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Effects Of Concurrent Aerobic And Calisthenic Exercises On Physical Fitness Components Of Middle Aged Obese Men's

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Abstract:

Obese and overweight as healthy problems they threaten the health of people in society many research provide physical activity including aerobic and Callisthenic and combination of aerobic and callisthenic training can play an important role in controlling body weight for the purpose of the study 95 middle age college male lecturers voluntaries to took part in this study in this which 60(N=60) subjects were screened using body composition and equally divided in to four group, group 1.aerobic. group 2 Callisthenic, group 3 combined (aerobic and callisthenic group 4 control group,(n=15)

Keywords: Aerobic training and callisthenic training, (cardio respiratory endurance, muscular strength endurance Flexibility, and body composition)

Introduction:

Obesity and overweight is a significant public health problem leading to chronic diseases and health conditions such as heart disease and diabetes. One in five people not only exceed ideal weight, but also meet the clinical criteria for obesity. Therefore, weight loss may be an important consideration in reducing these morbidity factors. The need for treatment far exceeds the capacity of the health care system to provide care on an individual basis. Moreover, the most effective method for the delivery of treatment, and the best ways to induce and sustain client adherence to such a programme, remain indefinable. Obesity stands in the ignominious position of being the only epidemic in the latter decades of the twentieth century and into new millennium that clinician, academicians, and investigators alike seems to have virtually ignored.

Aerobic exercises:

The corner stone of improving health through exercise is developing the aerobic capacity. Aerobic exercise is any exercise that raises the heart rate to the extent that it makes slightly breathless and sweaty e.g fast walking, jogging or cycling. Aerobic literally means 'with oxygen'. Aerobic system refers to heart, lungs, blood vessels and muscles. When exercising aerobically, fat burn as the main fuel. Aerobic capacity is based on how efficiently body can deliver oxygen to muscles and how much oxygen muscles can use for energy. Regular exercising at a specific level and for a certain time will help increase ability to take in, transport and use oxygen for exercise, so improving 'aerobic capacity'.

Aerobic fitness:

"Aerobic fitness" refers to endurance, or the ability to sustain work for prolonged periods. The term "aerobic" implies that the oxygen necessary to accomplish the work is taken up by the individual during the activity. With longer exercise time, more aerobic metabolism is involved, and exercise lasting more than 12 minutes is mostly accomplished by aerobic metabolism. In aerobic work, oxygen is obtained from the air and is transferred from the lungs to the blood and then to the muscles via the circulatory system. Maximal oxygen uptake, or maximal aerobic power (VO_2 max) is the indicator of aerobic fitness. As VO_2 max increases, the level of aerobic fitness also increases.

Causes of obesity:

Causes of obesity are generally found in the form of lack of physical exercise, genetically susceptibility, life style, biological problems, psychological impacts, irregular vicious cycle, saturated foods, and parental attitude

Calisthenics exercises:

The name Calisthenics comes from the Greek words 'kallos' for beauty and 'sthenos' for strength. While this is the basic aim of the sport, the social aspect, and the confidence and self esteem building of its participants is considered to be just as important. Calisthenics is widely practiced in Australia and is recognized as a fun and healthy way to keep fit for children of all ages

Methods:

For the purpose of this study One hundred Eighty men's working staffs from Tumkur, Karnataka were screened using body composition. Among the ninety-five, sixty sedentary moderately obese men's working staffs were randomly selected for the purpose of this study. The study was formulated as a pre and post test random group design, in which sixty obese men's working staffs were randomly assigned into four groups. Each group consists of 15 subjects; the subjects were treated with their respective training program for five days a week for about twelve weeks. After 12 weeks of their training program.

Experimental design:

The study was formulated as pre and post test random group design, in which sixty subjects were divided into four equal groups. The Experimental Group-I (n=15, AT group) performed Aerobic training programme, Experimental Group-II (n=15; CT Group) performed the Callisthenic training, Experimental Group- III (n=15, CATCT Group) performed a concurrent Aerobic and Callisthenic training and control group (n=15; CG) did not underwent any specific training programme.

The training programme for each session lasted for sixty minutes totally including first ten minutes warm-up with dynamic stretching exercises and last ten minutes warm-down with static stretching exercises. Ensured that the training intervention could be monitored and medical assistance was directly and reliably

accessible during the training sessions, in case of injury. A fully equipped and staffed first-aid station was also available within the campus that nearby the training venue. After the initial measurements and before the initiation of the training periods, the subjects of all groups were instructed about the proper execution of all the exercises to be used during the training for all training regimens. After twelve weeks of training the post test was conducted.

Physical fitness components:

Cardio Respiratory Endurance Test :

Cardio Respiratory Endurance was tested with Cooper 12 Minutes Run & Walk Test. Cooper (1968) reported a correlation of 0.90 between VO₂max and the distance covered in a 12 min walk/run. Place markers at set intervals

Muscular Strength and Endurance:

Modified sit-ups is a measure of abdominal muscular strength and endurance. The number of correctly executed sit-ups performed in 60 seconds was recorded as the score.

Flexibility test:

Flexibility test was measured by sit and research test. This test involves sitting on the floor with legs stretched out straight ahead. Shoes should be removed. The soles of the feet are placed flat against the box. Both knees should be locked and pressed flat to the floor - the tester may assist by holding them down. With the palms facing downwards, and the hands on top of each other or side by side, the subject reaches forward along the measuring line as far as possible. Ensure that the hands remain at the same level, not one reaching further forward than the other. After some practice reaches, the subject reaches out and holds that position for at one-two seconds while the distance is recorded. Make sure there are no jerky movements. The score is recorded to the nearest centimeter or half inch as the distance reached by the hand.

Body composition:

Body composition (particularly body fat percentage) can be measured in several ways. The most common method is by using a set of measurement calipers to measure the thickness of subcutaneous fat in multiple places on the body. This includes the abdominal area, the subscapular region, arms, buttocks and thighs.

Results:

Aerobic training significantly improved health related physical fitness on middle aged obese men

Callisthenic exercise significantly improved health related physical fitness on middle aged obese men

combined Aerobic and Callisthenic exercise significantly improved health related physical fitness on middle aged obese men

combined Aerobic and Callisthenic exercise training improved better than the health related physical fitness of middle aged obese men

Aerobic training improved better than the Callisthenic training on health related physical fitness of middle aged obese men

Callisthenic training improved better than the control group on health related physical fitness of middle aged obese men

Conclusions:

General results indicate that performance regular aerobic and Callisthenic exercises is better training method to reduce present body fat of middle aged obese men.

However the combined training is the most effect method to reduce percent body fat of middle age men.

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