SUMMARY CONCLUSION:

The entire work on the effect of high lipid diet (30%) on general and Cardiovascular impact in albino Wister rats with special reference to drug 1 Terminalia Arjuna (Arjuna), drug 2 Emblica Officinalis (Amla) and Drug 3 both Terminalia Arjuna (Arjuna) and Emblica Officinalis (Amla) may be summarized as following figure

- High fat diet, even alters Vascular properties in adult male albino Wistar rats of approximately 200 days (Average age, middle age).
- The alteration of vascular integrity is mainly reflected by histopathological changes in arterial tissues, elastic artery, Coronary artery without altering the nitric oxide status in rats with high fat diet.
• The early atherosclerotic changes in coronary artery in high fat fed rat perhaps due to age associated vascular disorders

• Both *Terminalia Arjuna* & *Emblica Officinalis* are found to be cardioprotective to some extent without influencing any metabolic impairment of liver

**SUMMARY**

• 10% of additional fat to Iso-caloric diet for short term duration of time on 200 days old rats develops early alteration in vascular integrity reflected by the mild formation of atherosclerosis plaque in coronary vessels along with increase wall thickness.

• This is further correlated that aortic wall in which significant structural changes by observing elastic artery, muscular artery at the level of tunica media the most.

• The adverse changes on vascular integrity were partial recovered by *Terminalia Arjuna (Arjuna)* and *Emblica Officinalis (Amla)* perhaps through free radical scavenging properties at least in histopathological point of view
LIMITATION:

Certain molecular markers for vascular integrity like nos3 gene expression Akt gene expression were evaluated in this study, hence the molecular mechanism behind these two drugs Terminalia Arjuna (Arjuna) and Emblica Officinalis to regulate hyperlipidemia induced cardiovascular alteration could not be explored.

FUTURE DIRECTION:

1. Molecular markers to be evaluated
2. High dietary lipids induce through study on oxidative and nitrosative stress to be done.
3. Active compounds of both the drugs further evaluated by HPLC method.