

## CHAPTER VI

### CONCLUSION

This study was performed to determine the *trans* fatty acid contents in various composition of bakery products and partially hydrogenated vegetable oils which produced and distributed in Thailand. Attenuated total reflection Fourier transform infrared spectroscopy was used to achieve peak identification of *trans* fats. The results in the present study indicated that average total *trans* fat content of shortening was higher than margarine in partially hydrogenated vegetable oils group. Moreover, in group of bakery products, average total *trans* fat of butter cookie was higher than rich butter bun, crispy pie, brownie, croissant, cake cream roll, cracker and sandwich chocolate cookie, respectively.

Current situation in Thailand, there are no *trans* fatty acid labeling regulations and the consumer has no possibility either to identify sources of *trans* fatty acid or to choose between low or high *trans* fatty acid content. In order to reduce the intake of *trans* fatty acid, we recommend that the government and health care providers should advice consumer about how to avoid the main foods containing *trans* fatty acid.

In this study, food samples were collected from supermarket and popular bakery store in Bangkok only. For further studies, foods samples should be collected from a variety of locations to provide more informative to represent the widely of Thailand marketplace. In order to estimate intake and support decision making regarding risk management, there is a need to continue to assess the content of *trans* fatty acid in the various foods in Thailand.

