# SUMMARY AND CONCLUSION

## SUMMARY AND CONCLUSION

This study was conducted on 10 term newborns, 17 low birth weight with normal gestational age and 15 preterm.

Complete clinical examination was performed.

Somatomedin (SM) and growth hormone were estimated in the cord sera of these babies.

Somatomedin was estimated by the Hall modification method using radioactive sulfate ($S^{35}$ uptake) of pelvic rudiment of chick embryo, 12 days duration. The normal level in full term newborn is taken as 100 % activity and low birth weight and premature group were compared to this figure.

The highly significant correlation between SM cord blood to birth weight and gestational age suggest that the somatomedins may be additional contributory factors in the growth and development of the human fetus.

The mean somatomedin levels were significantly lower in the low birth weight and premature compared to the control reflects the participation of somatomedin in the process of fetal growth.

The mean growth hormone levels did not show any significant differences between the low birth weight and premature when compared to the control group denoting that growth hormone does not contribute much to the fetal growth.

No significant correlation exists between somatomedin and growth hormone in the cord blood in the premature and low birth weight demonstrating that fetal somatomedin activity is not dependent on fetal growth hormone.