

THE EFFECT OF USING AEROBIC EXERCISE TRAINING IN SOME BLOOD FATS OF THE OVERWEIGHT PEOPLE

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Abstract

problem affect many individuals as it's a source of low self-confidence and a lack of concentration and poor job performance and motor skills for individuals and ... so on

There are many disadvantages of obesity which in turn may effect on some functional variables in the body, both in the course of the effort and comfort, as well as some of them effect on the body permanently making individual affected by what is called chronic diseases and the most important of these diseases, diabetes as well as being overweight significantly would strain the organs of the body and its systems constantly and forming heaviness on the areas that underpin human as spine and joints of the knees as well as a strain of the heart muscle, as well as make an individual more susceptible to heart disease and blood vessels, such as high blood pressure and hardening of the arteries, stroke arterial, the importance of research lies in an attempt of researchers to use modern methods in the treatment of obesity and through the use of some aerobic exercises to reduce excessive rises in certain blood fats, which increase significantly with excessive weight gain so researcher felt to carry out this study because of its scientific and theoretical importance.

KEYWORDS: AEROBIC EXERCISE. BLOOD FATS. OVERWEIGHT. TRAINING.

1. INTRODUCTION

Eventually obesity become nowadays a serious diseases that prevailed in the communities of the whole world, since it is a problem experienced by a lot of individuals are a source of low self-confidence and a lack of concentration and poor job performance and motor skills of the individuals

It must be on the Specialists with the scientific and educational specialization to find the necessary solutions and treatment programs to be avoided through the use of modern scientific means.

Although obesity has multiple disadvantages , which in turn may affect some of the functional variables in the body, both in the course of the effort, comfort, and most important of these damages diabetes as well as they strain the organs of the body and its systems constantly , also make up a weight over the areas that underpin human spine and joints of the knees, as well as a strain of the heart muscle , as well as make an individual more susceptible to heart diseases and blood vessels, such as high blood pressure and hardening of the arteries and arterial

thrombosis, also affected blood components such as cholesterol and high-density lipoproteins and low density lipoproteins

As well as obesity has an effect on the structure and the body style of the individual body and thus the effects of this obesity may reach to the limitation of the movement of the joints of the body resulting from the excess calories turn on the body's need

2. RESEARCH PROBLEM

Obesity is one of the problems prevailing at present time in all societies of the world, as it causes many serious diseases and that work on the occurrence of negative changes in all the body's functions, especially at the level of the circulatory system and the digestive system and the consequent additional burden and the other negative repercussions on respiratory and the excessive rise of the proportion of fat in the blood, which constitute a danger to the health of the individual, and all this is caused by the defect incident in the balance of energy, which make the individual affected with obesity due to eating food with high calories with sluggishness of the individual, so the individual in dire need of organization of his nutrition and his balance and so the principle is that each per capita intake of food used in the metabolic processes to provide energy for the body or for the construction of tissues necessary to compensate the catabolism otherwise, the bulk of it is stored as fat, which leads to an increase in the body, causing many diseases (such as high blood pressure, and high total cholesterol, low high-density lipoproteins, high-low density lipoproteins, high triglycerides) as well as to the visible obesity

So the researchers felt to delve into this problem because of low discussion of researchers to this subject and not to expand it and do not use modern methods and the lack of studies about functional variables caused by this disease, through the preparation of training program in accordance with the aerobic exercise in blood lipids of the overweight.

RESEARCH AIMS

- preparing Aerobic exercises for overweight people
- Identify the effect of aerobic exercise in blood fats among overweight people

3. RESEARCH METHODOLOGY

There are a lot of cases and phenomena cannot be studied except by approach fit with the problem," so used the experimental approach by one group with the pre- test to solve this problem

4. RESEARCH SAMPLE

The research sample was chosen by Deliberate way (12) of overweight in Baqhoba and from goers halls aged between 30-35 years

5. MEASUREMENTS AND TESTS USED IN THE RESEARCH

Blood separation test:

The goal of the test: the separation of blood plasma from the serum

Devices and tools: the centrifuge

Performance description: Blood samples were collected and making laboratory dealing through the use of a centrifuge for 15 minutes and quickly ((1000 cycle per minute, and blood serum were obtained, which is saved in the refrigerated cabinets dedicated for this purpose till working.

MEASURING THE RATIO OF HIGH-DENSITY LIPOPROTEINS HDL (159-1)

The goal of the test: determine the proportion of high-density lipoproteins in the blood (HDL)

Devices and tools: a spectrophotometer

Description Performance: the proportion of high-density lipoproteins in the blood is measured by drawing blood samples from laboratory and the individual should not eat for two (12) hours and deal with blood samples in the devices used in the measurement

Degree calculation: calculated by the information given by the device

MEASURING THE PROPORTION OF LOW-DENSITY LIPOPROTEINS IN THE BLOOD [169-1] LDL

The goal of the test: determine the proportion of low-density lipoproteins in the blood (LDL)

Devices and tools: a spectrophotometer

Description Performance: the proportion of low-density lipoproteins in the blood is measured by drawing blood samples from the laboratory and the individual should be eat for two (12) hours and then deal with blood samples in the devices used in the measurement

MEASURING THE PROPORTION OF VERY LOW-DENSITY LIPOPROTEINS VERY BLOOD [161-1] VLDL

The goal of the test: determine the proportion of very low-density lipoproteins in the blood VLDL

Equipment and tools: a spectrophotometer

Description Performance the proportion of very low-density lipoproteins in the blood is measured by pulling blood samples from laboratory and the individual should not eat for two (12) hours and then deal with blood samples in the devices used in the measurement

Degree calculation: is calculated by the information given by the device.

6. EXPLORATORY EXPERIMENT

For identifying the obstacles and difficulties that are likely to arise when implementing the main experiment, the researchers conducted an exploratory experiment because this one (practical training for the researcher to find out the advantages and disadvantages that occur during testing to avoid them) (14.2)

And for implementation of the tests vocabularies that lead to get the correct results, accurate and in accordance with the scientific methods used , in this research and after selecting a research sample , the researcher did the exploratory experiment dated 25/02/2013 on a sample consist of (4) individuals suffering from an increase in weight

7. PRE-TEST

The researcher did tribal tests on research sample of two groups (experimental and control) at (28/02/2013) of those who are suffering from overweight and these included laboratory tests included (low-density lipoproteins, and very low-density lipoprotein, high-density lipoproteins) with the help of the assistant team

8. THE USED CURRICULUM

The sport program include a number of athletic exercises that implemented in the manner of aerobic exercises, which are a jogging , a Swedish air exercises, the program takes into account the following:

- In the course of jogging exercises, aerobic Swedish, heart rate should not exceed (135 beats / min) to ensure that there is working with the aerobic exercise system and was determined by the exploratory experiment ,It included the exercises from(10) physically exercise given in (30) training units
- The sports program lasts (10) weeks by (3) units per week
- Gradient system was used to increase the training intensities (201-3)

220-age= pulse rate

100 / Pulse rate * 75))

As the youngest age in the sample is (30) years and oldest age is 35 years old. The equation is applied on age of 30 years old as following:

The maximum average of heart rate = 220-30 = 190

100 / 190*75 % = 138.75 beat per min

This rate of heart beats (135) assures us keep out in high intensity and keeps us working within the oxygenated system

9. POST-TEST

After the completion of the prepared curriculum in the application of aerobic exercise, the researcher did the post tests in the same place and circumstances.

10. STATISTICAL METHODS

the appropriate statistical methods was used from the statistical bag (spss).

11. RESULTS

Showing and analyze the results of tests of the variables under consideration of the research in the pre and post tests

Table (1), Shows the values of arithmetic means and standard deviations in the pretest and post- test for the re-search group

Variables	the unit of measure- ment	pretest	post test
High density lipoproteins	Mg/dl	47.16 5.154	47.833 2.927
Low density lipoproteins	Mg/dl	179.1 9.152	133.667 15.642
Very low density lipoproteins	Mg/dl	5.958 25.500	12.859 31.83

HIGH DENSITY LIPOPROTEINS : It is found that the arithmetic mean values in the pre-test reached (47.167) and the standard deviation of (5.154), while the value of post-test (47.833) and a standard deviation of (2.927).

LOW DENSITY LIPOPROTEINS : It is found that the mean values reached in the pre-test (179.167) and the standard deviation of (9.152), while (133.667) in the post-test and a standard deviation of (15.642)

Very low density lipoproteins:

It is found that the mean values reached in the pre-test (31.833) and the standard deviation of (12.859), while (25,500) in the post-test and a standard deviation of (5.958).

Showing and analyze the results of the differences and the standard error and the value of calculated (T) and the significance of the differences between pre and post tests for the research group

12. SHOWING AND ANALYSE THE RESULTS OF THE DIFFERENCES AND THE STANDARD EROR AND THE VALUE OF CALCULATED (T) AND THE SIGNIFICANCE OF THE DIFFERENCES BETWEEN THE PRE AND POST TESTS FOR THE RESEARCH GROUP

From Table 2, we find that the values of arithmetic means and standard errors and calculated (t) and significance of differences between pre and post- tests of the physiological variables of the first set as in the following manner:

Table (2), Shows the arithmetic means of the differences and the standard error and the values of calculated (t) and the proportion of error and significance of differences between pre and post tests for the research variables.

Rnk	variables	Unit of measurement	Pre test	Post test	T value	Proportion of error	significancy
1	HDL	Mg/dl	-0.667	4.082	-.400	0.706	Not significant
2	LDL	Mg/dl	45.500	15.057	7.402	0.001	significant
3	VLDL	Mg/dl	6.333	13.231	1.172	0.294	Not significant

HIGH DENSITY LIPOPROTEINS : it is founded that there is not significant differences between the results of pre and post- tests , the arithmetic mean of the differences between pre and post -tests results (-0.667) and stand-ard deviation of differences (4.082) , the value of calculated (t) is (-.400) and the error proportion (0.706)

VERY LOW DENSITY LIPOPROTEINS: it is founded that there are significant differences between the results of the pre and post- tests, the arithmetic mean of the differences between the pre and post- tests results (6.333) and standard deviation of differences (13.231) and calculated (t) value is (1.172) while the error proportion is 0.294

13. DISCUSSION

DISCUSSION THE RESULTS OF THE DIFFERENCES BETWEEN PRE-TEST AND POST-TESTS OF THE VAR- IABLES UNDER CONSIDERATION

HIGH DENSITY LIPOPROTEINS:

The table (1) (2) shows and through the presentation of the results of the differences of pre and post tests for the variable LDL that it was significant differences, the researchers attribute that to the use of aerobic exercise and which has a role in decreasing LDL and this is consistent with what Jordan and Jeffrey said that the aerobic exercise will convert low density lipoprotein which is harmful to high density lipoprotein which is good (5-120).

VERY LOW DENSITY LIPOPROTEINS:

From the table (1) (2) and through the presentation of the results of the variable VLDL it was found that they were non-significant differences, researchers said that the cause related to the sample as it used an aerobic exercise only, which led to reducing the level of low-density lipoprotein LDL and there are differences in the level of VLDL but they were not clear and within natural limits of the protein in the blood and this is consistent with what (Patrick et al, 2010) said, "The aerobic activities, dissolve the stored fat under the skin that lead to reduce levels of total cholesterol and triglyceride in the blood"(119-6)

Researchers Agree also with what (Haber, 1996) said that "the rise of free fatty acids in the blood plasma will lead to the secretion of VLDL by the liver and include an increase in the exit of cholesterol into the blood circulation and decreasing the level of VLDL in the blood with aerobic physical activity." 144-7

14. CONCLUSIONS

The aerobic exercise prepared by the researchers according to the training load regulation contributed to the positive development of the members of the research sample individuals .

Vocabularies of training program prepared by the researchers according to aerobic exercise brought some improvement in blood fats of members of the research sample individuals

15. RECOMMENDATIONS

- The need to adopt the training program in the operations of Weight Loss .
- Adoption of aerobic exercise for disposal of dangerous effect of blood fats on other samples.

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APPENDIGES

Appendix 1: the aerobic exercise of the training program

1. **Jogging on running device** : which is a device its strength (350 horse) used by players for running and decreasing weight in sports halls
2. **Orbit slim**: a device used to run but it likes a stair , its target is the lower muscles and fats all over the body
3. **Running device (bicycle)**: is a bicycle fixed on the land used by the players in the training process and decreasing the weights
4. **Rotation of trunk by the deviant muscle [298-8]**: Sit on the floor and hands crossed over the chest and knees bent, Put your feet under a pillar like base of weights device even under the couch, start moving trunk to the left and coming down background ,after finishing rotation anticlockwise, raise the trunk to the right side then repeat exercise to the right side and by rotational movement to the left side
5. **Milling and legs bent**: Rest and your back flat on the ground, keeping your hands behind your ears, and your elbows abroad bent your knees at an angle of 45 degrees and make your feet far apart by width similar to shoulders width and held constant body bend upper trunk toward the knees with raising both shoulders off the ground and then descend automatically focused on contractility abdominal muscles.

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