

# **GENOME-WIDE SCREEN FOR FAT REGULATORY GENES IN** *Drosophila melanogaster*

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Obesity is a disease known to adversely affect one's health through the accumulation of body fat. The disorder is a significant risk factor for type II diabetes, cardiovascular disease, hypertension and forms of cancer. Genetic research utilizing model organisms such as *Caenorhabditis elegans* and *Drosophila melanogaster* provide valuable insight into energy metabolism. Availability of complete genome databases in these organisms allows researchers to employ comparative genomics and bioinformatics analyses to assist in the identification of highly conserved fat regulatory genes. In an investigation utilizing RNAi, researchers systematically screened the *C. elegans* genome for 417 fat regulatory genes. This comparative genomic approach will lend insight into identifying the most highly conserved fat regulatory genes in sequence and function.