Comparative study on the muscular strength in between trained and untrained men

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ABSTRACT

Introduction: Muscular strength refers to the amount of force a muscle can produce within a single maximal effort. Muscle strength is measured during muscular contraction. The size of your muscle fibers and the ability of nerves to activate muscle fibers are related to the muscle strength. In addition to understanding the definition of muscular strength, it’s also important to understand the benefits of strong muscles. Building muscle strength helps with body alignment, makes performing everyday actions easier, increases metabolism, and relieves stress. Materials and Methods: Questionnaire was prepared, and survey was conducted among the males about the muscular strength in between trained and untrained men’s and data were collected. The survey was prepared on survey planet and was circulated among the men. The survey was conducted among 157 men’s. Results: A comparative study was made in between the trained and untrained men based on their fitness and muscular strength. Conclusion: From this survey, we evident that trained men’s aim to maintain their fitness level and involve them in sports to increase their muscular strength. Where muscular strength is just one component of physical fitness along with cardiovascular fitness, muscular endurance, flexibility and body composition, and muscular strength can provide several health benefits

KEY WORDS: Fitness, Gym, Muscular strength, Trained Men’s, Untrained Men’s

INTRODUCTION

In spite of advances in measurement techniques and an explosive increase in the volume of research, our understanding of muscular strength is in its introductory stages. It is clear that muscle strength is a highly complex and variable function dependent on a large number of factors. It is not surprising; therefore, that there are large differences in strength, not only between individuals but also even within the same individual.¹ The issue is compounded by the fact that correlations of strength among different muscle groups are seen in the same individual are generally low.

Muscular strength refers to the amount of force a muscle can produce within a single maximal effort. Muscle strength is measured during muscular contraction. The size of the muscle fibers and the ability of nerves to activate muscle fibers are related to the muscle strength.² In addition to understanding the definition of muscular strength, it’s also important to understand the benefits of strong muscles.³ Building muscle strength helps with body alignment, makes performing everyday actions easier, increases metabolism, and relieves stress.⁴

The role of our muscular strength in the performance of activities of daily living and exercise, as well as in the prevention of chronic disease, is increasingly being recognized.⁵,⁶ Resistance exercise training increases muscular strength and is currently prescribed by major health organizations for improving health and fitness.⁷,⁸ Likewise, cardiorespiratory fitness provides strong⁹ and independent prognostic information¹⁰ about the overall risk of illness and death in adults across a broad spectrum of ages.¹¹

Human muscle strength often discussed as if it was a quantity which is easily defined and measured.¹² Whereas the role of muscle strength in physical function is well established,¹³ less is known about the relationship between muscle mass and physical function.¹⁴ Muscle mass, muscle strength,
and fat infiltration into the muscle can be modified by behavioral and pharmacological interventions in older persons. Hormone supplementation, nutritional interventions, and strength, and exercise training are most often used to increase muscle mass and strength. While strong muscles are essential for any athletic endeavor, strong muscles can benefit everyone in some way. Isotonic exercise is any movement that causes a muscle, to lengthen, and shorten. Heavy resistance training is associated with increased body weight, lean body mass, and muscle cross-sectional area. Vibration training is increasingly being promoted as a safe and efficient training method to improve muscle strength. Muscle endurance is an important aspect of physical performance and needs to be considered when assessing musculoskeletal function.

When you improve muscular strength and muscular definition, you enjoy many different benefits, especially if you are trying to lose weight. And you do not have to be an expert bodybuilder to take advantage of them. Strength training provides benefits for exercisers of all levels. When you include strength training in your exercise program, you build lean muscle mass and improve your metabolism. Having stronger muscles will also help us to move through our daily activities and burn more calories with greater ease. And muscles help to improve the way that your body looks. A tighter, leaner body looks better at every size. Where the exercise of any kind is important for good health and to maintain healthy body weight. However, if you do strength or resistance training 2–3 times per week, you build strong muscles to stand taller, burn more calories and improve the quality of your daily activities and movement. Hence, the aim of this study is to compare the muscle strength of trained and untrained men’s.

**RESULTS**

The study results showed that the muscular strength is much heavier in trained persons when compared with untrained men.

**DISCUSSION**

The discussion of our survey will cover various aspects between the trained and untrained men’s. Among the 157 participants, 46.5% are trained, and 53.5% are untrained [Figure 1]. In that 82.8% found to be a vegetarian and 17.2% were non-vegetarian. When we have a look at the age group, 70% of them belongs to the age group of 18–29. Most of the men’s prefer overall body exercise, and they aim to increase their muscular strength. Among 157, commonly we found in both trained and untrained men’s have a habit of working out regularly. Only, 44.1% do not have a habit of working out regularly. Among 55.9% of men’s have a habit of working out 2–4 hours daily [Figure 2]. Among the trained men’s 48.4% found evening to be the most comfortable time for their workouts. We found that 76% of men’s preferred overall body weight exercise [Figure 3]. When we have a glance at any special dietary and nutritional intake, 95% of men’s in both the groups have no idea about it. Where 70% of the participants do not have a habit of taking any protein supplements for their fitness. We also evident that 67% of men’s found exercise to be very important [Figure 4]. Before you get started, talk to your healthcare provider to make sure there are not restrictions or modifications that you should follow to stay safe.
The amount of muscle strength which can be achieved depends on gender, age, and inherited physical attributes. While strong muscles are essential for any athletic endeavor, strong and muscles can benefit everyone in some way. From this, we found even the trained men’s have more resistance workouts to build up their muscular strength.

CONCLUSION

From this survey, we evident that trained men’s aim to maintain their fitness level and involve them in sports to increase their muscular strength. Where muscular strength is just one component of physical fitness along with cardiovascular fitness, muscular endurance, flexibility and body composition, and muscular strength can provide several health benefits. Muscular strength refers to the amount of force a muscle can produce and is usually measured by the maximum amount of force a muscle can produce in a single effort (maximal effort). We can also conclude that the fitness level of the untrained men’s is also well maintained. Most of the men’s are involved in the sports participation to increase their strength.

REFERENCES


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