CHAPTER 8

CONCLUSION

In summary, the data suggest that acetaminophen oral administration upto 1000 mg/kg body weight in Wistar and SD rats of either sex has impact on the strain variation in terms of No Observed Adverse Effect Level (NOAEL) and target organ toxicity where as there was no reversibility of toxicity observed after 14 day recovery period. The SD rat showed the NOAEL as 500mg/kg body weight where as Wistar rat had 1000 mg/kg b.wt. The target organs of toxicity in SD rats were found to be liver and kidney at 1000 mg/kg body weight where as Wistar rat did not have any toxicological impact at the same dosage. As there was an impact on different strain of rats from the results of the present study, the future animal experimental study design can be improved with better study design which should have inbred or isogenic strain of animals so that effects of genetic or strain variation could be avoided; different strains could be combined in a group of a experiment so that the quality of data shall be improved.