



BENEFITS OF SWISS BALL EXERCISES TO INDIVIDUALS

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Abstract:To evaluate the effectiveness of 06 weeks Plyometric Training Programme on Respiration Rate of Taekwondo Player. pre-test and post- test randomized group design were undertaken for the present study which consist of an Experimental group and control group. Equal number of subjects (N=50) were assigned randomly to both groups. The experimental group was exposed to 06 weeks Plyometric Training Programme, whereas, no treatment was given to control group. For the purpose of the present research work a total of 100 Taekwondo Players were randomly selected for the present research work. The level of significance to test the obtained t-ratio was fixed at 0.05 level of confidence, which was considered to be appropriate in review of the fact that highly sophisticated instruments and devices were not used for more stringent level of significance. By Using t'-ratio the finding of the study showed that there was a significant difference in the pre-test and post-test scores of experimental group in Respiration Rate as a result of 06 weeks plyometric training practices. Whereas the finding of the study reveals that there is significant difference in Respiration Rate in the pre-test and post-test of experimental group and No significant difference in control Group. As a result of 06 Weeks Plyometric training.

Keywords:Plyometric Programme, Taekwondo

Introduction:

Health is vitally significant for mankind. Good health has been regarded as the first and best wealth of an individual. Health not only affects the individuals but the whole community in which he lives. It has to be earned through a daily physical exercise.

Swiss ball is one of the extremely beneficial, therapeutic training and recreational equipments that enriches the health of individuals. It helps to improve strength, endurance, flexibility, and balance in sedentary individuals. It also improves static and dynamic balance. It shows a beneficial effect on muscular strength and abdominal strength. It also helps people to be more symmetrical so that the body functions properly and avoids injuries.

History of Swiss Ball:

"Swiss Ball" was developed in 1963 by AquilinoCosani, an Italian plastics manufacturer. He perfected a process for moulding large puncture-resistant plastic balls. Those balls, then known as "Pezzi balls".

Swiss ball exercises as therapies:

Swiss balls were first used in treatment programs for newborns and infants by Mary

Quinton, a British physiotherapist working in Switzerland. Later, Dr. Susanne Klein-Vogelbach, the director at the Physical Therapy School in Basel, Switzerland, used Swiss ball exercises as physical therapy for neuro-developmental treatment. Klein-Vogelbach advocated the use of ball techniques to treat adults with orthopaedic or medical problems.

North American physical therapists termed the Swiss ball as "Swiss ball" since it was first used by Physical therapists from Switzerland for the treatment of various patients and they were found to be beneficial. From their development as physical therapy in a clinical setting, those exercises are now used in athletic training, as part of a general fitness routine and incorporation in alternative exercises such as yoga.

The Swiss ball, is also known by a number of different names like --- Balance ball, Birth ball, Body ball, Fitness ball, Gym ball, Gymnastic ball, Physio ball, Pilates ball, Pezzi ball, Sports ball, Stability ball, Swedish ball, Therapy ball, or Yoga ball.

Form and structure of a Swiss ball

An exercise ball is a ball constructed of soft elastic with a diameter of approximately 35

to 85 centimetres (14 to 34 inches) and filled with air. The air pressure is changed by removing a valve stem and either filling with air or letting the ball deflate.

Uses of a Swiss ball

Swiss balls were previously used for physiotherapy; they are increasingly being used for workouts as well. Although its effectiveness has not been proven scientifically, Swiss ball exercises has become increasingly become popular especially in the last decade. However, performing exercises on an unstable surface, when compared to a stable surface, arouses a greater influence on muscular activity and unstable surface training can be very effective for injury prevention and treatment. Conversely, Swiss ball exercises decrease force output when compared to a stable surface.

A Swiss ball is most often used in the following activities:-

1. Physical Therapy
2. Weight Training
3. Athletic Training and Exercise
4. As a multi-purpose bench when performing weight training exercises.
5. To perform dumbbell flys and presses while lying on the ball with additional weight to stabilize the ankles.

Benefits of Swiss Ball Exercises to different Individuals:

Several research scholars have conducted research on the benefits of Swiss ball exercise in the foreign countries;

1. A nine day Swiss ball training may reduce perceived low-back discomfort in females. Females electing to use a stability ball can decrease discomfort by following a Swiss ball exercise protocol.
2. A six weeks Swiss ball exercises program improves static and dynamic balance and contributes to enhance concentration based performance.
3. A twelve weeks Swiss ball training protocol beneficially effects the muscular strength and abdominal strength of sedentary college going young men .
4. A six weeks Swiss ball core training exercise can be used to improve isokinetic leg strength and endurance, abdominal and

lower back muscular endurance, static and dynamic balance and lower back flexibility in the sedentary active. A six weeks of Swiss ball core training will help people to be more symmetrical so that body functions properly and avoids injuries.

5. A twelve weeks Swiss-ball core strength training can improve the strength, endurance, flexibility and balance in sedentary women. Sedentary individuals, physiotherapists, strength and conditioning specialists can benefit from core strength training with Swiss balls.

6. Swiss ball exercises not only improve select physical and physiological qualities of women Karate players but also improves their karate game performance level.

7. Swiss ball is used as a potential core stability training device.

8. A six weeks Swiss ball training session may positively affect core stability without concomitant improvements in physical performance in young athletes.

9. A ten weeks instability training program using Swiss balls with body weight as resistance can provide prolonged improvements in knee joint reposition sense and core strength which would contribute to general health and performance of sedentary university students.

Swiss balls are no doubt beneficial to most of the individuals who not only regain their health but also helps to improve and sustain health in most of the already healthy individuals be they men or women of any age group.

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