

New Research on Tea shows promising Health Effects for Tea Drinkers

What avid tea drinkers have appreciated for thousands of years, is now being explained scientifically from specific studies on the health benefits of tea. On September 18, 2007, the U.S. Department of Agriculture in Washington D.C. hosted the *Fourth International Scientific Symposium on Tea and Human Health* at which leading scientists from around the world presented the most recent research findings on the topic of tea and health.

The newest area of scientific studies is the impact of tea on the brain. According to John Foxe, Ph.D., Professor of Neuroscience, Biology and Psychology at City College of the City University of New York, theanine from tea seems to actively alter the attention networks of the brain. The amino acid theanine, which is almost exclusively present in the tea plant, *Camellia sinensis*, affects the brain's neurotransmitters and increases alpha brain-wave activity. This alpha brain rhythm shows a calmer, yet more alert, state of mind.

The effects of theanine in combination with caffeine are higher than with either one alone in improving attention. Theanine seems to work synergistically with caffeine to help induce a more calming, relaxed state which allows the mind to focus and concentrate better at tasks. This may explain why tea drinkers feel a soothing effect from tea without necessarily feeling tired. As Dr. Foxe explained, theanine helps the tea drinker control one's attention. When asked if this might be of help to children or adults suffering from attention deficit disorders such as ADD or ADHD, Dr. Foxe agreed, however, so far no studies have been done in that area.

Another positive effect on the brain is the preventive effect of antioxidants in green tea on diseases such as Alzheimer's and Parkinson's. Polyphenols appear to prevent brain cells in mice from dying and may even rescue the neurons once they have been damaged, to help them repair themselves.

Studies on the bioavailability of tea indicate that adding citrus juices to tea increases the body's ability to absorb the healthy antioxidants in tea. So adding a slice of lemon to the tea, as the Russians taught us hundreds of years ago, or preparing an iced tea punch with oranges or grapefruits, will make the drink not only pleasing but also healthier.

Tea flavonoids are thought to support cardiovascular health by reducing inflammation and blood cholesterol levels and by dilating blood vessels to help manage blood pressure. Other exciting findings were the positive effects of tea flavonoids on the prevention of lung cancer and tea's ability to change metabolism to favor weight loss and better manage blood sugar levels.

The scientists agreed that 2-4 cups of tea would be a healthy daily dose, but also emphasized that tea should be included as part of a "healthy cocktail" consisting of the recommended 5-a-day vegetables and fruits, exercise, intellectual activities, and possibly a glass or two of red wine, and an occasional piece of dark chocolate.



According to Dr. Foxe of City University of N.Y. theanine in tea may work synergistically with caffeine to help induce a more calming, relaxed state, but one that allows the mind to focus and concentrate better at tasks.