

## Novel drugs (Unani formulation) prevent cholesterol formation in rats susceptible to atherosclerosis by high cholesterol diet

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Coronary artery disease (CAD) is epidemic in India and one of the major causes of disease burden and deaths, main cause being the Atherosclerosis due to Hypercholesterolemia. The present study was aimed to evaluate the anti-hyper lipidemic, hypolipidemic & anti-atherogenic activity of Unani compound drug formulation (UDF) Bile, Piper nigrum, and Piperlongum in high fat fed albino rats.

**Objectives:** To evaluate the effect of the prospective association of low-density lipoprotein (LDL) particle diameter with the incidence of fatal and nonfatal coronary artery disease (CAD), pre-clinical data of atherosclerosis disease could provide important clues to design human clinical trials.

**Material and Methods:** The study was conducted on 5 groups of each 6 animals for a period of 8 weeks, group: A-control & group: B, C, D & E were on high fat diet (HFD). Group A compared with B, C, D & E. Group B compared with C, D & E. Group A : Standard diet (Control); Group B : HFD (Negative Control); Group C : HFD + UDF (10mg/kg b.wt); Group D : HFD + UDF (20mg/kg b.wt); Group E : HFD + Atorvastatin (0.72/kg b.wt) (Positive Control).

**Result and Discussion:** Effects of UDF studied by comparing the levels of Total Cholesterol, Triglycerides, HDL, LDL and VLDL on 15<sup>th</sup> day, 30<sup>th</sup> day and 45<sup>th</sup> day, on administration of UDF at the dose of 50-100mg/kg b.wt showed significant reduction in levels of lipid profile compared to the standard atorvastatin.

**Conclusion:** The results showed significant lowering of serum cholesterol in UDF treated animals, almost comparable to that of atorvastatin in its anti-hyperlipidemic activity in preventing hypercholesterolemic atherosclerosis and reducing risk factors for CAD, suggesting herbal preparations of UDF as effective economical and safe treatments for reducing the complications of lipid profile observed with CAD.

### Biography

Ghousia Tabassum, MDMoalejat (General Medicine) 2<sup>nd</sup> year student from Government Nizamia Tibbi College, Charminar, Hyderabad. Completed BUMS (Bachelor of Unani Medicine and Surgery) in 2012, received an award of excellence by Governor of A.P at silver jubilee celebration of Dr NTR University of Health sciences, Vijayawada.

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