

# **Resistin mRNA levels are downregulated by estrogen in vivo and in vitro**

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摘要

## **Abstract**

Resistin, a hormone secreted by adipocytes, is suggested to be an important link between obesity and diabetes. The aim of this study was to evaluate the regulatory effect of estrogen on adipocyte resistin gene expression in ovariectomized (OVX) rats and in isolated rat adipocytes in vitro. Subcutaneous injection of estradiol benzoate reduced resistin mRNA levels in adipocytes isolated from the inguinal, parametrial, perirenal, retroperitoneal, or periovarian fat deposits of OVX rats, while an in vitro study showed that estradiol treatment decreased resistin mRNA levels in cultured rat periovarian fat adipocytes. Results of Western blotting analysis also showed that estrogen decreased adipose resistin contents in vivo and in vitro. These data suggest that estrogen is a pivotal negative regulator of resistin gene expression