

Scientists Discover 14 Genes that Cause Obesity

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University of Virginia scientists have used machine learning-assisted testing, allowed them to identify 14 genes that cause obesity and three that help prevent it. Enticingly, they found that blocking the action of the three genes that prevented the worms from becoming obese also led to them living longer and having better neuro-locomotory function. These are exactly the type of benefits drug developers would hope to obtain from anti-obesity medicines.

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Conclusion

More work needs to be done, of course. But the researchers say the indicators are encouraging. For example, blocking the effect of one of the genes in lab mice prevented weight gain, improved insulin sensitivity and lowered blood sugar levels. These results (plus the fact that the genes under study were chosen because they were associated with obesity in humans) bode well that the results will hold true in people as well, the researchers say.

Anti-obesity therapies are urgently needed to reduce the burden of obesity in patients and the healthcare system. Our combination of human genomics with causality tests in model animals promises yielding anti-obesity targets more likely to succeed in clinical trials because of their anticipated increased efficacy and reduced side effects.

References

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Description

Obesity and our genes

Researcher new research helps shed light on the complex

Genomicists have identified hundreds of genes associated with

the worms have produced great benefits for science. They've been

Scholars used the worms to screen 293 genes associated with