



Dear Evergreen Resident,

Most of our villages offer various exercise facilities such as a gym and pool. We believe that health and fitness play a big part in ensuring a happy and joyful retirement. Please take the time to read the BBC article below or [click here](#) to read online and we hope you will be inspired to keep exercising.

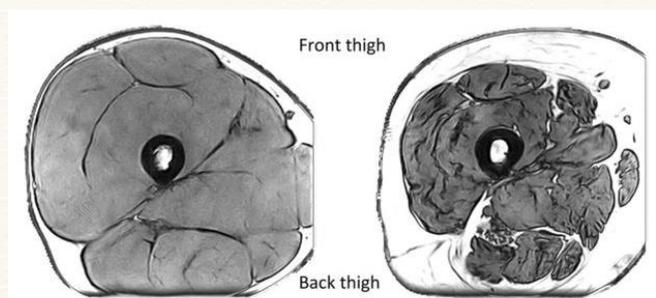
Muscle loss in old age linked to fewer nerve signals - BBC - 12 March 2018



Fit, healthy muscles are less likely to waste away in old age - Image copyright Getty Images

Researchers say they may have worked out why there is a natural loss of muscle in the legs as people age - and that it is due to a loss of nerves. In tests on 168 men, they found that nerves controlling the legs decreased by around 30% by the age of 75.

This made muscles waste away, but in older fitter athletes there was a better chance of them being 'rescued' by nerves re-connecting. The scientists published their research in the Journal of Physiology.



Muscle loss: The femur bone is in the middle creating a black ring, muscles are shaded grey and fat is white

As people get older, their leg muscles become smaller and weaker, leading to problems with everyday movements such as walking up stairs or getting out of a chair.

It is something that affects everyone eventually, but why it happens is not fully understood.

Prof Jamie McPhee, from Manchester Metropolitan University, said young adults usually had 60,000 -70,000 nerves controlling movement in the legs from the lumbar spine.

But his research showed this changed significantly in old age.

"There was a dramatic loss of nerves controlling the muscles - a 30-60% loss - which means they waste away," he said.

"The muscles need to receive a proper signal from the nervous system to tell them to contract, so we can move around."

The research team from Manchester Metropolitan University worked with researchers from the University of Waterloo, Ontario, and the University of Manchester.

They looked at muscle tissue in detail using magnetic resonance imaging (MRI) and they recorded the electrical activity passing through the muscle to estimate the numbers and the size of surviving nerves.

The good news is that healthy muscles have a form of protection: surviving nerves can send out new branches to rescue muscles and stop them wasting away.

This is more likely to happen in fit people with large, healthy muscles, Prof McPhee said.

Although it is not known why connections between muscles and nerves break down with age, finding out more about muscle loss could help scientists find ways of reversing the condition in the future.

Stay happy and healthy.

Warm wishes,

Derek