘comforting’ effect of drinking a cup of tea.

Both groups were subjected to challenging tasks, while their cortisol, blood pressure, blood platelet and self-rated levels of stress were measured. In one task, volunteers were exposed to one of three stressful situations (threat of unemployment, a shop lifting accusation or an incident in a nursing home), where they had to prepare a verbal response and argue their case in front of a camera.

The tasks triggered substantial increases in blood pressure, heart rate and subjective stress ratings in both of the groups. In other words, similar stress levels were induced in both groups. However, 50 minutes after the task, cortisol levels had dropped by an average of 47 per cent in the tea drinking group compared with 27 per cent in the fake tea group.

UCL researchers also found that blood platelet activation – linked to blood clotting and the risk of heart attacks – was lower in the tea drinkers, and that this group reported a greater degree of relaxation in the recovery period after the task.

Professor Andrew Steptoe, UCL Department of Epidemiology and Public Health, says: “Drinking tea has traditionally been associated with stress relief, and many people believe that drinking tea helps them relax after facing the stresses of everyday life. However, scientific evidence for the relaxing properties of tea is quite limited. This is one of the first studies to assess tea in a double-blind placebo controlled design – that is, neither we nor the participants knew whether they were drinking real or fake tea. This means that any differences were due to the biological ingredients of tea, and not to the relaxing situations in which people might drink tea, whether they were familiar with the taste and liked it, and so on.

“We do not know what ingredients of tea were responsible for these effects on stress recovery and relaxation. Tea is chemically very complex, with many different ingredients. Ingredients such as catechins, polyphenols, flavonoids and amino acids have been found to have effects on neurotransmitters in the brain, but we cannot tell from this research which ones produced the differences.

“Nevertheless, our study suggests that drinking black tea may speed up our recovery from the daily stresses in life. Although it does not appear to reduce the actual levels of stress we experience, tea does seem to have a greater effect in bringing stress hormone levels back to normal. This has important health implications, because slow recovery following acute stress has been associated with a greater risk of chronic illnesses such as coronary heart disease.”

*Adapted from materials provided by [University College London](#).*

University College London (2006, October 4).