VIII. SUMMARY
On the basis of nutritional studies, it has been demonstrated that HMG not only decreases serum total cholesterol, ester cholesterol, but also significantly lowers total esterified fatty acids, phospholipids and triglycerides of hypercholesterolemic rats. In case of normocholesterolemic animals, however, HMG has similar effect except that levels of phospholipids remain unchanged. It is also effective in suppressing experimentally induced hypercholesterolemia in serum as well as in liver.

HMG induces no toxic effect at the microscopic level, and also hastens the reversal of fatty infiltration of liver. Furthermore, the pharmacological observations suggest that HMG is inert. Hence it may be considered superior to most of the known hypocholesterolemic and hypolipemic drugs in use at present.

The increase in hepatic HMG-CoA hydrolase activity in cholesterol-fed rats has suggested that dietary cholesterol causes substrate level induction of the enzyme
activity and the HMG thus released in vivo inhibits HMG-CoA reductase activity. This may also explain why cholesterol-feeding blocks endogenous cholesterol synthesis.

Although it is premature to predict the exact mode of action of HMG, the present work is the first attempt to demonstrate the hypocholesterolemic and hypolipemic actions of HMG.