

Fountain of youth? Stem cells show promise in slowing aging, rejuvenating brain — in mice

Stem cells in the brain could be the key to extending life and slowing ageing. These cells — which are located in the hypothalamus — can reinvigorate declining brain function and muscle strength in middle-aged mice, according to a study published [in *Nature*].

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In their study, [Dongsheng Cai, a neuroendocrinologist at Albert Einstein College of Medicine in New York City] and his colleagues found that stem cells in the hypothalamus disappear as mice grow older. When the researchers injected their mice with viruses that destroy these cells, the animals seemed to grow older faster, experiencing declines in memory, muscle strength, endurance and coordination. They also died sooner than untreated mice of the same age.

Next, the team injected stem cells taken from the hypothalami of newborn mice into the brains of middle-aged mice. After four months, these animals had better cognitive and muscular function than untreated mice of the same age. They also lived about 10% longer, on average.

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Cai suspects that anti-ageing therapies targeting the hypothalamus would need to be administered in middle age, before a person's muscles and metabolism have degenerated beyond a point that could be reversed.

[Read the full study [here](#)]

The GLP aggregated and excerpted this blog/article to reflect the diversity of news, opinion, and analysis. Read full, original post: [Brain's stem cells slow ageing in mice](#)