

165 - BENEFITS OF RESISTANCE TRAINING RELATED TO THE THIRD AGE

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INTRODUCTION

Aging is a complex process that involves several variables such as genetics, lifestyle, chronic diseases, preventive and social behavior that interacts among themselves influencing the way is aging. During the aging process changes occur in several systems that vary from person to person and that is the potentially negative performance motor and the quality of life of people in general. Increasingly is searching ways to obtain or retard the aging process or strategies to ensure maintenance of functional capacity and autonomy in the last decades of life (ACSM, 1998).

The sarcopeny, identified as a major cause of the decline of the autonomy and increased mortality in the elderly, affecting primarily the fibers of the type IIb and promotes a rise in the concentration of fibers of the type I (SHEPHARD, 1998).

The training of strength with loads exceeding 80% of 1 RM promotes prevention of sarcopeny in order that they are recruited with the motor units of type II (FLECK; KRAEMER, 1999).

According Shephard (2003), the content of calcium from the bones begins to decrease gradually in most women between 20 and 30 years, and this rate of loss faster after menopause. In men, the process usually starts a little later and develops itself less quickly. The same author reports that the damage and degeneration of the articular cartilage causing a gradual rise in the incidence of osteoarthritis, with the passage of age. Of the 50 to 60 years the radiographs of the spine injuries show characteristics in 70 to 80% of individuals, while only a small proportion of individuals (15 to 20%) complain of specific symptoms.

To Shumway-Cook and Wallacott (2003), the fact that the style of life determines the general way in which **envelhecemos**, leading an emphasis on preventive measures of health, associated with the idea that we must aging well and with quality of life. Many of physical activity programs for the elderly have emerged since the maintenance of independence and the fundamental condition for any individual who has self-esteem and well being, so that it can perform its work without restrictions everyday and have a good health. The higher levels of muscle strength are achieved between the ages of 20 and 30 years. Subsequently is checked both the reduction in force as the musculature, which are accelerated after middle age.

There is increasing evidence indicating the positive effect of an active lifestyle in the maintenance of functional capacity and the physical autonomy during the aging process. Instead of all aspects already mentioned above by the end of the exercise in general, according Paffenbarger (2000), there are also important benefits of the training of muscle strength in elderly as: improvement in speed to the floor, improves the balance, improved self - efficiency, increase in the level of spontaneous physical activity, increased bone density, helps the control of diabetes, arthritis, heart disease, among others.

One of the main causes of accidents and disability in the elderly is the fall, which usually happens by abnormalities of balance, muscle weakness, visual disorders and consumption of certain products, among other factors that as Spirduso (2005), the exercise helps in preventing the falls through different mechanisms: strengthening the muscles of the legs and back, improvement of mobility, reflexes and body weight.

Studies show that even the elderly can buy weaker benefits with bodybuilding, even though many people feel that this type of exercise is more than the elderly could bear. However, the morphological and functional changes induced by chronic regular physical activity are low or return to the situation prior to training where the program of exercises is interrupted. This phenomenon has been called the "effect of the break of training" or simply "distrainment" and the magnitude of reversibility is proportional to the period of absence of stimulus.

According Mcardle, Katch and Katch (2003), the usual physical training facilitates the retention of protein and can delay the reduction of lean body weight of force seen with aging. The improvement in muscle strength induced by resistance training may represent the best way to prevent or reduce the incidence of injuries in the elderly. But we must remember the risk: According to the same authors above, exercises done with weights produce dramatic increases in blood pressure even with a relatively light isometric exercise. This overload acute cardiovascular could be harmful in people carriers of cardiac and vascular disease. For these people, are desirable or beneficial ways more **ritmics** of moderate exercise.

So before submitting his student elderly to any physical activity, it should do with it to undergo an evaluation and physical examination with his cardiologist, to make sure that the student is prepared to pursue the planned activity.

According Matsudo (1999) physical activity (in particular a way of life regular) can slow the decline of mobility, regardless of the presence of chronic disease. According to other analysis has been shown that subject with greater level of physical activity is better health and functional ability compared to sedentary of the same age.

The effects of bodybuilding usually appear between the fourth and eighth week of training, done a load of 80% of the maximum load in exercises that work multiple muscle groups on 2 sets of 8 to 10 repetitions and a weekly frequency of 2 times per week.

Fiatrone et al (2000) showed that even people aged above 90 years can achieve gains in strength during a period of training, 8 weeks, and these results may improve the quality of life of these people.

In recent years the search for physical activity has become a necessity for people in a way in general, especially for the elderly in search of an improvement in quality of life and functional capacities of the body. Negative Emotions such as anxiety and stress are considered important causes for the emergence of cardiovascular disease. Current studies show that exercise acts as coadjutant in forms of treatment for depression. Therefore, the study shows the importance of physical activity to maintain and even improve the functional structures.

During all these years, several studies also showed that the practice of physical exercise has obtained several positive effects for the elderly, such as: reducing blood pressure, improving the metabolism of glucose, increased bone mineral density, reduction of body fat, gain in muscle tissue, improvement of blood lipids, keeping the muscles among others. Thus the importance of this object of study is to try to get more clarity about the consequences of resistance against training on the health of older people.

This article is in a study that characterized the situation of the elderly in South Zone of the State of Rio de Janeiro, in order to focus on the possible positive effects of the practice of physical exercise to improve the health and quality of life.

METHODOLOGY

A related search through descriptive method used methodology of investigation through questionnaires (THOMAS; NELSON, 2006). The sample of this study was composed of 40 elderly of both genders, with 20 men and 20 women in the age group

between 60 to 80 years practitioners of physical exercises oriented, such as gymnastics lessons of collective located, step, weight training and stretching ago at least 12 months in academies located in the South Zone, the Municipality of Rio de Janeiro. Individuals volunteers responded to questionnaires IPAQ short version, evaluation profile of the lifestyle of individual Nahas, WHOQOL-OLD for evaluation of quality of life questionnaire and a pilot, which involved questions about their thoughts, feelings, and on certain aspects of his quality of life. This study meets the Standards for the Production Research in Human Beings, Resolution 196/96, of the National Council of Health on 10 October 1996. All participants in the study agreed to sign the Term of Participation Consented (Containing: goal of the study, procedure for assessments, the voluntary nature of participation of the subject and exemption from liability of the evaluator and the University Estácio de Sá). The statistical processing was performed by descriptive statistics (mean, the standard deviation, maximum, minimum and fashion for the continuous variables and relative frequency for analysis of the questionnaires)

RESULTS

Of the 40 elderly people studied, 20 were of the genus women and 20 of men, with average age of 65.35 (± 3.87) years. The elderly of the female gender had age 65.85 (± 4.32 years through the questionnaire Ipaq 65% of women consider themselves active, 30% very active and 5% insufficiently active. The male gender obtained age 6.85 ± 3, 39) years old and 65% are considered to be active, 30% very active and 5% insufficiently active.

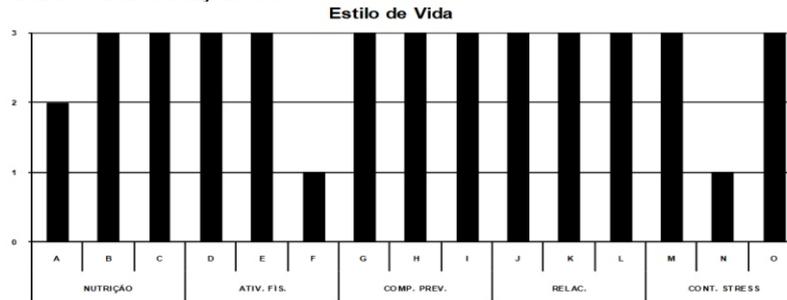


Figure A: Results of the questionnaire for the Style of Life, in all subjects tested.

Analyzing the results of Figure A got to be a broad overview regarding the following: nutrition, physical activity, preventive behavior, relationships and control of stress. All items mentioned in this work had a correlation with the group selected, elderly practitioner of physical activities in academies. The issues related to preventive behavior and relationship received all positive responses generating a framework favorable to the group chosen. One can assume that these items are directly related to subjects of the study because they do physical activity. It is customary that the visitors from academia are integrated and socially stable. The physiological relationship to the prevention of blood pressure, cholesterol, no use of alcohol and smoking may be related to the primary factor of the study: they are practitioners of physical activity. There was a balance in the other components in stock usual, at least one question was pointed negatively. Noting that the items analyzed correspond to attitudes and values, it was found that the figure shows an average of the healthy lifestyle. A senior correspondent is active practitioner of physical activity and this may be one of the factors contributing to that possible conclusion.

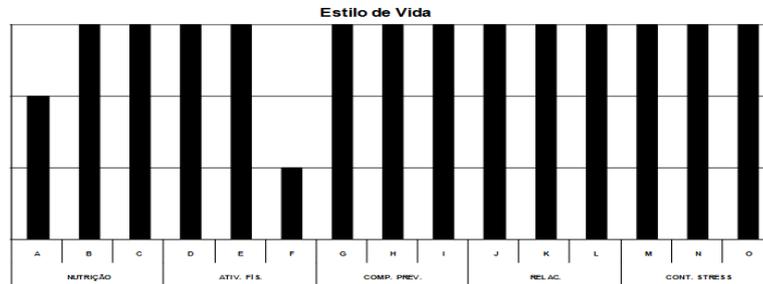


Figure B: Results of the questionnaire for the Life Style of the female gender.

In analyzing the results of Figure B, it is observed that women studied have a maximum rate in most facets of the issue is that the category regard to nutrition, had value 2 and the facet physical activity in question F in minimum value 1.

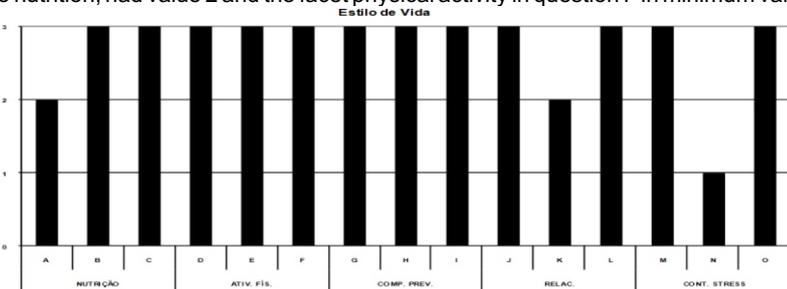


Figure C: Results of the questionnaire for the Life Style of the male gender.

In reviewing the results of Figure C, it is observed that the men surveyed have a maximum rate in most facets of which the issue. Regarding the nutrition category, showed average 2, in the category relationship facet K averaging 2 and in the category of stress control facet N had the minimum 1.

WHOOLD



Thus, when examining the results of the questionnaire WHOOLD, which has a wide range of values between 4 and 20, where you can see through the 6 facets they are: operation of the sensory (1), autonomy (2), activities past, present and future (3), social participation (4), death and dying (5) and intimacy (6), a facet of the functioning of sensory regard to the senses (touch, hearing, sight, taste and smell), reached the value of 18.25 where we say that remains above the average of the facets; Then the facet autonomy that has a relationship with the work, activities everyday, got to be a value of 11.24 is below the average of facets (12, 00); The following activities facet that is past, present and future has a value of 14.50 above the average of the facets; The facet regard to the social participation of the elderly in relation to coexistence in social groups and family got there a value above the average of the facets of 13.44; death or dying regard to the level of concern in relation to the death or manner with which dies had a minimum value of 9.63 is well below the overall average; In facet intimacy, which has a relationship with a companion or a close person with whom you can share (split) its intimacy more than with any other person in his life, got to the average of more facets to the maximum of 18.88. Finally, the total score regard to the average total of all facets examined, obtained the value of 14.44 remained above average. In short, the elderly have demonstrated values above average in most facets analyzed.

From the pilot questionnaire it was found that on the question 1, 100% of the elderly who answered yes were an improvement in their quality of life, with 59% in the appearance engine, 33% in the psychological, 5% affective and 3% cognitive in question 3 which questions whether the quality of life is related to the practice of the exercise got to be a result of 100% of positive answers.

In question 4, which has for what kind of influence that led to practice some type of physical activity among children and the options medium containing 0%, will own 62%, and some with 38%. In question 5 related to the level of satisfaction with the method practiced until now, had 100% of positive responses. When asked what kinds of people should perform physical activity 42% replied that all people should perform physical activity, 34% indicated the elderly, 9% said their children, 6% to heart diseases, and 9% divided between the family and people with overweight. The last question that analyzes any changes that negatively influenced on the day of each elderly, obtained is 100% of responses saying that there was no negative influence on your life.

To correlate the questionnaires, it was found that physical activity in question both in IPAQ, NAHAS, WHOOLD and PILOT got to be a satisfactory degree on the level of physical activity undertaken by senior studied, and the question relationship or social participation was also a average satisfactory significantly between NAHAS and WHOOLD.

CONCLUSIONS AND RECOMMENDATIONS

At the end of the study, one can observe that the constant practice of the year against resistance presented a very significant result in the level of the quality of life of elderly people studied.

The professionals who work or will work with the prescription of exercises in individuals of the third age, as it demonstrates the existence of a capacity to perform activities, should take these results into consideration. In summary, we can say that the picture of the quality of life and welfare of the elderly is pretty good. It is necessary, pay particular attention to the decline of cognitive skills, the commitment of motor skills and autonomy, on the other hand, has to be thinking, too, about how to keep the elderly independent and capable occupied so that they feel valued. The study shows how many elderly people reach a successful aging.

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BENEFITS OF RESISTANCE TRAINING RELATING TO THE THIRD AGE

ABSTRACT:

Currently in Brazil, according to the IBGE (2006), the elderly account for about 9% of the population, totaling 17 million people over 60 years, and the prospects of the UN in the next 20 years, is that this percentage increases to 16 %, which is beyond the Brazilian live longer, have more elderly in the population. In old age, the difficulty of tasks is evident, the distances are "longer", the stairs are harder to climb, the streets are more dangerous to cross, "the world becomes a threat to the elderly." Exercise is one of the most effective speeches about the improvement of the quality of life of the elderly, therefore helps in the control of the changes by the process of aging, promoting autonomy and independence in activities of daily life. Objective: To evaluate the effects of the practice of physical activity (against resistance training) on the health of the elderly. Methodology: Through descriptive method using a methodology of investigation. The sample was composed of 40 elderly of both genders, with 20 men and 20 women in the age group between 60 to 80 years practitioners of exercises against resistance (bodybuilding), and at least 12 months in academies located in the South of the Borough the Rio de Janeiro. Individuals volunteers responded four questionnaires being them: IPAQ short version (questionnaire international physical activity); NAHAS assessment of the profile of the lifestyle, WHOOLD quality of life for older people and a questionnaire PILOT. Results: To correlate the questionnaires, it was found that physical activity in question both in IPAQ, NAHAS, WHOOLD and PILOT got to be a satisfactory degree on the level of physical activity undertaken by senior studied, and the question was no relationship or social participation also a satisfactory average significantly between NAHAS and WHOOLD. Conclusion: At the end of the study, one can observe that the constant practice of the year against resistance presented a very significant result especially in motor respectively, and in other aspects studied for the improvement of the quality of life of older people. These results should be taken into consideration by the professionals who work or will work with the prescription of exercises in

individuals of the third age, as it demonstrates the existence of a capacity to perform activities

KEY-WORDS: Elderly. Quality of Life. Style of Life.

AVANTAGES DE LA RESISTANCE A LA FORMATION SE RAPPORTANT A LA TROISIEME AGE

RESUME:

Actuellement, au Brésil, selon l'IBGE (2006), les personnes âgées représentent environ 9% de la population, totalisant 17 millions de personnes de plus de 60 ans, et les perspectives de l'ONU dans les 20 prochaines années, c'est que ce pourcentage augmente à 16%, ce qui dépasse le Brésilien vivent plus longtemps, ont plus de personnes âgées dans la population. Dans la vieillesse, la difficulté des tâches est évident, les distances sont "plus", les escaliers sont plus difficiles à monter, les rues sont plus dangereuses à traverser, "le monde devient une menace pour les personnes âgées." L'exercice est un des meilleurs discours sur l'amélioration de la qualité de vie des personnes âgées, contribue donc dans le contrôle de la modification par le processus du vieillissement, la promotion de l'autonomie et l'indépendance des activités de la vie quotidienne. Objectif: évaluer les effets de la pratique de l'activité physique (résistance contre la formation) sur la santé des personnes âgées. Méthodologie: Grâce descriptif méthode utilisant une méthodologie de l'enquête. L'échantillon était composé de 40 personnes âgées des deux sexes, avec 20 hommes et 20 femmes dans le groupe d'âge de 60 à 80 ans praticiens d'exercices contre résistance (musculature), et au moins 12 mois dans les écoles situées dans le sud de l'arrondissement de la À Rio de Janeiro. Particuliers bénévoles ont répondu quatre questionnaires étant eux: IPAQ version courte (le questionnaire internationale de l'activité physique); NAHAS évaluation de la visibilité de la vie, WHOOLD qualité de la vie pour les personnes âgées et un questionnaire PILOTE. Résultats: Corréler les questionnaires, il a été constaté que l'activité physique en question aussi bien dans IPAQ, NAHAS, WHOOLD et PILOTE faut que ce soit un degré satisfaisant sur le niveau d'activité physique entrepris par les hauts étudié, et la question n'est pas de relations ou de la participation sociale Aussi un moyen satisfaisant de façon significative entre NAHAS et WHOOLD. Conclusion: A la fin de l'étude, on peut observer que la pratique constante de l'année, contre une résistance présenté un résultat très important en particulier dans les moteurs respectivement, et dans d'autres aspects étudiés pour l'amélioration de la qualité de vie des personnes âgées. Ces résultats devraient être pris en considération par les professionnels qui travaillent ou vont travailler avec la prescription d'exercices de personnes du troisième âge, car elle démontre l'existence d'une capacité d'accomplir les activités.

MOTS-CLES: Personnes âgées. Qualité de la vie. Style de vie.

BENEFICIOS DE LA RESISTENCIA CONTRA LA FORMACIÓN RELATIVAS A LA TERCERA EDAD

RESUMEN:

En la actualidad en el Brasil, según el IBGE (2006), las personas de edad representan alrededor del 9% de la población, un total de 17 millones de personas de más de 60 años, y las perspectivas de la ONU en los próximos 20 años, es que este porcentaje aumenta al 16%, lo que está más allá de los brasileños viven más tiempo, tienen más personas mayores en la población. En la vejez, la dificultad de las tareas es evidente, las distancias son "más largo", las escaleras son más difíciles de escalar, las calles son más peligrosas de cruzar, "el mundo se convierte en una amenaza para los ancianos." El ejercicio es una de las más eficaces discursos sobre la mejora de la calidad de vida de las personas de edad, por lo tanto, ayuda en el control de los cambios por el proceso de envejecimiento, la promoción de la autonomía y la independencia en las actividades de la vida diaria. Objetivo: Evaluar los efectos de la práctica de la actividad física (resistencia contra la formación) en la salud de las personas de edad. Metodología: A través de método descriptivo, utilizando una metodología de investigación. La muestra estuvo integrada por 40 personas mayores de ambos sexos, con 20 hombres y 20 mujeres en el grupo de edad entre 60 a 80 años practicantes de los ejercicios contra la resistencia (de musculación), y por lo menos 12 meses en las academias ubicado en el Sur del Municipio de la Río de Janeiro. Los individuos voluntarios respondieron cuatro cuestionarios que se les: IPAQ versión corta (cuestionario internacional de actividad física); NAHAS evaluación del perfil del estilo de vida, WHOOLD calidad de vida de las personas de edad y un cuestionario PILOTO. Resultados: Para la equivalencia de los cuestionarios, se encontró que la actividad física de que se trate, tanto en IPAQ, NAHAS, WHOOLD y PILOTO Tiene que ser un grado satisfactorio en el nivel de actividad física realizada por altos estudiados, y la cuestión no es la relación o la participación social También un promedio significativamente entre NAHAS y WHOOLD. Conclusión: Al final del estudio, se puede observar que la constante práctica de la resistencia contra el año presentó un resultado muy importante sobre todo de motor, respectivamente, y en otros aspectos estudiados para el mejoramiento de la calidad de vida de las personas mayores. Estos resultados deben ser tomadas en consideración por los profesionales que trabajan o trabajarán con la prescripción de ejercicios en las personas de la tercera edad, como lo demuestra la existencia de una capacidad para realizar actividades.

PALABRAS CLAVE: Ancianos. Calidad de vida. Estilo de Vida.

BENEFÍCIOS DO TREINAMENTO CONTRA RESISTÊNCIA RELACIONADO À TERCEIRA IDADE

RESUMO:

Atualmente no Brasil, segundo o IBGE (2006), os idosos representam cerca de 9% da população, totalizando 17 milhões de pessoas acima dos 60 anos, e as perspectivas da ONU nos próximos 20 anos, é que essa porcentagem aumente para 16%, ou seja, além do brasileiro viver por mais tempo, teremos mais idosos na população. Na velhice, a dificuldade de realizar tarefas fica evidente, as distâncias ficam "mais longas", as escadas ficam mais difíceis de subir, as ruas são mais perigosas de atravessar, "o mundo se torna uma ameaça para o idoso". O exercício físico é uma das intervenções mais eficientes quanto à melhora da qualidade de vida do idoso, pois auxilia no controle das mudanças ocorridas pelo processo de envelhecimento, promovendo independência e autonomia nas atividades do cotidiano. Objetivo: Avaliar os efeitos da prática da atividade física (treinamento contra resistência) na saúde do idoso. Metodologia: Mediante método descritivo utilizando uma metodologia de inquérito. A amostra foi composta por 40 idosos de ambos os gêneros, sendo 20 homens e 20 mulheres na faixa etária compreendida entre 60 a 80 anos praticantes de exercícios contra resistência (musculação), à no mínimo 12 meses, em Academias localizadas na Zona Sul do Município do Rio de Janeiro. Os indivíduos voluntários responderam quatro questionários sendo eles: IPAQ versão curta (questionário internacional de atividade física); NAHAS avaliação do perfil do estilo de vida, WHOOLD qualidade de vida para idosos e um questionário PILOTO. Resultados: Ao correlacionar os questionários, verificou-se que no quesito atividade física tanto no IPAQ, NAHAS, WHOOLD e PILOTO obtiveram-se um grau satisfatório em relação ao nível de atividade física realizado pelos idosos estudados, e no quesito relacionamento ou participação social houve também uma média significativamente satisfatória entre NAHAS e WHOOLD. Conclusão: Ao final do estudo, pode-se observar que a constante prática do exercício contra resistência apresentou um resultado bastante significativo principalmente no aspecto motor e respectivamente nos outros aspectos estudados para a melhoria da qualidade de vida dos idosos. Estes resultados deveriam ser levados em consideração pelos profissionais que trabalham ou que irão trabalhar com a prescrição de exercícios em indivíduos da terceira idade, uma vez que demonstra a existência de uma capacidade para executar atividades.

PALAVRAS-CHAVES: Idoso. Qualidade de vida. Estilo de vida.