INTRODUCTION:

Hyperlipidemia shares remarkably in the manifestation and development of atherosclerosis and coronary heart diseases (CHD)\(^1\). Atherosclerosis causing to coronary artery have presumed a serious disease. It is the prime cause of mortality and morbidity worldwide\(^2\). Atherosclerosis is a multifactorial disease and about 250 different risk factors have been recognized\(^3\). Among the several factors high fat diet, unhealthy life style, smoking, family history of hypertension and increased LDL levels are the culprits for the onset of CHDs\(^1\). Epidemiological studies have revealed a positive significant correlation between Coronary Artery Disease (CAD) and plasma cholesterol concentration\(^4\). Intake of diet with high saturated fat and cholesterol has been proved to be the predominant factor in the progress of atherosclerosis. Experimental studies have proved high fat diet may be connected with increased oxidative stress in mammals\(^5\).

Reducing levels of increased lipids mainly low density lipoproteins (LDL) and triglycerides by dietary interventions or by the drug could reduce the risk of CHD\(^1\).

Synthetic anti hyperlipidemic drugs like statin and synthetic antioxidant like probicol are drug of choice to cure atherosclerosis and its associated complication\(^6\). Even though statins have been proved effective in lowering increased LDL levels have found side effects\(^6\). Statins are fundamentally enzyme inhibitor that is HMG CoA.

It is likely that modern medicinal system is curing on one hand and causing side effects on the other hand\(^7\). Nowadays enhanced interest in natural products has encouraged the search for new hypolipidemic drugs and therapies from these natural sources. Many herbal medicinal products are much efficient in lowering increased lipid levels in body with very low side effects\(^1\).
Hence, for treatment of atherosclerosis and various cardiovascular diseases, much attention has been focused on the use of natural products that have very few side effects\textsuperscript{8}. *Terminalia Arjuna (Arjuna) and Emblica Officinalis (Amla)* occupy the pride of place in the context of such medicinal values. Recently there has been renewed interest in these plants because of its multimode cardioprotective activities.

*Terminalia Arjuna (Arjuna)* (Family: Combretaceae), used in traditional medicine for treating ulcers, wound healing\textsuperscript{9}, and also for antibacterial\textsuperscript{10}, antimitagenic/anticarcinogenic\textsuperscript{11}, antioxidant and hypocholesterolemic activities\textsuperscript{12}. The active constituents of *Terminalia* include tannins, triterpenoids saponins (arjunolic acid, arjunic acid, arjungenin, ar junglycosides), flavonoids (arjunone, arjunolone, luteolin), gallic acid, oligomeric procyanidinspolyphenols, calcium, magnesium, zinc and copper\textsuperscript{13}.

*Terminalia Arjuna(Arjuna)* acts on cardiac muscles and improves pumping action of heart. It is used as a cardiac tonic\textsuperscript{14}. As *Emblica Officinalis (Amla)*, a strong antioxidant and found to have influences on the regulation of lipid metabolism\textsuperscript{15}.

In search of relative safer alternative compound to fight against cardiovascular risks and diseases especially in case of exposure to high dietary fat consumption, the present study has undertaken to find out cardioprotective efficacy of *Terminalia Arjuna(Arjuna)* and *Emblica Officinalis(Amla)* on experimental model.
REFERENCES:


7) Sharma S, Sharma D, Agarwal N. Diminishing effect of Arjuna tree bark on the lipid and oxidative stress status of high fat high cholestrol fed rats and development of certain


