Is there an ‘exercise gene’? Scientists believe CRISPR guided gene therapy could help curb muscle loss in elderly people

“Many millions of elderly people worldwide suffer from sarcopenia, a disease that is characterized by muscle wasting. A large proportion become so frail that they can no longer exercise,” says Jose Bianco Moreira, a researcher at NTNU, the Norwegian University of Science and Technology.

“Gene therapy is the most effective method to be able to give these people the same health benefits you normally get with physical exercise,” says Moreira, who has been involved in the new research. He is part of the Cardiac Exercise Research Group (CERG).

In the darkest and least understood part of our genetic material, the researchers found an absolutely crucial RNA strand. Then they used gene therapy to trigger the genes to create more of this muscle-building RNA strand.

The experiment had impressive effects in both mice and roundworms, as well as in experiments with precursors to human muscle cells.

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Of course, it will take a while until editing the genes of humans in the same way as in these animal experiments becomes common practice. But researchers are now working to develop gene therapy that is based on RNA.

This is an excerpt. Read the original post here.