144 - ANALYTICAL STUDY RELATING TO GAIN MUSCLE STRENGTH OF LOWER LIMB FOR MEN AND WOMEN PRACTITIONERS BODY PUMP

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INTRODUCTION.

The Science of Physical Education, no doubt, have advanced significantly in recent decades, particularly with regard to the physiology of exercise. However, we realize that most of the scientific literature has focused on the sport, leaving open space for the investigation of non-sport physical activities such as the activities carried out in gyms. Technology has brought progress and, together with it, the diseases associated with hypokinesia or inactivity. Thus, man is aware of the importance of the practice of physical activities, and different are the reasons that led the exercise, including: aesthetics, health, fitness and quality of life (GOMES, 1994; Novaes, 2001).

Novaes (1991) argues that there are numerous options for those seeking to practice a physical activity, and today one of the most sought after are found in gyms.

These have become alternative sites to individual practice of outdoor activities, without professional guidance, or practice of sports found in elite clubs. The high level of skill required for the practice of sports activities has caused people to return to school, turning them into a good option to replace the sports clubs and related spaces (Novaes & Vianna, 2003).

Da Costa et al. (1996) argue that health clubs have emerged in the 30s and, by 1970, gained a new and played a major role in the social growth of the fitness in the world. In the late '70s and early '80s, there was a large explosion in the number of fitness centers throughout the country. This rapid expansion has led to other alternative activities emerge, in addition to fitness, bodybuilding, dance and fights. Costa (1996) comments that the proliferation of health clubs is an international phenomenon. An estimate made in 1984 by the Brazilian Association of Academies of Physical Activities and Sports (ABRAF) refers to the existence of 6000 thousand stores in the state of Rio de Janeiro.

The fitness centers have served as a field of research for quantitative scholars. In recent years, growing interest and need to investigate this area of knowledge, highlighting the numerous dissertations and theses. (Lacerda, 1995, Pereira, 1996; Gerheim, 1996; SAMULSKI et al. 1997; Novaes, 1990, 1998; COELHO FILHO, 1998; MENEZES Dantas, 1998, COSTA, 1998; new saint, 1999, MELLO, 2002; MULLER, 2002; FARIA 2002, MALTA, 2002).

In these studies, there was a major concern with aspects of aesthetics, health and quality of life, and that awareness of the improved quality of life, from the practical activities in academia, has been presenting an increasing degree, and demonstrating its importance in our society. Tubino (1973) confirms the above position, warning that issues relating to the practice of physical activities these days are invariably located in the social perspectives of culture and quality of life.

ACSM (2000) adds that the maintenance or enhancement of muscular strength and muscular endurance allows any individual to perform tasks with less physiological stress, helping to maintain functional independence for a lifetime.

Thus, they become important research that will contribute to a better understanding of such activities, providing scientific support to them and the professionals who teach their practice.

According to Ferrari and Guglielmo1, a large number of activities have been offered in gyms, and the more practiced at present are those operating in the form of relief, such as Body Pump, Body Combat, Spinning, Power Jump, among others.

Regarding the mode that we investigated, Body Pump, Less Mills 2 seconds, this activity is present in over 60 countries, which reinforces the importance of investigating it.

OBJECTIVES

This study aims to compare the effects of training BODY PUMP levels of muscular endurance (RML) of the lower limbs of adult men and women non-athletes beginners. Sampling non-probability sample is limited to individuals aged between 18 and 35 years, females and males in a total of 20 practitioners. This group was chosen for ease of control of adherence to process (Body Pump classes), and the control mechanisms of action (body of teachers pump) of the practitioners body pump, the Academy of Metropolitan Region of Rio de Janeiro, São Gonçalo, the Alcântara district.

Inferential analysis

evaluated the initial training load in the pre-test and after 3 months, the A new measurement of load in the post-test mix of 69 songs of the pump body 2 and 7, because, through it, you can compare two independent groups seeking to verify the initial charge and the end of practice.

PRESENTATION AND DISCUSSION OF RESULTS.

Characteristic sample

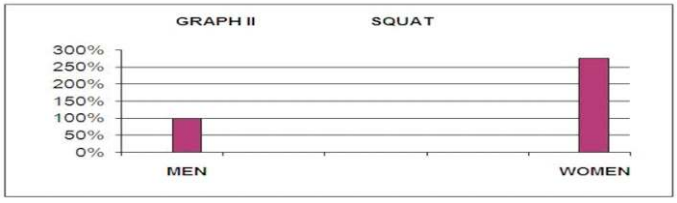
The study sample consisted of 20 participants (n = 20), divided into two groups. One of the men (n = 10) and another of women (n = 10). The groups were selected and evaluated by the gender factor, aiming to define the profile of muscular endurance of the lower limbs.

Presentation of data collected

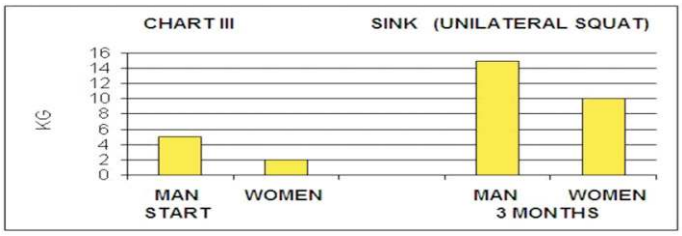
In the series of SQUAT (Figure 1), men started at 15 kg and women with 4 kg. After 3 months of training have achieved the following loads: 30 kg man, the woman with 15 kg.



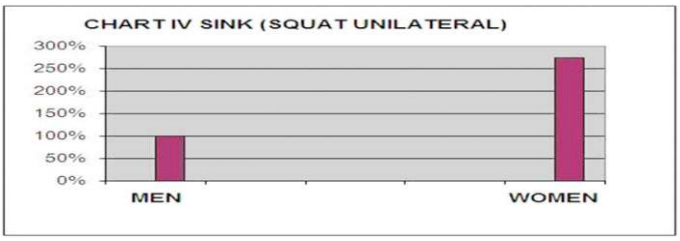
In relation to its increase in percentage, the man had obtained a 100% increase compared to the beginning of their training, while women had an increase of 275% over the same period. (Chart 2)



Therefore, in relation to the number of sink (Figure 3), the man began his program with a load of 5 kg, woman with 2 kg. After 3 months of training could be with the following loads: man 15 kg, female 10 kg.



Concerning the percentage, the man obtained an increase of 100% over the beginning of their training. The women were able to have an increase of 275% over the beginning of their training (Figure 4).



CONCLUSION

It was observed that regardless of where the selection of repetition / overload is a continuation of repetitions with maximum loads or near the maximum by series / 100 series of repetitions, there is a positive effect on the development of lean muscle mass, muscular endurance and absolute resistance.

There is also an effect on reducing body fat in the medium to long term and the general welfare of the participant. It was analyzed that was a big difference in relationships between men and women due to psychological factor, because the woman has some concern about working with weight, reporting that will acquire a male aspect, where it was explained that the same will not happen because of the number of repetitions and load.

Immediately view and you get the muscular endurance with the practice of BODY PUMP with a short period of time, thus facilitating their daily activities.

Recommendations

The frequency, intensity, duration and type of exercise determine the efficiency of a training / exercise in reducing body fat and in improving muscular endurance and various components of physical fitness. The most widely followed guidelines for health and physical condition are released by the American College of Sports Medicine (2000). The position of the ACSM for the quantity and quality of training for the development and maintenance of aerobic fitness, body composition, strength and endurance in healthy adults includes the following recommendations: Frequency of training 3-5 days a week.

Therefore the BODY PUMP is an efficient way of training that meets most criteria of ACSM in a gym class conference.

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ANALYTICAL STUDY RELATING TO GAIN MUSCLE STRENGTH OF LOWER LIMB FOR MEN AND WOMEN PRACTITIONERS BODY PUMP

ABSTRACT:

The aim of this study is to compare the effects of training BODY PUMP, the levels of muscular endurance (RML) of the lower limbs of adult men and women non-athletes. The sample comprised 20 individuals divided into two groups: 10 men (n = 10), with a mean age of 24.5, and women (n = 10), with a mean age of 26.5. Data were drawn from the songs 2 (half squat) and 7 (unilateral squat or sink), the classes of the mix BODY PUMP 69, for lower limbs, checking the initial charge of training. After obtaining these data, we performed the statistical descriptive study to define the profile of each group. We used the statistical test t-student, because through it is possible to compare two independent groups, searching for differences in central tendency, variability, kurtosis or any other. The results indicate that there are significant differences between the levels of gain muscular endurance (RML) in the lower limbs when compared to the beginning of training. However, we can conclude that the BODY PUMP is an excellent form of training of muscular endurance (RML), he obtained statistically significant results compared to the beginning of training, helping to overturn the myth that only the weights used to the training of muscular endurance (RML).

The results also encourage those who for various reasons cannot or do not like training in weight rooms, thus providing a new option of training in gyms, clubs, spa or similar places.

ETUDE ANALYTIQUE RELATIVES AU GAIN DE MUSCLE DE RÉSISTANCE INFÉRIEUR POUR LES HOMMES ET LES FEMMES PRATICIENS DE CORPS DE POMPE

RÉSUMÉ:

L'objectif de cette étude est de comparer les effets de la formation CORPS DE POMPE, les niveaux d'endurance musculaire (RML) des membres inférieurs, des hommes et des femmes adultes non-athlètes. L'échantillon comprenait 20 personnes réparties en deux groupes: 10 hommes (n = 10), avec un âge moyen de 24,5, et les femmes (n = 10), avec un âge moyen de 26,5. Les données ont été tirées des chansons 2 (moitié de squat) et 7 (unilatérale squat ou dans l'évier), les classes de la combinaison BODY PUMP 69, pour les membres inférieurs, en vérifiant la charge initiale de la formation. Après l'obtention de ces données, nous avons réalisé l'étude statistique descriptive pour définir le profil de chaque groupe. Nous avons utilisé le test statistique t-étudiant, car à travers, il est possible de comparer deux groupes indépendants, la recherche de différences de tendance centrale, la variabilité, aplatissement ou tout autre. Les résultats indiquent qu'il existe des différences significatives entre les niveaux de gain d'endurance musculaire (RML) dans les membres inférieurs par rapport au début de formation. Cependant, nous pouvons conclure que la pompe du corps est une excellente forme de formation de l'endurance musculaire (RML), il a obtenu des résultats statistiquement significatifs par rapport au début de la formation, contribuant ainsi à renverser le mythe selon lequel seuls les pondérations utilisées pour la formation de l'endurance musculaire (RML).

Les résultats ont également encourager ceux qui pour des raisons diverses, ne peuvent ou n'aiment pas la formation dans les salles de poids, fournissant ainsi une nouvelle option de la formation dans les gymnases, les clubs, un spa ou des lieux similaires.

ANÁLISIS ESTUDIO RELATIVO AL AUMENTO DEL MÚSCULO RESISTENCIA DE MIEMBRO INFERIOR PARA HOMBRES Y MUJERES PROFESIONALES DE BODY PUMP

RESUMEN:

El objetivo de este estudio es comparar los efectos del entrenamiento de BODY PUMP, los niveles de resistencia muscular (RML) de las extremidades inferiores de los hombres y mujeres adultos no atletas. La muestra fue de 20 individuos divididos en dos grupos: 10 hombres (n = 10), con una edad media de 24,5, y las mujeres (n = 10), con una edad media de 26,5. Los datos fueron extraídos de las canciones 2 (media sentadilla) y 7 (unilaterales en cuclillas o sumidero), las clases de la mezcla de BODY PUMP 69,para los miembros inferiores, el control de la carga inicial de la formación. Después de obtener estos datos, se realizó el estudio estadístico descriptivo para definir el perfil de cada grupo. Se utilizó la prueba estadística t-student, porque con ella es posible comparar dos grupos independientes, en busca de diferencias en la tendencia central, variabilidad, curtosis o cualquier otro. Los resultados indican que existen diferencias significativas entre los niveles de ganancia de la resistencia muscular (RML) en las extremidades inferiores en comparación con el comienzo de la formación. Sin embargo, podemos concluir que el BODY PUMP es una excelente forma de entrenamiento de resistencia muscular (RML), obtuvo resultados estadísticamente significativos en comparación con el comienzo de la formación, ayudando a derribar el mito de que sólo las

ponderaciones utilizadas para formación de la resistencia muscular (RML). Los resultados también animar a aquellos que por diversas razones no pueden o no les gusta la formación en las salas de peso, proporcionando así una nueva opción de formación en los gimnasios, clubes, spa o lugares similares.

ESTUDO ANALÍTICO REFERENTE AO GANHO DE RESISTÊNCIA MUSCULAR DE MEMBROS INFERIORES ENTRE HOMENS E MULHERES PRATICANTES DE BODY PUMP

RESUMO:

O objetivo deste estudo é comparar os efeitos do treinamento de BODY PUMP, nos níveis de resistência muscular localizada (RML) de membros inferiores de homens e mulheres adultos não-atletas. A amostra foi composta por 20 indivíduos divididos em dois grupos: 10 homens (n=10), com idade média de 24,5, e mulheres (n=10), com idade média de 26,5. Os dados foram selecionados a partir das músicas 2 (Meio agachamento) e 7(Agachamento Unilateral ou Afundo), das aulas de BODY PUMP do mix 69, para membros inferiores, verificando a carga inicial do treinamento. Após a obtenção desses dados, foi realizado o tratamento estatístico descritivo, objetivando definir o perfil de cada grupo. Aplicou-se o teste estatístico t-student, pois através dele é possível comparar dois grupos independentes, buscando-se diferenças na tendência central, variabilidade, curtose ou qualquer outra. Os resultados indicam que há diferenças estatisticamente significantes entre os níveis de ganho de resistência muscular localizada (RML) em membros inferiores quando comparados ao início do treinamento. Contudo, pode-se concluir que o BODY PUMP é uma excelente forma de treinamento da resistência muscular localizada (RML), já que obteve resultados estatisticamente significantes na comparação com o inicio do treinamento, ajudando assim a derrubar o mito que somente a musculação serve para o treinamento da resistência muscular localizada (RML).

Os resultados favorecem também aqueles que por diversos motivos não conseguem ou não gostam de treinar em salas de musculação, dando assim uma nova opção de treinamento em academias, clubes, SPA ou lugares afins.

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