Tapanee kongrungrueang 2009: The Effect of Walking Intensity on Percent Body Fat in Obese Women. Master of Science (Sports Science), Major Field: Sports Science, Interdisciplinary Graduate Program. Thesis Advisor: Assistant Professor Ratree Reungthai, Ed.D. 103 pages.

The objectives of this research were to study and compare the effect of walking intensity on percent body fat in obese women. The subjects were volunteer female personnel of Department of Health, Ministry of Pubic Health, and aged 40 - 49 years. The subjects were obese women (BMI 25.0 -29.9 kg.m⁻²) and percent body fat 38 percent. They were divided into three groups. Group 1 consisted of 10 subjects performed normal daily activities (the control group). Group 2 consisted of 10 subjects performed regular walking exercise on a treadmill at a predetermined workload which corresponded to 35 % HRR (Heart Rate Reserve) (the experimental group). Group 3 consisted of 10 subjects performed regular walking exercise on a treadmill at a predetermined workload which corresponded to 65 % HRR (Heart Rate Reserve) (the experimental group). The both experimental group performed walking exercise for 12 week, with 5 sessions per week and energy expenditure 300 Kcal per day. Three groups carried out a test percent body fat. The test was performed before, and after the 12th week of training. Data were analyses using and paired t-test and one-way analysis of variance at the .05 level of significance.

The result indicated that the percent body fat of the experimental 2 group and control group after 12th weeks of training were significantly different at the .05 level. In addition percent body fat of after 12th week of training in experimental group 1 was significantly different from the percent body fat before training at the .05 level. However, the percent body fat of the control group was not significantly different for any of the two periods (before training and after 12th week of training) It was concluded that the decrease in percent body fat in obese women who walking exercise at low workload (35% HRR) more than in obese women who walking exercise at high workload (65% HRR).