CHAPTER 5

CONCLUSION

In conclusion, the present study has shown that administration of *C. asiatica* extract might modulate the metabolism of AFB_1, not only a single dose of 40 μg/kg bw of AFB_1 but also the multiple dose of 400 μg/kg bw of AFB_1.

As the single dose model, *C. asiatica* extract may alter the AFB_1-metabolism as demonstrated either by acceleration of AFB_1-albumin adduct formation or by elimination of adduct from serum. These alteration effects might be including in the preventive effects of *C. asiatica* extract.

Because of reduction of AFB_1-albumin adduct accumulation as well as 8-OHdG formation in the subjects that received *C. asiatica* extract prior to co-treatment of the multiple doses of AFB_1 with the extract, administration of *C. asiatica* extract may prevent liver DNA damage resulting from AFB_1-metabolism. This preventative effect was confirmed by reduction of serum GGT activity in the extract and AFB_1 co-treated rats.

Although the *C. asiatica* was able to be modulate the metabolism of AFB_1, as demonstrated by the reduction of AFB_1-albumin adduct level and reduction of oxidative liver DNA damage, these modulatory effects were affected in a dose independent manner. Thus administration of the *C. asiatica* extract at the low concentration (10 mg/ kg bodyweight) was able to prevent liver damage resulting from AFB_1-metabolism.