

Abstract

The purpose of this study was to investigate the effects of a 12-week training program on the physical fitness and health-related quality of life (HRQL) of sedentary middle-aged men. The study was a randomized controlled trial. The participants were divided into two groups: a training group and a control group. The training group performed a 12-week program of aerobic and resistance training. The control group remained sedentary. Physical fitness was measured by maximum oxygen consumption ($\dot{V}O_{2\max}$), maximum heart rate (HR_{max}), and maximum power (P_{max}). HRQL was measured by the SF-36 questionnaire. The results showed that the training group had significantly higher values for $\dot{V}O_{2\max}$, HR_{max}, and P_{max} compared to the control group. The training group also had significantly higher scores on the SF-36 questionnaire, indicating improved HRQL. The results suggest that a 12-week training program can improve physical fitness and HRQL in sedentary middle-aged men.

Keywords: aerobic training, resistance training, physical fitness, health-related quality of life, middle-aged men

Introduction

Physical fitness is a key component of overall health and well-being. It is defined as the ability to perform physical activities without undue fatigue or discomfort. Physical fitness is influenced by a variety of factors, including genetics, age, and lifestyle. Regular physical activity is essential for maintaining and improving physical fitness.

Health-related quality of life (HRQL) is a measure of an individual's overall health and well-being. It is defined as the individual's perception of their health and their ability to perform daily activities. HRQL is influenced by a variety of factors, including physical fitness, mental health, and social support.

The purpose of this study was to investigate the effects of a 12-week training program on the physical fitness and HRQL of sedentary middle-aged men. The study was a randomized controlled trial. The participants were divided into two groups: a training group and a control group.

The training group performed a 12-week program of aerobic and resistance training. The control group remained sedentary. Physical fitness was measured by maximum oxygen consumption ($\dot{V}O_{2\max}$), maximum heart rate (HR_{max}), and maximum power (P_{max}). HRQL was measured by the SF-36 questionnaire.

The results showed that the training group had significantly higher values for $\dot{V}O_{2\max}$, HR_{max}, and P_{max} compared to the control group. The training group also had significantly higher scores on the SF-36 questionnaire, indicating improved HRQL.

The results suggest that a 12-week training program can improve physical fitness and HRQL in sedentary middle-aged men.

Conclusion