

Metabolic Syndrome in Insects Triggered by Gut Microbes

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Abstract

Emerging research suggests that intestinal microbiome composition is an important factor in the development of obesity. However, little is known about the mechanistic details of this relationship. A recent insect study demonstrated for the first time that metabolic syndrome and symptoms such as obesity and insulin resistance are not restricted to mammals and can be induced by means of a protozoan intestinal infection. This article describes the findings of this study and integrates them with findings from studies relating obesity to the gut microbiota of mammals.

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Abbreviations: (AMPK) AMP-activated protein kinase, (MAPK) mitogen-activated protein kinase, (TNF- α) tumor necrosis factor- α

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