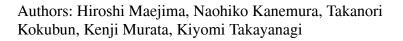
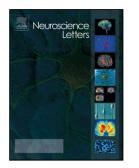
Accepted Manuscript

Title: Exercise enhances cognitive function and neurotrophin expression in the hippocampus accompanied by changes in epigenetic programming in senescence-accelerated mice





PII:	S0304-3940(17)30921-7
DOI:	https://doi.org/10.1016/j.neulet.2017.11.023
Reference:	NSL 33231
To appear in:	Neuroscience Letters
Received date:	23-6-2017
Revised date:	7-11-2017
Accepted date:	8-11-2017

Please cite this article as: Hiroshi Maejima, Naohiko Kanemura, Takanori Kokubun, Kenji Murata, Kiyomi Takayanagi, Exercise enhances cognitive function and neurotrophin expression in the hippocampus accompanied by changes in epigenetic programming in senescence-accelerated mice, Neuroscience Letters https://doi.org/10.1016/j.neulet.2017.11.023

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

ACCEPTED MANUSCRIPT

Exercise enhances cognitive function and neurotrophin expression in the hippocampus accompanied by changes in epigenetic programming in senescence-accelerated mice

Hiroshi Maejima¹, Naohiko Kanemura², Takanori Kokubun², Kenji Murata², Kiyomi Takayanagi²

- Department of Rehabilitation Science, Faculty of Health Sciences, Hokkaido University, Kita 12 Nishi 5, Kita-ku, Sapporo, 060-0812, Japan
- 2. Department of Physical Therapy, Faculty of Health and Social Services, Saitama Prefectural

University, Sannomiya 820, Koshigaya, 343-8540, Japan

Corresponding Author

Hiroshi Maejima, PhD

Department of Rehabilitation Science, Faculty of Health Sciences, Hokkaido University

Kita 12 Nishi 5, Kita-ku Sapporo 060-0812, Japan

E-mail: <u>maeji@hs.hokudai.ac.jp</u> Phone & Fax: +81-11-706-3328

Key words: neurotrophin; exercise; aging; hippocampus; epigenetics

Highlights

- Long term exercise improves cognitive function in the senescence-accelerated mice.
- Long term exercise enhances the expression of BDNF in the hippocampus.
- Long term exercise downregulates the expression of p75 in the hippocampus.
- Exercise induced an increase in activity of acetyltransferase and histone deacetylase.

Abstract

Download English Version:

https://daneshyari.com/en/article/8841854

Download Persian Version:

https://daneshyari.com/article/8841854

Daneshyari.com