New Hormone Discourages Weight Gain and Diabetes

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Scientists say they've discovered a naturally occurring hormone named MOTS-c that boosts insulin sensitivity and suppresses weight gain from eating high-fat foods. The findings, recently published in Cell Metabolism, could one day lead to a preventive treatment for obesity and diabetes, reports Time.com.

Researchers said the MOTS-c hormone works to target muscle tissues to increase insulin sensitivity throughout the body. This is the same way exercise works to fight weight gain and normalize the body's metabolism.

For the study, researchers at the University of Southern California injected MOTS-c into obese lab mice that had developed a resistance to insulin. The hormone helped slow down how quickly the mice gained weight. In addition, the shots of MOTS-c also eventually reversed the rodents' insulin resistance.

"This represents a major advance in the identification of new treatments for age-related diseases such as diabetes," said Pinchas Cohen, MD, a senior author of the study.

Although all of the experiments with MOTS-c so far have been performed on mice, researchers said the hormone's molecular mechanisms are the same in all mammals. What's more, human clinical trials for MOTS-c could begin within the next three years.

According to the U.S. Centers for Disease Control and Prevention, more than one-third of American adults are currently obese. Click here for tips on how to lose weight and boost your metabolism without help from drugs.