Researchers Discover a Gene That Makes Your Muscles Significantly Stronger

By The University of Melbourne on Sep 09, 2022

The discovery opens the door to the creation of therapeutic therapies that mirror some of the benefits of exercise.

The study found that the gene promotes muscle strength during exercise.

Researchers have discovered a gene that increases muscle strength when activated by exercise, opening the door to the creation of therapeutic treatments that replicate some of the benefits of working out.

The University of Melbourne-led research, which was published in *Cell Metabolism*, demonstrated how various forms of exercise alter the molecules in our muscles and led to the identification of the new C18ORF25 gene, which is activated by all forms of exercise and is responsible for enhancing muscle strength. Animals lacking C18ORF25 have weaker muscles and worse exercise performance.

Dr. Benjamin Parker, project leader, said that by activating the C18ORF25 gene, the research team could observe muscles grow significantly stronger without necessarily becoming larger.

“Identifying this gene may impact how we manage healthy aging, diseases of muscle atrophy, sports science, and even livestock and meat production. This is because promoting optimal muscle function is one of the best predictors of overall health,” Dr. Parker said.

“We know exercise can prevent and treat chronic diseases including diabetes, cardiovascular disease, and many cancers. Now, we hope that by better understanding how different types of exercise elicit these health-promoting effects at the molecular level, the field can work towards making new and improved treatment options available.”

By analyzing proteins and how they change within cells, the team, which included Dr. Parker and Professors Erik Richter and Bente Kiens of the University of Copenhagen in Denmark, was able to distinguish the molecular similarities and differences between various forms of exercise in human muscle biopsies.

“To identify how genes and proteins are activated during and after different exercises, we performed an analysis of human skeletal muscle from a cross-over intervention of endurance, sprint and resistance exercise,” Dr Parker said.

Researchers were able to compare signaling responses across exercise modalities in the same person, compared to their pre-exercise level, thanks to the experimental design. This allowed them to monitor how a person responded to various forms of exercise directly in their muscles.

Reference: “Phosphoproteomics of three exercise modalities identifies canonical signaling and C18ORF25 as an AMPK substrate regulating skeletal muscle function” by Ronnie Blazev, Christian S. Carl, Yaan-Kit Ng, Jeffrey Molendijk, Christian T. Voldstedlund, Yuanyuan Zhao, Di Xiao, Andrew J. Kueh, Paula M. Miotto, Vanessa R. Haynes, Justin P. Hardee, Jin D. Chung, James W. McNamara, Hongwei Qian, Paul Gregorevic, Jonathan S. Oakhill, Marco J. Herold, Thomas E. Jensen, Leszek Lisowski, Gordon S. Lynch, Garron T. Dodd, Matthew J. Watt, Pengyi Yang, Bente Kiens, Erik A. Richter and Benjamin L. Parker, 25 July 2022, *Cell Metabolism*.
DOI: 10.1016/j.cmet.2022.07.003

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A synergistic approach encompassing the body as a wholon. Push pull routines divide within the 7 day calendar, allowing each muscle group three days recovery. To failure with a 45 sec. to one minute rest period between sets. No bs in between. Pre-fatigue primary major muscle group first to prevent secondary muscle injury from overload. Again, treat the body as a wholon in the understanding principles of proper form.

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Yes what you said is a good exercise plan. But has nothing to do and no affect on what this article is about.

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They are really REALLY jumping the gun with this report, talking about the POSSIBILITIES way way down the road, like 10 to 20 years, as if they were fact.
Lol

Of course they would use it in livestock ……
Lol……
Maybe do they can use less actual steroids like trenbalone, or use this new gene together with it.

A Dub *3 days*

Yup. Sign me up for that sh##. 😆

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They get this gene from babies .. idiots and vanity is the only reason to get this gene… Murderers

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This stuff has been around since tge 40s… It was first used to create Capt America. Reintroducing it now is gimmicky don’t you think?

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Every time you discover a gene, it is not a “new” gene. It has always been there. It is newly discovered.

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again make a new start to be positive in training to make a change for the better we all fall eventually and need insperation to continue or start again. Lot go's in your field of studies education and achievements

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