VARAPORN PINTOCHON: EFFECTS OF LOW IMPACT AND NON IMPACT AEROBIC DANCE EXERCISE ON BIOCHEMISTRY SUBSTANCES IN BLOOD OF AGED FEMALES.

THESIS ADVISOR : ASSOC. PROF. THANOMWONG KRITPET, Ph.D.,

PP 103 ISBN 974-579-895-9

The purpose of this research was to compare the effects of low impact and non impact aerobic dance exercise on biochemistry substances in blood of aged females.

Subjects were 45 volunteered females whose ages were between 60-85 years old.

These subjects were the members of the Siriraj Senior Citizen Club, Mahidol University, and used to participate in the Tai Chi at least 6 months. Prior to the experiment, they were tested in blood chemistry and were then randomly assigned into three groups.

The first group was trained with low impact aerobic dance, the second group was trained with non impact aerobic dance, and the third for both low impact and non impact aerobic dance. Every group was trained for 8 weeks with 2 days a week. All 3 groups were then measured the biochemistry substances in blood after the experiment. The data were analized in term of means, standard deviation and t-test. The One-Way Analysis of Variance was used to determine the statistically significant differences at the .05 level.

The results of this research were that:

- 1: The mean of glucose, triglyceride, cholesterol, LDL and HDL for pre and post experiments of the low impact group were not different at the significant level of .05
- 2. The mean of triglyceride for pre and post experiment in the non impact group was significantly different at .05 level. The glucose, cholesterol, LDL and HDL on pre and post experiments were not different at the significant level of .05
- 3. The mean of glucose, triglyceride, cholesterol, and LDL for pre and post experiments for the both low impact and non impact aerobic dance exercises were different at the significant level of .05, however, HDL for pre and post experiments was not significantly different at .05 level.
- 4. There was no statistically significant difference at the .05 level in biochemistry substances of the aged females among three types of training.