Feb. 2013

**Reishi (Ganoderma lucidum): Effects on Cognitive Function**

Reishi contains many bioactive compounds that can have positive impacts on cognitive function in a multifactorial manner. Reishi is highly-valued for its adaptogenic properties that help us to neutralize stress at the adrenal level and that can also help to correct hormonal and neurotransmitter deficiencies and imbalances. On a very basic level the adaptogenic, calming properties of Reishi can contribute to a clear and focused mind. Excessive stress and worry can significantly impact cognitive function.

Research has demonstrated that Reishi supports a healthy inflammation response. Abundant evidence has shown that neuro-inflammation is a significant factor in the pathogenesis of many types of neurodegenerative disorders. Reishi also supports healthy and balanced immune function. Impaired or unbalanced immune function can result in chronic inflammation that can cause a cascade of harmful conditions. The main form of active immune defense in the brain and central nervous system (CNS) are provided by microglia. Microglia cells are the resident macrophages of the brain and spinal cord that are constantly scavenging the CNS for plaque deposits, damaged neurons and infectious agents that can negatively impact cognitive function. The immunomodulatory properties of Reishi support healthy microglia and macrophage function.

The natural aging process in humans results in a continuous decline in cognitive performance. Multiple studies in both humans and animal models have indicated that this decrease in cognitive function is associated with an age-related increase in oxidative stress. Additionally, intensive exercise can generate very high levels of reactive oxygen species, leading to oxidative damage that can impact cognitive function and many other aspects of health. Reishi contains an array of antioxidants that can reduce the damaging effects of oxidative stress by reactive oxygen species (ROS).

An adequate supply of oxygen to the brain is essential for healthy cognitive function. In Traditional Chinese Medicine (TCM), Reishi is highly-valued as a cardiovascular tonic that can help to ensure a good supply of blood and oxygen to brain and nerve tissue via several modes of action. Clinical studies and experiments with animals confirm that Reishi can dilate the coronary artery, increase blood flow, and improve circulation in cardiac muscle capillaries, thus increasing the supply of oxygen and energy to cardiac muscle. Reishi improves the function of red blood cells in the uptake and transfer of oxygen to the extent that Reishi can even alleviate symptoms of altitude sickness. Reishi
may help to prevent strokes and their devastating effects on the brain and nerve function by improving blood circulation and inhibiting the aggregation of platelets.

Cognitive function can also be impaired by toxins such as heavy metals, pesticides and pharmaceutical drug breakdown products. Reishi can help to chelate heavy metals and thus enable efficient elimination of these toxins. Reishi also supports healthy liver function for detoxification processes.

REFERENCES


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