

## CHAPTER 4

### DISCUSSION & CONCLUSION

Numerous studies of the production of  $T_4$ -antisera suitable for RIA have been reported (14, 15, 16).

Our study demonstrates:-

1. The patterns of the immunological response are more or less alike i.e. they all produce IgG to  $T_4$  (Fig. 4, 5, P.19, 21).
2. The  $T_4$ -antibodies suitable for  $T_4$ -RIA were obtained after 6 weeks of immunization.
3.  $T_4$ -BSA antisera titre are approximately twice of  $T_4$ . $CH_3$ .HCl-BSA antisera (Fig. 6, P. 23).
4.  $T_4$ -BSA antisera have a higher value of affinity constant (K) and total binding sites (q) (Fig. 7, 8, 9, 10, P. 25, 28, 31, 34, 37).
5. The standard dose response curve of each the range produced are correlated with each other and linear over the range of 0.625 - 60 ng/ml (Fig. 12, 13 P. 40, 42).
6. The analysis of serum  $T_4$  using both antiserum are reproducible. (Table 14, P. 49).
7. The antisera produced are highly sensitive have a lower detection limit of 0.625 ng/ml and no cross-reaction with MIT and only 0.19 and 0.18 percent with  $T_3$  respectively. (Fig. 14, 15 P. 45, 47).

The method of antisera production using  $T_4$ -BSA conjugate has some advantage over  $T_4$ . $CH_3$ .HCl-BSA conjugate because of a simple in preparation. The final dilution of antiserum used is approximately twice of  $T_4$ . $CH_3$ .HCl-BSA. How ever both antisera are suitable for  $T_4$ .RIA.

The antisera obtained are lyophilized and store at  $-70^{\circ}\text{C}$ ,  
which could be used for 3 years without any loss of potency.



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