

**EFFECTS OF CURCUMINOIDS ON INSULIN RESISTANCE  
AND CARDIAC AUTONOMIC STATUS IN OBESE RATS**

**WARASINEE BOONPRASERT**

**MASTER OF SCIENCE  
IN PHYSIOLOGY**

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**THE GRADUATE SCHOOL  
CHIANG MAI UNIVERSITY**

**MAY 2008**

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**A THESIS SUBMITTED TO THE GRADUATE SCHOOL IN  
PARTIAL FULFILLMENT OF THE REQUIREMENTS  
FOR THE DEGREE OF  
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**THIS THESIS HAS BEEN APPROVED  
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**23 May 2008**

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## ACKNOWLEDGEMENT

I am extremely indebted to the valuable advice, knowledge comments and the kind encouragement of Assistant Professor Anchalee Pongchaidecha, PhD., my thesis advisor and Chairman of the Department of Physiology, who gave me the opportunity to do this research. I wish to express my profound gratefulness to my co-advisor, Narissara laileard, PhD., Department of Physiology, Faculty of Medicine, Chiang Mai University who has provided the excellent and continuous useful guidance for this research project from the beginning to the finish line of this thesis. I am also greatly indebted to Associate Professor Nipon Chattipakorn, M.D., PhD., Department of Physiology, Faculty of Medicine, Chiang Mai University for his helpful advice and valuable suggestions on this thesis.

I am also particularly thankful to Lecturer Wasana Pratchayasakul, a research assistant at CERT Center, for helping me carry out this experiment.

I would like to thank all instructors in the Department of Physiology, Faculty of Medicine, Chiang Mai University for their teaching and suggestion during the course work which were greatly helpful in completing my graduate study.

Finally, I would like to express my profound gratitude and appreciation to my family for their love, patience, inspiration, generous standing and loving support throughout my life.

Warasinee Boonprasert