

# Resistin

**Resistin** is a hormone of adipose tissue, so it belongs to the so-called adipokines. It was discovered in 2001 in connection with insulin resistance research<sup>[1]</sup>.

## Structure and synthesis

The hormone is produced not only in adipocytes, but also, for example, in the skeletal muscle or in immunocompetent cells. It is a polypeptide with a length of 108 amino acids<sup>[1]</sup>.

adipose tissue,  
immunocompetent cells  
polypeptid composed of 180  
amino acids  
lowing the amount of food intake  
605565 (<https://omim.org/entry/605565>)

## Function

Resistin is involved in hypothalamic circuits of regulation of food intake. Its effects include:

- reduces food intake,
- regulates sensitivity to insulin,
- acts as a pro-inflammatory cytokine - increases the release of TNF- $\alpha$ , IL-12, increases the expression of cytoadhesive molecules.

It is likely to contribute to **insulin resistance** at elevated concentrations. Its increased level positively correlates with the amount of adipose tissue. The importance of resistin has been linked to the risk of atherosclerosis, according to some research, it increases the level of LDL cholesterol in the blood.

## Links

### Related articles

- Endocrine function of adipose tissue
- Adipose tissue

### External links

- <https://en.wikipedia.org/wiki/Resistin>

### References

1. KITTNAR, Otomar, et al. *Lékařská fyziologie*. 1. edition. Praha : Grada, 2011. 790 pp. pp. 539. ISBN 978-80-247-3068-4.

### Literature used

- KITTNAR, Otomar, et al. *Lékařská fyziologie*. 1. edition. Praha : Grada, 2011. 790 pp. ISBN 978-80-247-3068-4.
- LEDVINA, M, et al. *Biochemie pro studující medicíny II*. 2. edition. Praha : Nakladatelství Karolinum, 0000. 0 pp. ISBN 978-80-246-1415-1.