AMPK 活性化内因性単糖：1,5-AF による エクササイズ効果増強の検証

久留米大学　菊池清志
（共同研究者）鹿児島大学　丸山征郎
久留米大学　田中永一郎
同　森岡基浩
鹿児島大学　中西和毅

AMPK-Activated Endogenous Monosaccharide: Verification of Exercise Effect Enhancement by 1,5-AF

by

Kiyoshi Kikuchi
Division of Brain Science, Department of Physiology, Kurume University School of Medicine,
Department of Neurosurgery, Kurume University School of Medicine,
Department of Systems Biology in Thromboregulation,
Kagoshima University Graduate School of Medical and Dental Science,
Department of Pharmacology, Faculty of Dentistry, Mahidol University
Ikuro Maruyama
Department of Systems Biology in Thromboregulation,
Kagoshima University Graduate School of Medical and Dental Science
Eiichiro Tanaka
Division of Brain Science, Department of Physiology, Kurume University School of Medicine
Motohiro Morioka
Department of Neurosurgery, Kurume University School of Medicine
Koki Nakanishi
Course of Physical Therapy, School of Health Sciences,
Faculty of Medicine, Kagoshima University

ABSTRACT

AMP-activated protein kinase（AMPK）activation is expected to prevent frailty. In this study, we evaluated the effects of AMPK on the behavior of aging-accelerated mice（started in Senescence Accelerated Mouse Prone 8:SAMP8）. The mice were divided into AMPK-activated monosaccharide group and control diet group. After 9 months, the mice were raised freely in the cages and analyzed by the SMART video imaging system using an open field, but there was no significant difference between the two groups（n=12）. The study did not demonstrate efficacy of this monosaccharid.

要　旨

AMPK（AMP-activated protein kinase） 活性化がフレイル予防に期待されている．老化促進モデルマウス（SAM8: Senescence Accelerated Mouse8）にて，AMPK活性化作用を有する自然食材由来の単糖による行動解析を中心とする評価をした．本単糖配合飼料摂取群，対照飼料摂取群に対して，飼育ケージ内にて自由飼育を行い，9カ月後にOpen Fieldを用いて，SMARTビデオ画像行動解析装置にて解析したが，両群間（n=12）で有意な差はみられなかった．今回の検証においては本単糖の有効性は実証できなかった．