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Does walking really effective for the people with overweight and high level of triglycerides: A pilot study

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Abstract

The main aim of this study was to find out does walking really helpful for the people with overweight and high level of triglycerides. There are various types of study has been done on walking just to find out its benefits on our health. Most of the literatures are showing that there are various types of health benefits of walking. The objective of the study was to find out the effects of 40 minutes pedometer based walking for 12 weeks. The overweight people those who also having high level of triglycerides were taken in this study as the subjects. In the present study 5 male subjects were selected from Bolpur Santiniketan area and their age range was between 40-50 years. Body weight and blood triglyceride were selected as the parameters of the study. At the starting of the study average weight of the subjects were 82.36 kg and after 12 weeks the average weight is 78.86 kg. Significance difference of weight and triglycerides level found statistically between pre and posttest in this study.

Keywords: Walking, triglycerides, Overweight, Obesity, B.M.I, Pedometer

Introduction

Triglycerides are a type of fat found in your blood. We need some triglycerides for good health. But high triglycerides might raise our risk of heart disease and may be a sign of metabolic syndrome. Normal is less than 150. Borderline-high is 150 to 199. High is 200 to 499. Very high is 500 or higher. Walking is a very easy exercise to reduce fat. We just need to walk faster than we walk normally. We can burn excess body fat accumulated in the body and if we can decrease our excess weight it will help us to decrease the level of triglycerides. Walking not only decrease our weight and triglycerides but also keeps our heart and lungs strong. It can be a great way to lose weight and increase physical fitness. There are many benefits to incorporating such an exercise routine into everyday life. Speed walking can be a great exercise for people of all ages. There are a few different ways for individuals to tell if they are walking quickly enough for physical benefits; these are perceived exertion, heart rate, and a measure of distance versus time. The perceived exertion when walking briskly should cause the walker to begin to sweat and to breathe slightly more heavily, but he or she should still be able to talk easily.

Objectives of the study

1. To find out correct speed of walking to control body weight and triglycerides level.
2. To find out correct duration waking for controlling body weight and triglycerides level.
3. To find out how much distance we should walk within 40 minutes to control triglycerides level.
4. To find out how much weight we can decrease doing 40 minutes walking.

Methodology

Subjects: There are 10 male subjects were selected from Bolpur Santiniketan area and they were coming under overweight category. Only men subjects were selected for the study.

Tools of the study: The tools which were used for the study are Yamax cw-701 pedometer, stop watch, weighing machine.

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Procedure: At the starting of the study the weight of each subject were measured by a standard weighing machine and blood sample also taken to know the triglycerides level. The researcher told to the subjects to walk 40 minutes at the morning with empty stomach. Recommended speed was 120 steps/minutes for the first 4 weeks. After 4 weeks speed increased up to 130 steps/min. Last 4 weeks the speed increased up to 140 steps/minute. Yamax cw-701 pedometer was used to find out the number of steps and distance covered by each subject. The subjects walked 6 days in a week. Height of the subjects were also measured to find out the B.M.I. After completing the schedule of 12 weeks the weight and triglycerides level of the subjects were measured once again.

Findings: At the starting of the research average weight of the subjects were 82.36 kg. Average height is 171cm. Therefore average B.M.I. 28.16 kg/mt². After completing the schedule of 12 weeks of walking, the researcher found that the mean steps covered by of the subjects was 131.66 steps/day. Mean distance covered by the subjects was 4.166 km/day. After completing the study, the researcher found that the rate of weight decreased by the subjects were different. After completing the study the researcher found that the average weight decreased by the subjects was 3.5 kg. After completing the study the researcher found that there is a significant between pre-test and post-test value of triglycerides. The average triglyceride level was 259.8 mg/dl at the time of starting of the study. After completing the study the average triglyceride level is 174.6 mg/dl which shows a significant difference between pre-test and post-test.

Table 1: t-test for significance of difference in weight between pre-test and post test

| | Mean | Mean Difference | Std Error of Difference | t-value |
|--|-------|-----------------|-------------------------|---------|
| Pre test | 82.36 | 3.50 | 0.240881 | 14.53* |
| Post test | 78.86 | | | |
| t ₀₅ (df=4) = 2.77 *. significant at 0.05 level | | | | |

From table -1 it was observed that the t-value 14.53 was significant at 0.05 level.as the mean value of weight at the time of post-test (78.86) is lower than the value of pre-test (82.36) and the difference was found significant statistically, therefore, it may be interrupted that walking is very helpful for overweight and obese people.

Table 2: t-test for significance of difference in triglycerides level between pretest and post-test

| | Mean | Mean Difference | Std Error of Difference | t-value |
|--|-------|-----------------|-------------------------|---------|
| Pre test | 259.8 | 85.2 | 13.63 | 6.25* |
| Post test | 174.6 | | | |
| t ₀₅ (df=4)=2.77 *. significant at 0.05 level | | | | |

From table -2 it was observed that the t-value 6.25 was significant at 0.05 level.as the mean value of triglyceride at the time of post-test (174.6) is lower than the value of pre-test (259.8) and the difference was found significant statistically, therefore, it may be interrupted that walking is very helpful for the people suffering from high level of triglycerides.

Conclusions

Within the limitations of the present study, the following conclusions may be drawn.

1. Significant mean difference was found between pre-test

and post-test.

2. Walking helps to decrease weight.
3. Walking may be considered as a good exercise for the people suffering from high level of triglycerides.

References

1. ATS Committee on Proficiency Standards for Clinical Pulmonary Function Laboratories. ATS statement: guidelines for the six-minute walk test. Am J Respir Crit Care Med. 2002; 166:111–117.[PubMed]
2. Beyul E, Budagovsky V. Handbook of nutrition. Moscow Medicine; 1992, 464.
3. Brooks GA, Mercier J. Balance of carbohydrate and lipid utilization during exercise: the “crossover” concept. J Appl Physiol 1985-1994; 76:2253-2261. [PubMed]
4. Burgomaster KA, Hughes SC, Heigenhauser GJ, Bradwell SN, Gibala MJ. Six sessions of sprint interval training increases muscle oxidative potential and cycle endurance capacity in humans. J Appl Physiol. 1985-2005; 98:1985-1990. [PubMed]
5. Coquart J, Sioud R, Grosbois JM, Lemaire C, Tourny-Chollet C, Castres I *et al.* Détermination de l’exercice le mieux ressenti par des patientes obèses: exercice continu vs exercice intermittent. Diabetes Metab. 2012; 38:33-34.
6. Dansou P, Tolly PL, Yèhouéou B, Tossou R, Hadonou ML. The effect of soccer training on the levels of atherosclerotic lipids in the blood of obese subjects. Sante. 2000; 10:393-397. [PubMed]
7. Dumortier M, Brandou F, Perez-Martin A, Fedou C, Mercier J, Brun JF. Low intensity endurance exercise targeted for lipid oxidation improves body composition and insulin sensitivity in patients with the metabolic syndrome. Diabetes Metab. 2003; 29:509-518. [PubMed]
8. Durstine JL, Grandjean PW, Cox CA, Thompson PD. Lipids, lipoproteins, and exercise. J Cardiopulm Rehabil. 2002; 22:385-398. [PubMed]
9. Eguchi M, Ohta M, Yamato H. The effects of single long and accumulated short bouts of exercise on cardiovascular risks in male Japanese workers: a randomized controlled study. Ind Health. 2013; 51:563–571. [PMC free article] [PubMed]
10. Grandjean PW, Crouse SF, O’Brien BC, Rohack JJ, Brown JA. The effects of menopausal status and exercise training on serum lipids and the activities of intravascular enzymes related to lipid transport. Metabolism. 1998; 47:377-383. [PubMed]