

NEW RESEARCH LINKS MUSHROOMS & BRAIN HEALTH

It's a common concern as we age – the ability to keep our mind sharp and our brain active.

World Health Day is on April 7 and the Australian Mushroom Growers Association (AMGA) is urging older Australians to boost their intake of mushrooms following new research into nutrients found in mushrooms and cognitive health.

AMGA Dietitian and one of Australia's leading nutritionists Jane Freeman says it seems as though by consuming even a small portion of mushrooms each week could **help lower the risk of cognitive impairment, which often precedes conditions like dementia, Alzheimer's disease and Parkinson's disease.**



“Mushrooms have grabbed the attention of dementia researchers due to being one of the highest food sources of a neuroprotective type of amino acid called ergothioneine,” Ms Freeman says.

“Interestingly, mushrooms are a food that contains one of highest sources of ergothioneine which may contribute to the **promotion of nerve tissue and help stave off symptoms of brain disorders.**

“It's an exciting time to see this research coming out because Alzheimer's disease affects up to one in 10 Australians over the age of 65, and up to three in 10 Australian over the age of 85.”

A healthy lifestyle is important too, including regular exercise which has been shown to help slow or prevent the onset of dementia.

So how many mushrooms do we need to eat to help to keep our brains healthier?

Ms Freeman says research from the National University of Singapore found seniors who ate more than two standard portions of mushrooms per week (equivalent to half a plate) could have 50 percent less chance of suffering mild cognitive impairment.

“A separate study published in the *British Journal of Nutrition* also showed that even eating one small portion of mushrooms a week was beneficial to reducing the risk of cognitive decline.

“This is another reason why we all should be eating three mighty mushrooms a day, to support our overall health,” Ms Freeman adds.

FAST FACT: Alzheimer's disease is the most common type of irreversible dementia which affects memory, intellect, rational thought and social skills.

– ENDS –

Interview Opportunity: Dietitian Jane Freeman

To discuss nutritional tips for seniors, fast facts and immunity for seniors.

Get inspired with these retro brain-boosting recipes:

- Mushroom & Chicken Pot Pies <https://tinyurl.com/yc58u4a4>
- Bubble & Squeak – Mushroom-style <https://tinyurl.com/bdcw5cer>
- Blended Savoury Mince <https://tinyurl.com/5c43e3e7>
- Mushroom Strudel <https://tinyurl.com/2u4tspv9>

About the Australian Mushroom Growers Association:

The Australian Mushroom Growers Association (AMGA) is the not-for-profit peak industry body, representing the best interests of the Australian mushroom industry. We are passionate about promoting mushrooms for their myriad of unique health benefits and their delicious taste.

MEDIA CONTACT

Bianca Keegan - AMGA Communications & Media
bianca.keegan@amga.asn.au | 0438 758 925

References:

Weigand-Heller AJ, Kris-Etherton PM, Beelman RB. The The 9 Fun Fact Scientific Description Other Considerations References acid or building block of protein called ergothioneine. concentrations (0.1-1mg/g) in fungi/mushrooms, possess significant & efficacious antioxidant activities. bioavailability of ergothioneine from mushrooms (*Agaricus bisporus*) and the acute effects on antioxidant capacity and biomarkers of inflammation. *Prev Med* 2012;54(Supp1):S75-8

Halliwell B, Cheah IK, Tang RMY. Ergothioneine – a diet-derived antioxidant with therapeutic potential. *FEBS Lett* 2018;592(20):3357-3366.

S. Sotgia, A. Zinellu, A.A. Mangoni, G. Pinus, J. Attia, C. Carru, M. McEvoy. Clinical and biochemical correlates of serum L-ergothioneine concentrations in community-dwelling middle-aged and older adults *PLoS One*, 9 (1) (2014), Article e84918

Nakamichi N, Kato Y. Physiological Roles of Carnitine/Organic Cation Transporter OCTN1/SLC22A4 in Neural Cells. *Biol Pharm Bull.* 2017;40(8):1146-1152. doi: 10.1248/bpb.b17-00099. PMID: 28768995

Cheah IK, Feng L, Tang RMY et al. (2016) Ergothioneine levels in an elderly population decrease with age and incidence of cognitive decline; a risk factor for neurodegeneration? *Biochemical and Biophysical Research Communications* 478, 162-167

Hatano T, Saiki S, Okuzumi A et al. (2016) Identification of novel biomarkers for Parkinson's disease by metabolomic technologies. *Journal of Neurology, Neurosurgery & Psychiatry* 87, 295-301

MEDIA RELEASE
30 March 2022



Feng L, Cheah IK, Ng MM, Li J, Chan SM, Lim SL, Mahendran R, Kua EH, Halliwell B. The Association between Mushroom Consumption and Mild Cognitive Impairment: A Community-Based Cross-Sectional Study in Singapore. *J Alzheimers Dis.* 2019;68(1):197-203. doi: 10.3233/JAD-180959. PMID: 30775990.

Ba, D., Gao, X., Al-Shaar, L., Muscat, J., Chinchilli V., Ssentongo, P., Richie, J. (2022) Mushroom Intake and Cognitive Performance Among US Older Adults: the National Health and Nutrition Examination Survey, 2011-2014. *British Journal of Nutrition*, 1-20. doi: 10.1017/S0007114521005195