Scientists solve 70-year-old anti-aging mystery

In a discovery that could give way to preserving youth, scientists have unraveled the mechanisms of a low-calorie diet that lead to longevity. (Alexander Katte/shutterstock.com)

A low-calorie, balanced diet delays aging and increases longevity in animals because it encourages a sort of house-keeping in the cells, according to a Portuguese research team.

Adhering to the diet, says lead author Claudia Cavadas, induces the recycling of old molecules in the cells that could clog and cause malfunctioning if they stick around.

The study targeted a part of the brain called the hypothalamus, which was recently identified to be what controls aging, say the researchers, whose study was recently published (http://www.pnas.org/content/early/2015/03/11/1416609112.abstract) in the journal Proceedings of the National Academy of Sciences of the U.S.

Finding out why a low-calorie diet leads to longevity and anti-aging could be an important step in fighting age-related neurodegenerative diseases such as Alzheimer’s and Parkinson’s.