



SLIMSTYLES™ CRAVE-RELAX™

Controls Food Cravings and Compulsive Eating

How many of us compulsively eat when we're under stress? Theanine, the amino acid found in green tea, may help control the food cravings that lead to increased weight. How? When confronted with daily stress, problematic sleep patterns, and feelings of being 'under the gun', too much cortisol surges through our system. Unbalanced cortisol levels can lead to excess insulin production with a direct effect on weight gain. Stress can also make us head straight for the fridge searching for high-fat, high-carbohydrate foods to provide comfort and calm us down.

Cortisol and similar adrenal hormones play a major role in the response to stress. Cortisol keeps blood sugar levels constant by triggering formation of glucose from fats and proteins. Normally, the body releases high amounts of cortisol early in the morning but only low levels at night. If you are under stress, though, your adrenals will release cortisol whenever it is needed. Constant stress means constant hormone secretion, and here is where we see the negative side of this finely tuned response. Excessive levels of cortisol and other glucocorticoids produced by the adrenals, can lead to symptoms such as depression, fatigue, insomnia, high blood sugar, loss of muscle and bone, poor wound healing, and impaired immune function. For those trying to lose weight, high cortisol levels will sabotage our best efforts as the cortisol leads to high blood sugar and loss of muscle, key factors in keeping the weight on. Mounting evidence shows that continuously elevated cortisol levels are associated with weight gain, problems with relaxation, increased sugar or carbohydrate cravings, fatigue, and a compulsion to eat. How can theanine control this stress-weight-stress cycle and contribute to weight loss?

HOW DOES SLIMSTYLES L-THEANINE HELP US RELAX?

The brain transmits four different categories of brain waves that are determined by frequency: *Gamma*, *Theta*, *Alpha* and *Beta*. *Gamma* waves are

present during sound sleep and *Theta* waves indicate dozing or light sleeping. In contrast, *Beta* waves are present during an awake, excited state, whereas *Alpha* waves indicate an awake, yet relaxed state. Here's how L-theanine helps us to relax. Absorbed quickly through the small intestine, it is transported directly to the brain where it stimulates the generation of *Alpha* brain waves. Although effective doses can range from between 50 to 200 mg of L-theanine, it only takes 30 to 40 minutes to achieve an alert, awake yet relaxed mental and emotional state lasting from 8 to 12 hours. Researchers also suggest that L-theanine may play a role in the formation of GABA (gamma amino butyric acid), a neurotransmitter that is key to relaxation and memory. Theanine can counteract the effects of cortisol, by enhancing a feeling of calm and relaxation, controlling the craving.

SUNTHEANINE® — THE ONLY CLINICALLY TESTED L-THEANINE

Food scientists at the Taiyo Kagaku Company in Japan developed an enzymatic method of producing a very pure yet potent L-theanine. This method won them international awards (Food Ingredient Research Award, 1998 and Best New Product of 2000 at Nutracon). Studies that contributed to the award were:

- Studies with Wistar rats showed that orally administered L-theanine reached the brain within 30 minutes and decreased serotonin levels and increased catecholamines and tryptophan levels.
- A study involved 18- to 23-year-old women, who were placed in a dark room and were given either 50 to 200 mg of Suntheanine® or plain water as a placebo. Within 40 minutes *Alpha* brain waves that produced a relaxing but not drowsy effect were reported in the women given Suntheanine®.

A GOOD NIGHT'S SLEEP — NATURALLY

L-theanine might be ideal for people who have trouble sleeping and the stress of waking up day after day feeling exhausted. Researchers at the

National Institute of Mental Health in Japan have found that taking a pure L-theanine dietary supplement (Suntheanine®) before bed produced a significant improvement in sleep quality. The research team's findings outline the first human study showing that L-theanine, an amino acid found in green tea, can enhance the quality of actual sleep experienced by young subjects.

The Japanese research team first had 22 young men (12 daytime workers, average age of 28; 10 students, average age of 26) undergo 3-day acclimatization period. They then were asked to take 200 mg of Suntheanine® or a placebo one hour before bedtime for six consecutive days. After subjects completed this first blinded supplementation phase they were then "crossed over" to receive the opposite treatment. Subjects' sleep performance was assessed by interviews upon awakening, self-reported questionnaires, and a wrist actigraph, which records bodily movement during sleep.

The entire group reported a statistically significant absence of "feeling exhausted" and a reduced need for sleep during the Suntheanine® administration period, relative to placebo. Seven of the ten collegiate males showed a statistically significant improvement in sleep efficiency, an index of actual sleep time enjoyed between the time of falling asleep and the final morning awakening. These subjects also reported a superior mental state prior to falling asleep and a decreased occurrence of nightmares during the Suntheanine® phase but not during placebo, even though the total time from falling asleep to awakening was unchanged during both placebo and Suntheanine® phases.

SAFETY AND DOSAGE

Data from human and animal studies show L-theanine to be very safe. According to the Ames Salmonella/Microsome Assay, L-theanine is non mutagenic. In fact, the Japanese government gave L-theanine food additive approval as far back as 1964. Approval was given for unlimited use

in foods with the exception of infant foods. In 1994 an Asian confectionary manufacturer introduced Relax, a chewing gum that contained 25 mg of L-theanine per piece of gum. Since then hundreds of products containing theanine have been introduced to the Asian market, some with levels of L-theanine up to 300 mg per serving, with no adverse events reported.

It doesn't matter what time of day you choose to take SlimStyles Crave-Relax. It can be taken as soon as stress levels start to rise, or as soon as you find yourself heading to the fridge. If you're experiencing high levels of stress take the upper end of the dosage spectrum but no more than 600 mg within a 6-hour period.

Since pregnant and lactating women in oriental countries have absorbed L-theanine from the teas that they consume with no reports of problems, it should not be a concern, however we do not yet have conclusive proof from studies to be able to recommend it at present, especially in higher amounts.

MAKE SURE IT'S THE RIGHT L-THEANINE

A recent study showed that any other theanine products might not be what they claim to be. Only Suntheanine® is exclusively L-theanine and the other products out there actually contain a mixture of D- and L-theanine. These mixtures are called racemates and may be inferior to the real thing in terms of efficacy and safety. In the February 15th 2004 issue of *Rapid Communications in Mass Spectrometry*, Dr. Daniel Armstrong stated: "Our analysis reveal that several theanine ingredients marketed for use in dietary supplements are not what they claim to be...Theanine extracted from tea is present in predominantly the L-form. Five of the six ingredients we test were racemates, suggesting they were chemically synthesized. Only Suntheanine®, which is produced via an enzymatic process, appeared to be essentially pure L-theanine."

Natural Factors makes this exclusive form of L-theanine available in fast-acting chewable tablets that come in two delicious flavours: Tropical Fruit and Wild Berry. Each tablet contains 100 mgs of Suntheanine® L-theanine.

Therefore, when stress sends you straight to the fridge for those high-fat, high-carbohydrate comfort foods, use SlimStyles Crave-Relax chewable tablets, the only clinically researched pure L-theanine commercially available to counteract the effects of cortisol. They provide quick-acting craving control, often a key factor in successful dieting.