

CHAPTER VI

CONCLUSION AND SUGGESTION

The overall results of this investigation indicated that:

1. The oral feeding of garlic extract (100 mg/kg bw/day) could attenuate impairment of endothelium-dependent relaxation and decreased vasoconstriction to norepinephrine in streptozotocin-induced diabetic rats (STZ-rats). And, indomethacin-induced vasoconstriction in garlic-treated STZ-rats indicated that garlic-treated may decrease vasoconstrictor prostanoid production in STZ-rats. Thus, garlic extract could prevent endothelial dysfunction.

2. From the studies of cardiac function demonstrated that oral feeding of garlic extract could prevent cardiovascular dysfunctions in STZ-rats. As characterized by the values of systolic pressure, diastolic pressure, mean arterial pressure, heart rate, and aortic flow rate.

3. Moreover, the results of this study also showed that the abnormalities of cardiac functions occur together with impairment of endothelial function in STZ-rats at 8,12, and 16 weeks.

4. Overall, this finding indicated that impairment of endothelial functions and changes of cardiac functions assessed in STZ-rats could be prevented by oral feeding of garlic extract (100 mg/kg bw/day). These effects of garlic extract on this diabetic model indicated in this investigation provided the idea that garlic extract might be great benefit to diabetic patients in prevention of endothelial dysfunction. However, the factors that might be involved in responses to effects of garlic extract, including duration of diabetes, dose of garlic extract should be investigated. Moreover, the mechanism of action need to be confirmed in the future.