

Title Effects of Low Impact and Non Impact Aerobic Dance
 on Physical Fitness and Blood Chemistry of the
 Elderly

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ABSTRACT

The purposes of this study were to study and compare effects of low impact and non impact aerobic dance on physical fitness and blood chemistry of the elderly. Subjects were 54 members of Siriraj Senior Citizens Club, Mahidol University whose age were over 60 years old and participated in exercising activity in this club for at least 6 months. Prior to the experiment, the volunteered subjects were tested in physical fitness and blood chemistry and were then randomly assigned into three groups. The first group was trained for a low impact aerobic dance; the second for a non impact aerabic dance ; and the third for both low and non impact aerobic dance. Each group was trained for forty minutes a day except for the third group,a longer period of eighty minutes was administered,two days a week on Tuesday and Thrusday for eight weeks. Data from physical fitness and blood

chemistry tested before and after the aerobic dance training were analyzed through the use of means, standard deviations, t-test and F-test.

It was found that:

1. After the experiment, the mean of the overall physical fitness was affected by three types of training in all three groups. Increase in the mean of the muscular flexibility was found in all three groups of female subjects but only in the third group of male subjects. The mean of the skin thickness and the fat percentage of all groups decreased after the exercise. After non impact aerobic dance training, the mean of muscular strength of hand grip of both male and female subjects increased. Only in male subjects, was the mean of cardiovascular endurance found increasing after low and non impact aerobic dance; in female subjects, the increase in the mean of this kind of endurance was found only in the third group.

In addition, decrease in the mean of blood chemistry was found after all three types of training. Non impact aerobic dance as well as the combination type of low and non impact resulted in the increase of the mean of HDL.

The comparison of the mean of the data gathered before and after the training showed that there was no statistically significant difference at the .05 level.

2. There was also no statistically significant difference at the .05 level in physical fitness and blood chemistry of the elderly among three types of training.