ISSN-0976-0245 (Print) • ISSN-0976-5506 (Electronic)

Volume 11 | Number 03 | March 2020

Indian Journal of Public Health Research & Development

An International Journal

SCOPUS IJPHRD CITATION SCORE

Indian Journal of Public Health Research and Development
Scopus coverage years: from 2010 to till date.Publisher: R.K. Sharma, Institute of Medico-Legal Publications
ISSN:0976-0245E-ISSN: 0976-5506 Subject area: Medicine: Public Health, Environmental and Occupational Health
CiteScore 2017-0.03
SJR 2017 - 0.108
SNIP 2017- 0.047

Covered by Scopus
EMBASE
Approved by MCI

Website:
www.ijphrd.com

Indian Journal of Public Health Research & Development

Print-ISSN: 0976-0245-Electronic-ISSN: 0976-5506, Frequency: Quarterly (Four issues per volume)

Indian Journal of Public Health Research & Development is a double blind peer reviewed international journal. It deals with all aspects of Public Health including Community Medicine, Public Health, Epidemiology, Occupational Health, Environmental Hazards, Clinical Research, and Public Health Laws and covers all medical specialties concerned with research and development for the masses. The journal strongly encourages reports of research carried out within Indian continent and South East Asia.

The journal has been assigned International Standards Serial Number (ISSN) and is indexed with Index Copernicus (Poland). It is also brought to notice that the journal is being covered by many international databases. The journal is covered by EBSCO (USA), Embase, EMCare & Scopus database. The journal is now part of DST, CSIR, and UGC consortia.

Website : www.ijphrd.com

Editor

Dr. R.K. Sharma
Institute of Medico-legal Publications
Logix Office Tower, Unit No. 1704, Logix City Centre Mall,
Sector- 32, Noida - 201 301 (Uttar Pradesh)

Printed, published and owned by

Dr. R.K. Sharma
Institute of Medico-legal Publications
Logix Office Tower, Unit No. 1704, Logix City Centre Mall,
Sector- 32, Noida - 201 301 (Uttar Pradesh)

Published at

Institute of Medico-legal Publications
Logix Office Tower, Unit No. 1704, Logix City Centre Mall,
Sector- 32, Noida - 201 301 (Uttar Pradesh)

Strength Improvement in Adults Healthy Men

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Abstract

Increased strength in adult men is very important. It is critical to optimizing physical fitness and avoiding injury. Strength is a fundamental ability that must be trained along with other abilities so as not to become counterproductive. This report informs that strength training is very influential to the physique, especially in the musculoskeletal functioning for adults healthy men. Strength training also has an impact on physical activities that are good for the soul and helps fight disorders such as anxiety and depression for adults men. Increased strength in adult men is very important. It is critical to optimizing physical fitness and avoiding injury. Strength is a fundamental ability that must be trained along with other abilities so as not to become counterproductive. This report informs that strength training is very influential to the physique, especially in the musculoskeletal functioning for adults healthy men. Strength training also has an impact on physical activities that are good for the soul and helps fight disorders such as anxiety and depression for adults men. Dominant capacity is the conditional capacity where motor performance requires a higher contribution. Most of motor activities require optimal performance of at least two qualities of the three listed. The development of one of the three conditional capacities must take place in a methodical way since it directly or indirectly affects the others. Thus, the key to increasing strength in adult men is routine motor training in a structured and methodically educated routine.

Keywords: *Strength, adults, men, physical fitness, healthy.*

Introduction

We will highlight a broader picture of strength expressed by the skeletal muscle system in fit and healthy human beings[1]. Later we will also see how mechanical forces are necessary for men to perform their everyday functions, from the simplest to the most complex and deepen the role of the strength to better understand the reasons for and causes of our movements[2]. There are three conditional abilities of a person, namely resistance, strength and speed. The development of this ability counteracts the decline in muscle mass, otherwise often called sarcopenia and prev ents muscle injuries in adult men. Intramuscular coordination is useful for athletes who have high endurance and who benefit from alternating recruitment or even desynchronization, allowing greater recovery for muscles that do not contract. Research also shows that intensification techniques are the best practice. There are divisions in the context of strength. The first is maximum strength, that is the highest strength that can be expressed by the nervous-muscle system voluntarily with contraction. The second is fast strength, that is the capacity of the nervous-muscle system to overcome resistance with a high level of contraction[3].

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Material and Method

An important factor to consider is the possible presence of hypertension that can seriously present an impediment to such training since loads very close to the ceilings determine an increase in blood pressure due to the Valsalva maneuver (exhalation to closed glottis), which inevitably occurs when almost maximal loads with low repetitions are applied; this leads to an increase in chest pressure and a reduction in the flow of venous blood to the heart[4]. This condition is established especially during exercises involving large muscle masses such as squat. This happens because it tends to unconsciously increase the intra-abdominal pressure in order to protect the vertebral column from the stress[5].

For athletes who are periodically subjected to medical checks or to those who are constantly monitored, it is of crucial importance to cycle and periodize their workouts and to always introduce a less long rest period before the maximum strength cycle[6]. A question too often brought up concerns the optimal number of series and repetitions in the cycle dedicated to maximum force. Several studies agree that there is no substantial difference between the 3- and 5-series-per-exercise cycles. As such, it is important to perform a low number of repetitions strictly within the 4-to-7-stroke range with doubles and singles.

Predominantly eccentric trainings, like those of the negative ones, represent a very powerful means of development of maximum force. With this training it is possible to brake loads of even 120–130% of 1RM. It should not, however, be carried on for more than 2 or 3 weeks so as not to overload the connective structures excessively[7]. Plyometric trainings can also be useful for increasing maximum strength, provided that the same rules are observed for negative repetitions. Both of these method overload both the musculoskeletal system and the central nervous system[8].

Finding and Results

There are studies showing that the findings of this topic are very familiar and it is not surprising that these athletes always represent the "strongest" sports class with greater abilities. Maximum strength is one of the biggest mistakes an athlete can make[9]. If you want to achieve a high level of clear muscle growth and create an impressive physical structure, then you need to push hard and lift weights to strengthen your muscles and joints. In this way, improvements to posture and endurance can be achieved and the risk of spinal column pathology such as hernia in the abdominal and back muscles can be avoided[10]. This also has an impact on increasing heart contractile capacity and coronary spraying at rest. Sportsmen have not only lower heart rates than people who do not move but also lower susceptibility to sudden changes in pressure; in addition, the circulatory system becomes more elastic and has better venous return because of greater efficiencies of the muscles.

Physical activity is also good for the soul and useful for fighting disorders such as anxiety and depression. In fact, it contributes to the release of two important types of neuromediators, namely acetylcholine and endorphins. These are molecules that produce sensations of analgesia and well-being as well as properties that lead to the definition of the happiness hormone[11]. The results of research conducted on breathing exercises prove that a number of trainings given to clients are able to increase the strength of breathing muscles[3].

The increase in strength is not exponential; its growth is therefore not always linear over time. If this were not the case, in a few years any power athlete would be able to practice biceps curls with 200 kg dumbbells. Unfortunately, it does not go that way. In strength training we must intervene gradually and, in any case, within human limits, set realistic long-term goals that are achievable[13].

Discussion

The various kinds of strength mentioned above include maximum force, explosive power, resistance to explosive power and muscle endurance, which can be classified according to biological principles[4]. This power can be classified by considering both neuromuscular aspects, which function to modulate tension and metabolic aspects, which determine its duration. Therefore, maximum strength and explosive strength are characterized by neurogenic factors, while resistance to explosive forces and muscle resistance are characterized by metabolic factors[5]. Strength, speed and endurance are the main requirements for successful performance[6]. Dominant capacity is the conditional capacity where motor performance requires a higher contribution. Most motor activities require optimal performance of at least two qualities from the three listed. The development of one of the three conditional capacities must be carried out methodically because it directly or indirectly influences the other[7],[8].

Cyclists cannot think of winning the final sprint if they are not trained, volleyball players cannot think of jumping higher if they have not increased their strength and body builders cannot think of developing further hypertrophy if they have not been through power training[8]. Among the three types of strength, maximum strength is the first to be trained. After having this quality increased, one can start working on another type of power with adequate training. Maximum strength can then become explosive strength and endurance or turn into hypertrophy[19]. Maximum strength increase occurs first with adaptation and modification at the nerve system level and morphological transformation and eventually reaches hypertrophy. Most likely, neural adaptation acts at both the central and peripheral levels; this is determined as a final result. This modification will provide possibilities to immediately recruit a very high number of muscle fibers and trigger all the blasting processes by force[9].

Changes in nervous system level will ensure increases in intramuscular and intermuscular coordination with energy savings as the result as well as increases in the speed of the implementation of a movement[21]. Small loads can produce high outcomes through speed, but using low loads and high repetitions is sub-optimal because in such a training situation, the alternation of the recruitment of motor units comes into play, in which case it does not lead to the improvement of strength[1]. Higher loads, on the other hand, will provide greater supercompensation. If optimal muscle tension is not achieved, there may be no increase in the strength produced. Training method to increase maximum strength vary and include repeated effort method: series method, pyramidal method, dynamic method, maximal effort method, static or isometric stress method and contrasting method[10]. The latest findings reviewing articles that show that exercises that are carried out slowly and gently can reduce the risk of even simple exercises if done incorrectly can cause joint pain and muscle tension aimed at improving male posture[17].

The method above are the result of a study which combines well with performance sports[2]. Strength training for advanced bodybuilders or fitness practitioners aims to increase the reception capacity of motor units, thereby usable in mesocycles for hypertrophic purposes. This is principally the characteristic to building strength[7].

Conclusions

Dominant capacity is the conditional capacity where motor performance requires a higher contribution. Most of motor activities require optimal performance of at least two qualities of the three listed. The development of one of the three conditional capacities must take place in a methodical way since it directly or indirectly affects the others. Strength is a fundamental ability that must be trained along with other abilities so as not to become counterproductive. It serves as a starting point. A cyclist cannot think of winning a final sprint if he has not trained his strength, a volleyball player cannot think of jumping higher if he has not trained his strength and a bodybuilder cannot think of developing further hypertrophy if he has not trained his strength. Thus, the key to increasing strength in adult men is routine motor training in a structured and methodically educated routine.

Conflict of Interest: The authors declare that there is no conflict of interest related to this study.

Source of Funding: The authors declare that there is no source of funding from anyone.

Ethical Clearance: Approved by the Research Ethics Committee of the Udayana University Medical School/Sanglah Hospital.

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