Amycenone, a nootropic found in *Hericium erinaceum*

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Abstract

The current paper describes the physiological and nootropic actions of Amycenone, which is an activator of brain function that is obtained from extracts of the Yamabushitake（*Hericium erinaceum*）.

Kawagishi and his group have studied compounds that are derived from medicinal mushrooms and their use in the treatment of dementia since 1991. They have found that *H. erinaceum* exerts important bioactivities, including the induction of nerve growth factor（NGF）synthesis, the inhibition of the cytotoxicity of beta-amyloid peptide, and the protection against neuronal cell death caused by oxidative or endoplasmic reticulum stress.

Since NGF was first discovered in the 1940s, it has garnered attention as a substance in the brain that curbs the degeneration and loss of neurons and that promotes the repair and regeneration of nerve function. However, NGF cannot pass through the bloode-brain barrier.

Amysenone（Amyloban®3399, which contains a standardized extract of *H. erinaceum*）has been found to pass through the blood-brain barrier, and its safety as a health food is currently being ascertained.

On the basis of the author's first-hand experiences, Amyloban®3399 was found to clearly increase alertness. The actions of Amyloban®3399 in treating sleep-related breathing disorders were examined. Amyloban®3399 was effective in improving sleep apnea and hypopnea syndrome.

The use of Amyloban®3399 has been noted to result in the obvious restoration of cognitive function in mild cognitive disorder.

Key words ：erve growth factor（NGF）, *hericium erinaceum*, nootropic, cognitive impairment