Insulin resistance: Reading

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- <u>Int J Endocrinol.</u> 2017;2017:5076732. doi: 10.1155/2017/5076732. Epub 2017 Aug 17.
 - Latent Inflammation and Insulin Resistance in Adipose Tissue.
- <u>Stafeev IS et al.</u>
- Abstract
- Obesity is a growing problem in modern society and medicine. It closely • associates with metabolic disorders such as type 2 diabetes mellitus (T2DM) and hepatic and cardiovascular diseases such as nonalcoholic fatty liver disease, atherosclerosis, myocarditis, and hypertension. Obesity is often associated with latent inflammation; however, the link between inflammation, obesity, T2DM, and cardiovascular diseases is still poorly understood. Insulin resistance is the earliest feature of metabolic disorders. It mostly develops as a result of dysregulated insulin signaling in insulin-sensitive cells, as compared to inactivating mutations in insulin receptor or signaling proteins that occur relatively rare. Here, we argue that inflammatory signaling provides a link between latent inflammation, obesity, insulin resistance, and metabolic disorders. We further hypothesize that insulin-activated PI3-kinase pathway and inflammatory signaling mediated by several IkB kinases may constitute negative feedback leading to insulin resistance at least in the fat tissue. Finally, we discuss perspectives for anti-inflammatory therapies in treating the metabolic diseases.