《“运动药丸”的研究有了新进展，有望取代健身房,还能有效对抗疾》

有没有一种“运动药丸”，能减少人们前往健身房的次数？科学家还真的研究出来了。

An “exercise pill” that could reduce the need for visits to the gym is a step closer, say scientists.

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A study found that suppressing production of the protein myostatin increased muscle mass.

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Although the research was conducted in mice, the team hopes it will lead to human treatments.

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Lead researcher Dr Joshua Butcher, from Augusta University in Georgia, US, said: "Ultimately, the goal of our research would be to create a pill that mimics the effect of exercise and protects against obesity.

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"A pill that inhibits myostatin could also have applications for muscle-wasting diseases, such as cancer, muscle dystrophy and AIDS, Myostatin is known to be a powerful "brake" that holds back skeletal muscle growth."

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Studies suggest that obese people produce more of the protein, making it harder for them to exercise and build up muscle.

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"Given that exercise is one of the most effective interventions for obesity, this creates a cycle by which a person becomes trapped in obesity," said Dr Butcher.

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The researchers bred four groups of lean and obese mice that were genetically programmed either to produce uninhibited levels of myostatin or to be completely lacking in the protein.

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As expected, mice with no myostatin became markedly more muscular.

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Obese mice unable to produce myostatin remained fat, but they were also stronger and showed markers of heart and metabolic health on a par with their lean counterparts.

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They were in dramatically better shape than obese mice with unrestricted myostatin production.

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Dr Butcher added: "In our muscular obese mouse, despite full presentation of obesity, it appears that several of

these key pathologies are prevented.

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"While much more research is needed, at this point myostatin appears to be a very promising pathway for protection against obesity-derived cardiometabolic dysfunction."

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The research was presented at the American Physiological Society’s annual meeting, Experimental Biology 2017, in Chicago, US.

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