

**183 - THE DEVELOPMENT OF FLEXIBILITY THROUGH OF LOCATED GYMNASTICS AND AERÓBICA**

ROSIMERY RAMOS CHRISOSTEMO  
PERSON WHO ORIENTATES: CEZAR GRONTOWSKI RIBEIRO  
UNIUV - PHYSICAL EDUCATION

**INTRODUCTION**

The importance of practical of the physical activity it is proven human being, but also, opposing, the consequences are known that its lack produces. With this project, one expects to show to the people who through the aeróbica and located gymnastics are possible to improve in great amount the flexibility of the women of 20 the 40 years, without forgetting that this type of activity helps in the improvement also of the auto-image and auto-esteem. Consequently, these women will have a more healthful life and with more quality. As it detaches Skinner well (1991), the health evaluations, where if it can cite, for example, flexibility, force and muscular resistance, as well as the information on necessities, objectives and interests of each individual, are extremely useful in what it says respect to the knowledge of the benefits and risks of the exercises, as well as the motivation to initiate or to continue with the activities. One of the main objectives to be despertados must be the pleasure, that is promoted through the understanding of the goals, interests and individual questions of necessity. As Sabá explains (2002) a factor that attracts the people for this type of activity is the style of current life: as the sedentarismo became a characteristic of the great majority of the population, since the advance of the technological resources, mainly, brought a degree of exacerbado comodismo to the life form human being, this situation of comfort and inactivity seems to play an important role in the increase of the prevalence of obesidade in diverse countries of the world. Of this form, it is necessary that if it prioritizes practical the regular one of exercises, but if does not have to forget that, not having an adequate control of the amount of ingested calories, the physical activity separately will tend to be inefficacious. The gymnastics also assists in the emagrecimento, being that one of the main benefits in this direction is the preservation of the muscular mass, that in individuals that are inactive, is diminished with the emagrecimento. When if it reduces the muscular mass, the person starts to have a basal metabolic expense lower e acquires with this a bigger trend to recoup the lost weight (COAST, 1998). The professionals in health recommend that the individual at least practises 30 minutes of physical activity in moderate intensity, at least three times in the week, and, if possible, in every day of the week (COAST, 1998; MCARDLE and KATCH, 1992). Inside of the gymnastics, the flexionamento capacity is extremely important, therefore the biggest amplitude of the movements brings obtains benefits in the execution in such a way, as in the prevention of injuries. Many concepts are presented in the bibliography to define flexibility. Barrow and McGee (2000, P. 23) define flexibility as "the variation of movements, in a joint". To obtain excellent flexibility allows to greater fluidity and amplitude of the movements during the accomplishment of physical activities, what it improves the capacity to prevent fabric injuries, muscular or ligamentosas injuries. In the preschool age the locomotive system is characterized for its great elasticity. It is the only factor that presents apogee in the ticket of infancy for the adolescence, losing itself later gradually with the age. The factor flexibility does not have global character, with equal values in all the joints of the body, its development can be obtained and to be situated selectively in each specific joint. Flexibility was defined by Alter (1999, P. 3) as the responsible physical quality for the "... amplitude of available movement in a joint or set of joints." This definition could be complemented and be enunciated as: "Responsible physical Quality for the voluntary performance of a movement of maximum angular amplitude, for a joint or set of joints, inside of the morphologic limits, without the risk to provoke injury" (DANTAS, 1995, P. 33). To speak in flexibility are, therefore, if to relate to the biggest arcs of possible movements in the involved joints. As the practical one of the physical activity, in special in the aeróbica and located gymnastics, it demands the complete use of the arcs to articulate specifically involved in the carried through gestures, is very difficult, if not impossible, a desirable performance without if making use of a good level of flexibility in the pledged muscular segments. The more high it will be the performance requirement, more attention must be given to flexibility. It is standed out that this does not mean to reach the possible maximum of mobility. Flexibility, in contrast to all the other physical qualities, is not better how much bigger it will be. An excellent level of flexibility for each sport and each person exists, in function of the requirements that the practical one will exert on the locomotive device and the structure of its components (ligaments, joints, muscles and other involved structures). A level of flexibility above of the desired one, beyond not causing improvement of the performance nor reduction of the risk of muscular distensão, will propitiate increase of the possibility of luxações (DANTAS, 1995, P. 51; KRIVICKAS & FEINBERG, 1996 and TWELLAAR, VERSTAPPEN, HUSON & VANMECHELEN, 1997). The physical activities that they search to improve the performance if base on the Scientific Principles of the Porting Training (DANTAS, 1995, P. 37-54). With flexibility it could not be different. The text of the preceding paragraphs only detaches the necessity to be taken in account the rules of two of the cited Principles: - Biological Individuality - Especificidade To work flexibility, for example, of the athlete of high income, aiming at to get the maximum of results with the minimum of risks, a sufficiently ample knowledge of the three involved factors will be necessary: the biological characteristics of the athlete, the specific requirements of the sport and the physiological and metodológicos beddings of flexibility. Beyond all the displayed one, if it cannot forget that the practical one of the physical activity assists in the improvement of the mood, alliviates estresse it, beyond the diverse benefits to the human organism. With this, it is essential that works of this nature are carried through, since they allow to the researchers a professional growth and adaptation to the research process, beyond serving as a referencial to strengthen the importance that the physical activity in a general way possesss it human being.

**OBJECTIVES**

To verify the improvement of the gotten indices of flexibility with the work of aeróbica and located gymnastics; - To compare the results of the tests effected with the active and physically sedentary women; - To correlate the data with proposals of improvement of the health and quality of life of the practitioners.

**MATERIALS AND METHODS**

Sample: 26 women had been analyzed, with age between 20 and 40 years of age, being 13 practitioners (Active Group) of physical activity and 13 not practicing ones (Sedentary Group). Instrument of Research: fleximetro was used, to analyze the degree of flexibility of knees and shoulders. Type of Research: The research is quantitative, being used the comparative method and test T of Student for analysis of the data.

**RESULTS**

The results gotten to the end of the work had been the following ones: Flexão of the Right Knee Sedentary group: it did not have significant modifications. Active group: the work presented degree of significance of 99%. Flexão of the Left Knee Sedentary group: it did not have significant modifications. Active group: the work presented degree of significance of 99%. Flexão of the Right Shoulder Sedentary group: it did not have significant modifications. Active group: the work presented degree of significance of 99%. Flexão of the Left Shoulder Sedentary group: it did not have significant modifications. Active group: the work presented degree of

significance of 99%. Extension of the Right Shoulder Sedentary group: it did not have significant modifications. Active group: the work presented degree of significance of 99%. Extension of the Left Shoulder Sedentary group: it did not have significant modifications. Active group: the work presented degree of significance of 99%.

### CONCLUSIONS

The directed physical activity for women must be emphasized in the searched etária band, in order to increase practical regular - the practical one in the days of week is placed here as - therefore during the week end the people tends to be more active, in what it says respect to walk, to take a walk, among others elements that can be considered as possessing of one determined degree of physical activity, as the walked ones, races, dances and esportivos games. In this direction, the practical incentive to the daily one will have as possibility to acquire benefits related to the health, as much in short, as the medium and long run. The work ratifies through the gotten significance that is possible through lessons of gymnastics aeróbica and located to develop a bigger degree of flexibility in women of 20 the 40 years, thus improving its capacity to execute the most varied tasks, as well as being benefited with the lesser possibility of incidence of injuries. Beyond everything this, must be detached still the explanation of DANTAS here (1995) where places that the regular physical activity has as effect the substantial reduction of the possibility of death for cardiac illness, also diminishing the risk of infarto, some types of cancer, hipertensão, diabetes and high pressure. She is also important allied in the aid of the control of the corporal weight and contributes so that let us have healthy joints and muscular mass. As for the quality of life, the physical activity, in the case of this work the located gymnastics and the aeróbica, assist in the reduction of pain in artrite cases, and are strong allies in the combat to the anxiety and depression. Therefore, it is important to understand that, as they show the results gotten in this research, the quality of life of the people is related to an active style of life, where the physical activity must be integrant and primordial part, having the individual conscience of the necessity of practical its. It still fits to stand out that the search for a qualified professional becomes necessary, since the execution of programs without responsible accompaniment, can so be or more harmful than the inactivity, to the step that a program of correct work will be, without no doubt, power plant and disposal for the daily activities, beyond being a pleasure source, also improving auto-esteem and mood of the practitioners.

### BIBLIOGRAPHY

ALTER, M.J. Science of Flexibility. Translation: SILVA, Maria of the Favour of. 2ª ed. Porto Alegre: Artmed, 1999. BARROW, H.M. and MCGEE, R. Measured and Evaluation in Physical Education and Sports. São Paulo: Manole, 2000. COAST, M.G. Located Gymnastics. 2ª ed. Rio De Janeiro: Sprint, 1998. DANTAS, E.H.M. Flexibility, allonge and flexionamento. 3ª ed. Rio De Janeiro: Shape, 1995. KRIVICKAS, L.S. and FEINBERG, J.H. Lower-extremity injuries in college athletes - relation between ligamentous laxity and lower-extremity muscle tightness. Archives of Physical Medicine and Rehabilitation. Philadelphia. v. 77, i. 11, P. 1139-1143, 1996. MCARDLE, W.D., KATCH, F.I., KATCH, V.L. Physiology of the exercise: energy, nutrition and human performance. Rio De Janeiro: Guanabara Koogan, 1992. SABÁ, F. Tack to the practical one of the physical exercise in academies. São Paulo: Manole, 2002. SKINNER, J.S. Test of effort and lapsing of exercises. Rio De Janeiro: Revinter, 1991. TWELLAAR, M.; VERSTAPPEN, F.T.J.; HUSON. and the VANMECHELEN, W. Physical characteristics risk-factors will be sport injuries - to 4-year prospective-study. International Journal of Sports Medicine. Stuttgart, v.18, i. 1, P. 66-71, 1997.

### THE DEVELOPMENT OF FLEXIBILITY THROUGH OF LOCATED GYMNASTICS AND AERÓBICA

#### SUMMARY

The physical activity acquired in the last few decades, a degree of extreme importance as for the health human being. The current research in this area shows clearly that good part of the occurrence of illnesses is also caused by the physical inactivity. However, the human being is each more conscientious time on the cares necessary to get one better quality of life, and that this includes the movement corporal, that is, this conscience is changing behaviors and styles of life. In this direction, the aeróbica gymnastics and the located one had conquered an important space today, being comprovadamente activities that assist in the prevention and diverse recovery of males related to the health human being. The research had for objective to analyze the importance of the aeróbica and located gymnastics in the improvement of the flexibility of women of 20 the 40 years. The collection of data if gave through the evaluation of flexibility, being analyzed the segments knees and shoulders. 26 women, being divided in two groups with 13 participants each had been analyzed, being Active a called group (practically of physical activity) and another Sedentary one (not practicing). This was used to verify the existing differences between the groups. The analysis statistics of the data was through Test T of Student. The results gotten with the Sedentary group suggest that it did not have significant modifications in the analyzed questions, whereas the Active group presented 99% of effectiveness as for the improvement of the flexibility of the analyzed variants, in the case flexão and extension of shoulders and flexão of knees. This strengthens the idea of that the work of aeróbica and located gymnastics assists in the development of flexibility, improving the capacity to articulate, as well as preventing possible injuries. Word-key: Flexibility, aeróbica and located gymnastics, knees, shoulders.

### O DESENVOLVIMENTO DA FLEXIBILIDADE ATRAVÉS DA GINÁSTICA AERÓBICA E LOCALIZADA

#### RESUMO

A atividade física adquiriu nas últimas décadas, um grau de importância extrema no que se refere à saúde humana. As pesquisas atuais nesta área mostram claramente que boa parte da ocorrência de doenças é causada também pela inatividade física. Porém, o ser humano está cada vez mais consciente sobre os cuidados necessários para se obter uma melhor qualidade de vida, e que isso inclui a movimentação corporal, ou seja, essa consciência está mudando comportamentos e estilos de vida. Nesse sentido, a ginástica aeróbica e a localizada conquistaram um importante espaço, sendo hoje comprovadamente atividades que auxiliam na prevenção e recuperação de diversos males relacionados à saúde humana. A pesquisa teve por objetivo analisar a importância da ginástica aeróbica e localizada na melhoria da flexibilidade de mulheres de 20 a 40 anos. A coleta de dados se deu através da avaliação da flexibilidade, sendo analisados os segmentos joelhos e ombros. Foram analisadas 26 mulheres, sendo divididas em dois grupos com 13 participantes cada, sendo um grupo denominado Ativo (praticamente de atividade física) e outro Sedentário (não praticante). Isto foi utilizado para verificar as diferenças existentes entre os grupos. A análise estatística dos dados foi através do Teste T de Student. Os resultados obtidos com o grupo Sedentário sugerem que não houve modificações significativas nos quesitos analisados, enquanto que o grupo Ativo apresentou 99% de eficácia no que se refere à melhoria da flexibilidade das variantes analisadas, no caso flexão e extensão de ombros e flexão de joelhos. Isso reforça a idéia de que o trabalho de ginástica aeróbica e localizada auxilia no desenvolvimento da flexibilidade, melhorando a capacidade articular, bem como prevenindo possíveis lesões.

**Palavras-chave:** Flexibilidade, ginástica aeróbica e localizada, joelhos, ombros.