Aged garlic extract supplement helps relieve acute stress

Shih-Jen Tsai

Department of Psychiatry, Taipei Veterans General Hospital, Taipei, Taiwan, ROC; Division of Psychiatry, School of Medicine, National Yang-Ming University, Taipei, Taiwan, ROC; Institute of Brain Science, National Yang-Ming University, Taipei, Taiwan, ROC.

Psychosocial stress is a ubiquitous phenomenon to most people living in a complex social environment. Stress has been implicated as contributors to many physical diseases as well as psychiatric disorders like depression and anxiety disorders. Studies of responses to acute stress may reveal processes that eventually lead to maladaptive responses to stress. Animal studies of stress have demonstrated a wide range of neurochemical and morphological alterations that could contribute to the stress reaction. Among them, the hypothalamus-pituitary-adrenal axis and its end product cortisol are essential for an adequate response to stress.1 Cortisol is important for proper body functioning but needs to be balanced. However, some people experience a greater spike in cortisol than others when they experience stress.1 The elevated cortisol levels in response to stress may interfere with learning and memory, lower immune function and cause increases in weight gain, blood pressure, cholesterol, and heart disease.2 In addition to cortisol, stress increases the rate of decline in brain monoamine levels (namely serotonin, norepinephrine, and dopamine), which may eventually cause depression.3

Excess stress is a common problem for many people and there are many ways to help manage stress. Medication such as anxiolytics and antidepressants is a simple, fast way to reduce stress. Although medication can relieve the symptoms of stress, it is not usually suitable for long-term use because the potential side-effects from these medications may outweigh their benefits. Other treatments, including exercise and yoga, can be just as effective as medication but do not come with unwanted side effects.4 However, all of these stress relieving strategies take time, and sometimes it might feel overwhelming or frustratingly slow.

Garlic (Allium sativum), a strong smelling and pungent tasting food plant, has a rich history of medicinal use. In addition to its antinecancer, anti-inflammatory, antioxidant, immunizing enhancing properties, antibacterial activities, and blood pressure lowering ability, studies had demonstrated that garlic extract has antidepressant-like activity in stress animal model of depression.4 Garlic has fewer side effects because it comes from natural elements and is a common food plant. Body odor, bad breath as well as gastrointestinal side effects may occasionally occur. Garlic should be used cautiously by persons who are at risk for bleeding as garlic has antiplatelet effects. Persons allergic to garlic or other members of the lily family should avoid use of garlic. However, its strong aroma may limit its use in stress relief. To alleviate the strong aroma and taste, Hwang et al used the low-temperature-aged garlic (LTAG) extract to test its antidepressant-like effects from these medications may outweigh their benefits. Other treatments, including exercise and yoga, can be just as effective as medication but do not come with unwanted side effects.4 However, all of these stress relieving strategies take time, and sometimes it might feel overwhelming or frustratingly slow.

www.ejcma.org
ACKNOWLEDGMENTS
This study was supported by grant V108C-038 from the Taipei Veterans General Hospital.
We thank Emily Ting for English editing.

REFERENCES