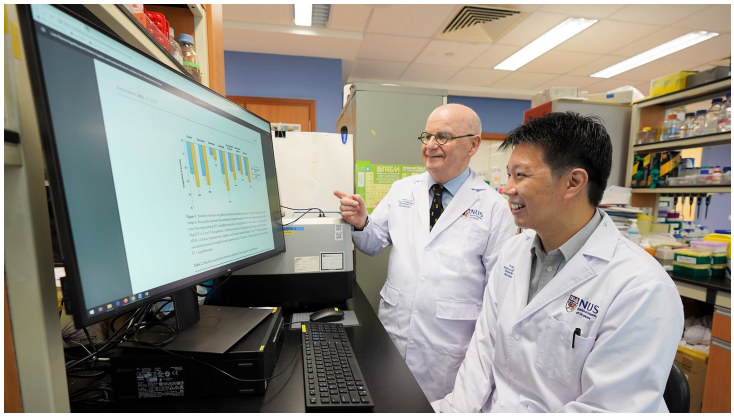
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Singapore identifies predictive blood biomarker for cognitive impairment and dementia

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Identification of elderly persons at risk of developing cognitive impairment and dementia could be made possible by examining ergothioneine levels in the blood



A recent study by a team comprising researchers from the National University of Singapore (NUS) and the National University Health System (NUHS) has revealed that low levels of ergothioneine (ET) in blood plasma may predict an increased risk of cognitive impairment and dementia, suggesting possible therapeutic or early screening measures for cognitive impairment and dementia in the elderly.

The research teams were led by Professor Barry Halliwell from the Department of Biochemistry under the NUS Yong Loo Lin School of Medicine and Associate Professor Christopher Chen and Dr Mitchell Lai from the Memory, Ageing and Cognition Centre under NUHS.

ET is a unique diet-derived compound discovered more than 100 years ago by Charles Tanret. However, it was only in 2005 when scientists discovered a transporter specific for ET that facilitates the uptake and accumulation of ET in the body.

However, evidence of whether a low level of ET in blood plasma can predict the progression of cognitive impairment and dementia was unknown.

The most recent study by the NUS-NUHS research team addresses these gaps in ET research by demonstrating the potential of ET as a predictive biomarker for cognitive impairment and dementia in elderly Singaporeans.

Based on this study, which showed that plasma ET levels in the blood can be a predictive biomarker for the risk of cognitive and functional decline, the research team hopes to gather further evidence of ET's preventive and therapeutic potential through a double-blinded placebo-controlled clinical trial.