
一般講演 | B 食品機能 (Food Function)

[3Ea] 血糖調節、認知機能

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10:45 ~ 11:00

[3Ea-07]Improvement of cognitive function by brain-transfer peptide Tyr-Pro

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キーワード : SAMP8、Morris water maze、dipeptide

【 Purpose】 Tyr-Pro (YP) is a soybean dipeptide that can penetrate the Blood-Brain Barrier (BBB). In this study, we examined the cognitive function improvement effect of long-term oral intake of the YP using a model mouse for promoting aging, SAMP8.

【 Methods】 Sixteen-week-old male SAMP8 mice were used in a control group, a YP diet group (0.01%), and an amino acid diet group (Tyr+Pro, 0.005%). At 41 weeks of age, the Morris water maze test was performed to evaluate spatial learning memory. Brain tissue was removed at the time of slaughter (43 weeks of age), and the expression levels of various proteins were evaluated using ELISA and Western blot assay.

【 Results】 Results of the Morris water maze test showed that escape latency was prolonged in SAMP8 (30.7±6.2 sec), indicating a decrease in spatial learning memory. The amount of A $\beta_{(x-42)}$ in the hippocampus was increased in the control group and significantly decreased by YP intake.