##C241943 : MAJOR PHYSICAL EDUCATION
KEY WORD: ACUTE WEIGHT REDUCTION/REPLACEMENT / BOXERS' EFFICIENCY
PRAPAT LAXANAPHISUTH : EFFECTS OF ACUTE WEIGHT REDUCTION AND REPLACEMENT UPON BOXERS' EFFICIENCY. THESIS ADVISOR: ASSC. PROF. DR. ANAN ATTACHOO, ED.D., PROF. DR. CHOOSAK VEJBATH, PH.D., AND ASST. PROF. DR. SUWATTHANA SUWANNAKHETNIKOM, PH.D. 338 PP. ISBN 974-584-396-2.

The purpose of this research was to study the effects of acute weight reduction and replacement upon boxers' efficiency. The samples were 40 Thai boxers and amateur boxers, 20 each. They were pretested in physical work capacity at 80% maxHR for creation of 4 equivalent groups, 10 each, purpose. Each group, then, was randomly assigned into 4 experimental groups : Control, weight raised, 3% weight loss and 5% weight loss. PWC 80%maxHR, whole body reaction time, competitive state anxiety, and boxing impact forces were tested and retested by ISO-power ergometer system, whole body reaction measuring device, CSAI-2T, and impact force measuring equipment, respectively. Each experimental group was allowed 4 and 6 hours for weight reduction and replacement respectively. The data, then, were analyzed in terms of means, and standard deviations. The t-test, one-way ANOVA, one-way ANCOVA and Tukey (A) method were also employed to determine the significance of mean differences. It was found that :

There were no significantly different at the .05 level among 4 groups on all items with respect to PWC 80%maxHR, whole body reaction time, competitive state anxiety. On boxing impact forces, however, there was only one item that had a significant difference. It was on the impact force of right knee at midtrunk that the control group and the 5% weight loss group was significantly different at the .05 level.