CHAPTER VI

CONCLUSION

This study investigated the effect of WPI supplementation on inflammatory mediators in type 2 diabetic patients. The inflammatory mediators in the present study included hs-CRP and IL-6. The mean hs-CRP level at baseline of the subjects in the WPI and control groups in this study were 2.32 ± 1.01 mg/l and 2.48 ± 0.50 mg/l respectively. The mean plasma IL-6 level of the subjects in the WPI and control groups at baseline were 1.95 ± 0.25 pg/ml and 1.92 ± 0.17 pg/ml respectively. This study found that the hs-CRP levels significantly correlated with IL-6 in the subjects at baseline.

After supplementation of 30 g WPI daily for 6 weeks, the subjects in the WPI group had significant decreases in mean body weight, BMI, SBP, and TG compared to their baseline. The levels of hs-CRP and IL-6 in the WPI group tended to decrease from baseline after 6-week WPI supplementation. The results showed that the only adverse effect of WPI supplementation observed in this study was flatulence, which was found in 3 subjects. Flatulence was improved after they consumed WPI in splitted doses and it disappeared completely after they stopped the WPI supplementation.

In conclusion this study indicated that WPI supplementation may modulate inflammation in type 2 diatbetic patients. However, these results need to be confirmed by further studies to clarify the effect of whey protein on immune modulation.

Recommendations for Further Study

The duration of the study may be extended. The control group may receive placebo during supplementation period to reduce the bias of the study. Additionally, the effects of whey protein supplementation on inflammation should be studied in other inflammatory diseases such as arthritis, asthma, and inflammatory bowel disease to clarify the inflammatory reduction effect of whey protein.