

# **Antihyperlipidemic effects of carboxamides Derivatives in Triton-WR-1339 induced hyperlipidemia in rats**

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**Al-Zaytoonah University of Jordan, 2020**

## **Abstract**

Hyperlipidemia is defined by increasing of one or more constituent of lipid profile, such as total cholesterol (TC), low density lipoprotein cholesterol (LDL-C), plasma triglyceride (TG) concentration, and decrease in high density lipoprotein cholesterol (HDL-C), this condition is considered the major risk factor of atherosclerosis and for coronary artery diseases (CAD).

In the present study, we investigated the Antihyperlipidemic effect of carboxamides derivative (a, b and c) which were synthesized at The University of Jordan. These Compounds were tested in vivo using Triton WR–1339 induced hyperlipidemic rats as an experimental model for their hypolipidemic activity. The compounds (a and b) showed a significant effect and was examined to check the molecular characterization of their mechanism of action using PCR array profiling.

Analysis of gene expression profiles of fatty acid and lipoprotein signaling and cholesterol metabolism PCR arrays of C1 and C2 in comparison to Triton WR-1339 control group, showed that several genes of interest are considered as antiatherogenic that reduces LDL-C in circulation, but other genes down-regulated like Apoa2, Apoa1, Apoe.

**Keywords:** Triglycerides. hyperlipidemia. gene array