SUMMARY AND CONCLUSION
The present study had been conducted upon twenty three healthy male and female volunteers, who had earlier been studied in previous years (1985-1989). The different protocols in these studies, with slight alterations, were finally decided to be applied over appropriate individuals (HCFH-I, HCFH-II and HCFH-III).

Basal fasting blood samples were drawn after twelve hours of overnight fast, on first day and then HCFH was given. On same day a second sample was drawn a hour after the breakfast and third sample three hours after. This HCFH was then continued daily for seven consecutive days (multidose prolonged feeding) and then on eight day, after twelve hours of overnight fast fourth sample was drawn. Then HCFH was withdrawn and subjects were allowed routine breakfast for seven more consecutive days. Finally on fifteenth day, after twelve hours of overnight fast, fifth sample was drawn.

This whole study was made with the aim of assessing the reproducibility of changes induced in lipid lipoprotein profile after high cholesterol fat diet in the selected healthy volunteers and to correlate these changes, both quantitatively and qualitatively to screen individuals at risk of developing CAD due to atherosclerosis.

Finally, following conclusions were drawn:
1. The lipid lipoprotein profile is characteristic in an individual and is variable as the subjects changes.

2. The variation pattern of lipid - lipoprotein profile induced by HCFD is largely the same in most individuals.

3. Three groups of individuals were finally delineated in this study for identifying risk.
   a. Major risk group: There are those individuals who showed a high rise in STC, LDL and a stationary or lowering HDL. The LDL/HDL ratio in these are always unfavourable.
   b. Minor Risk group: These are those individuals who showed no prominent rise in STC and LDL, HDL showed a rise and LDL/HDL ratio was always favourable.
   c. Moderate Risk group: These are individuals who showed mild rise in STC and LDL. However, HDL did not change much such that it induced the LDL/HDL ratio, which initially was favourable, becomes unfavourable after HCFD.

4. Multidose feeding trial (prolonged feeding) of HCFD is a better mode for studying and screening out susceptible ones (risk group) in comparison to single dose feeding trial.
5. Those individuals in whom family history of CAD is strongly positive (i.e. being patient of IHD before age of 45 years) show a tendency of STC and LDL values to rise higher.

6. Serum triglycerides showed a constant rise in our study after HCFD. This rise was higher in single dose post prandial levels than in prolonged feeding fasting values.

7. Few subjects showed that initial LDL/HDL ratio was unfavourable (72) but after diet the ratio showed a favourable turn (72). This is attributed (Hypothesis) to movement of LDL cholesterol into intracellular/or extracellular space in response to sudden increase in absorption of high dietary cholesterol/ fat diet by some unknown neurologic and/or receptor mechanism.