



Q Are there any studies conducted on lion's mane mushroom, Ji-Lin ginseng, and ashitaba?

A A joint research project by Japan's Tohoku University, Hokuto Corporation, and Shinshu University found that lion's mane mushroom supports the production of the enzymes that give cells the signal to release more nerve growth factor (NGF). From there, NGF can do its normal work of maintaining, repairing, and improving the infrastructure of memory. A study published in Ukraine's *Fiziolohichnyi Zhurnal* shows that lion's mane mushroom directly supports myelination and myelin growth. A study published in the UK journal *Phytotherapy Research* shows that lion's mane mushroom supports cognitive function.

A study conducted by Gifu Pharmaceutical University, Japan, found that Ji-Lin ginseng contains an NGF-like substance that supports neuronal outgrowth. Ji-Lin ginseng also contains compounds called saponins, which support healthy NGF levels in the brain. Ginsenoside Rg1 in Ji-Lin ginseng helps support neurons and cognitive functions. Furthermore, ginseng has beneficial pectin that has been found to support brain cells from toxicity created by free radicals.

As for ashitaba, a study published in Japan's *Biological and Pharmaceutical Bulletin* shows that ashitaba supports internal signals that increase the levels of brain-derived neurotrophic factor (BDNF), which helps maintain neurons. Another study shows that powders made from ashitaba support healthy levels of NGF in the brain and muscles. Chalcones in ashitaba not only promote the production of NGF and BDNF, but also serve as antioxidants.

Q What is NGF?

A Nerve growth factor (NGF) is a protein that is extremely important for the normal development of the brain and nervous system. Research shows that NGF can help maintain healthy peripheral nerves (the nerves outside the brain and spinal cord). Studies show that elevating NGF levels in the body supports brain health. NGF also helps to sheathe neurons in myelin and aids in the repair of myelin.

Q Does everyone get dementia when they grow old?

A The risk of dementia increases as a person grows older. However, this does not mean everyone will get dementia. Dementia under age 60 is rare, and about 35% of people will have symptoms suggestive of dementia by age 85. Dementia is not a disease, but rather a set of symptoms related to declining mental ability over a long time period. These symptoms may include loss of recent memory and language difficulty.

Q Is it possible to slow down or even reverse memory loss?

A The human brain is malleable, even in old age. The following factors can help maintain the health of neurons.

Diet: Eat a balanced diet. Consume more plant foods like lion's mane mushroom, Ji-Lin ginseng, and ashitaba, which help support brain health.

Exercise: Exercise can increase the blood supply to the brain, boost the growth of new neurons, and forge more connections between neurons.

Lifelong Learning: Continuous learning trains brain cells. Picking up a new skill exercises brain cells because new information is processed by the brain.

Q Would the ginseng in *E-Memories™* cause overstimulation and excessive heat?

A No. *E-Memories* contains Ji-Lin ginseng, not Korean ginseng. Ji-Lin ginseng is mild in nature.



問 學術界有哪些關於猴頭菇、吉林人參和明日葉的研究呢？

答 由日本東北大學、北斗股份有限公司和信州大學聯合進行的一項研究發現，猴頭菇會促進人體內某些酶的產生，這些酶會給細胞發出信號，使之釋放更多的神經生長因子（NGF）。這樣，釋放出的神經生長因子就能夠維護、修復和改善記憶功能的基礎結構；而另外一項發表在烏克蘭 *Fiziolohichnyi zhurnal* 期刊上的研究發現，猴頭菇還能直接促進髓鞘和髓磷脂的生長；還有一項發表在英國“植物療法研究”（*Phytotherapy Research*）期刊上的研究指出，猴頭菇能強化認知功能。

日本岐阜藥科大學的一項研究發現，吉林人參中含有一種類似 NGF 的物質，這種物質能夠刺激神經生長。吉林人參中還含有一種能夠提升大腦中 NGF 水平的化合物 - 皂甙。吉林人參中的人參皂甙 **Rg1**，能維護神經元，改善認知功能。此外，人參中還蘊含著有益的膠質，可保護腦細胞免受自由基的毒害。

關於明日葉，有一項發表在日本“生物學與醫藥通報”上的研究報告指出，明日葉能激發體內信號的傳遞，提升腦源性神經營養因子（BDNF）的水平，進而維護神經元。另外一項研究顯示，明日葉粉能夠將大腦和肌肉中的 NGF 維持在健康的水平。明日葉中的查爾酮不僅可促進 NGF 和 BDNF 的產生，同時也具有抗氧化劑的效益。

問 什麼是 NGF

答 神經生長因子（NGF），是對大腦和神經系統的正常發育至關重要的一種蛋白質。研究顯示，NGF 有助於維護神經末梢（大腦和脊髓的外圍神經）的健康。研究證實，提升人體內 NGF 的水平，有助於維護大腦的健康。NGF 還可幫助髓磷脂包裹神經元，並有助於修復髓磷脂。

問 是不是每個人老了之後都會癡呆呢？

答 年齡越大，癡呆的風險會越高。但這並不意味著每個人都會癡呆。在 60 歲以下就患癡呆症的人較為罕見，但到了 85 歲則大約會有 35% 的人都出現一些癡呆的症狀。癡呆症並不是一種疾病，而是腦力和思考力長期衰退的一些症狀。這些症狀包括失去近期記憶和語言障礙等。

問 我們可以推遲甚至扭轉記憶衰退嗎？

答 人類的大腦具有可塑性，即使到了老年狀態也是如此。以下方法都有助於維護神經元的健康。

飲食：注意飲食的均衡，多吃一些有助於大腦健康的植物性食品，比如猴頭菇、吉林人參和明日葉等。

運動：運動可增加大腦的血液供應，促進新神經元的生長及神經元間訊息的疏通與傳導。

終生學習：不斷學習新技能，以此訓練大腦細胞，因為大腦處理新的訊息時腦細胞會得到鍛煉。

問 「樂憶」中的人參是否過於刺激，會不會導致上火？

答 「樂憶」中的人參是吉林人參，不是高麗參。吉林人參品性溫和，不會導致上火。