

A human protein genetically engineered into wheat plants increases yields by 50%. Is this dramatic tweak replicable?

It's not enough to grow more food—humanity needs to grow more efficiently.

With an eye toward feeding the world's growing population in a sustainable way, researchers from China and the U.S. may have found a clever solution—in the form of supersizing crops. Transplanting a human protein, known for promoting growth, into crops may engender larger, heavier and more bountiful plants, boosting agricultural yields by a whopping 50 percent, according to the new study in [Nature Biotechnology](#).

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The protein responsible for the plants' extraordinary growth spurt is the human fat mass and obesity-associated protein called FTO. While its associated gene gets a bad rap for increasing one's obesity risk, the researchers previously [reported](#) that the protein is important for regulating growth in humans and other mammals.... Essentially, FTO acts as a master “on” switch that ramps up widespread protein production across multiple RNA strands.

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Despite its promise, genetic modification [hasn't](#) been able to reliably amplify crops yields by more than [10 percent](#). Plant growth is complicated, genetically speaking—there simply isn't one single gene to tweak. The study's jaw-dropping percentage increases are amazing, almost unbelievably so, and other plant researchers recommend caution before getting any hopes up and ascribing more power to the protein.

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