

## CHAPTER V



## CONCLUSION

Vitamin B<sub>12</sub> content in human milk, fresh cow's milk and its various preparations, i.e., pasteurized milk, condensed milk, powdered milk, evaporated milk, cheese and butter, were determined by the radioisotope dilution method.

A mean value of vitamin B<sub>12</sub> in 220 human milk samples was  $502 \pm 503$  pg./ml. This value was in accordance with results reported by other authors. Supplementation of vitamin B<sub>12</sub> tablets of 150 and 300  $\mu$ g. per day to lactating mothers for 3 to 5 days showed no significant increase in vitamin B<sub>12</sub> in their milk samples.

Vitamin B<sub>12</sub> content of fresh cow's milk ( 1.52  $\mu$ g./l. ) and pasteurized cow's milk ( 1.35  $\mu$ g./l. ) was nearly identical while vitamin B<sub>12</sub> content in sterilized milk ( 0.85  $\mu$ g./l. ) was significantly lower than these of fresh and pasteurized milk (  $P < 0.05$  ).

The mean values of vitamin B<sub>12</sub> content of various kinds of preparations of cow's milk bought from the market were as follow :  
pasteurized milk,  $1.64 \pm 0.44$   $\mu$ g./l.; powdered milk,  $20.8 \pm 17.8$   $\mu$ g./kg.; condensed milk,  $3.33 \pm 0.71$   $\mu$ g./l.; evaporated milk,  $0.26 \pm 0.15$   $\mu$ g./l.; cheese,  $1.07 \pm 1.6$   $\mu$ g./kg.; and butter,  $0.51 \pm 0.13$   $\mu$ g./kg,

Vitamin B<sub>12</sub> content in human milk, fresh cow's milk, powdered milk, condensed milk ( except evaporated milk ) seemed to supply adequate vitamin B<sub>12</sub> requirement for the infants fed on these milk preparations.