

Cellular protein may be key to longevity

September 15 2014



Credit: *Aging cell*

Researchers have found that levels of a regulatory protein called ATF4, and the corresponding levels of the molecules whose expression it controls, are elevated in the livers of mice exposed to multiple interventions known increase longevity.

Elevation of ATF4, at least in the liver, seems to be a shared feature of diets, drugs, genes, and developmental alterations that extend maximum lifespan.

"Pathways that appear to change in the same way in many different kinds of slow-aging [mice](#) may provide helpful hints towards the design of drugs that keep people healthy longer by slowing most of the diseases of aging," said Dr. Richard Miller, senior author of the *Aging Cell* study.

"ATF4 seems to be involved in control of aging from yeast to mice, so it's a good bet to be important in human aging, too."

More information: Li, W., Li, X. and Miller, R. A. (2014), ATF4 activity: a common feature shared by many kinds of slow-aging mice. *Aging Cell*. doi: 10.1111/accel.12264

Provided by Wiley

Citation: Cellular protein may be key to longevity (2014, September 15) retrieved 1 May 2024 from <https://medicalxpress.com/news/2014-09-cellular-protein-key-longevity.html>

<p>This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.</p>
--