# 153 - PHYSICAL ACTIVITY AND ITS RELATION TO THE LEVEL OF PHYSICAL FITNESS OF STUDENTS OF THE OFFICE OF FEDERAL ALAGOAS - IFAL 

TÂMINEZ DE AZEVEDO FARIAS ${ }^{1}$ CLISIVALDO DE OLIVEIRA OMENA ${ }^{2}$ CASSIO HARTMANN ${ }^{3}$

## ARNALDO TENÓRIO DA CUNHA JUNIOR ${ }^{4}$

 JOSÉ ACIOLY DE CARVALHO1 - INSTITUTO BATISTA DE ENSINO SUPERIOR DE ALAGOAS - IBESA, MACEIÓ-ALAGOAS 1,2 - DOCENTE DO INSTITUTO FEDERAL DE ALAGOAS - CAMPUS MACEIÓ/ AL - BRASIL. 1, 3 - PROGRAMA EURO-AMERICANO DE PÓS-GRADUAÇÃO STRICTO SENSU EM SAÚDE - PEDAGOGIA DO ESPORTE E MEDICINA DO ESPORTE - UNIVERSIDADE CATÓLICA NUESTRA SEÑORA DE LA ASUNCIÓN - UC 4 - DOCENTE DA UNIVERSIDADE FEDERAL DE ALAGOAS - CAMPUS ARAPIRACA/AL - BRASIL. taminez@hotmail.com

## INTRODUCTION

Exercise has always been present in the daily life of man from primitive times, where prehistoric man to ensure their survival used the shooting, swimming, fishing, planting and harvesting, that is was an extremely active physically. Now what we today call the gym, school physical activity in the form of games and dances arose in Europe in the early nineteenth century. From there, there are several methods of exercise, and in the contemporary world human motion passes impresidível be in maintaining good health (RAMOS, 1982; BREGOLATO, 2002; dalli, 2007). Parallel to these developments, you can also see that this practice of physical activity has decreased due to increasing life easier because of the comfort and modernity. Access to new technologies is making the twentieth century man less active in relation to seniority. Current society is less and less exercise, which develops an indulgence and sedentary people with this inactivity comes to hypokinetic diseases, and therefore contributes to the onset of various diseases caused by physical inactivity. Several studies in children and adolescents have shown $\urcorner$ of the benefit of physical activity in stimulating growth and development during adolescence. The practice of appropriate physical activity affects the heart, tones muscles, helps maintain weight, promotes bone health and provides mental well-being and social integration.

Recent studies have pointed increasingly, children and adolescents are less physically fit (CUNHA JUNIOR, 2004; GUEDES. 2003). Thus, programs aimed at maintaining and improving physical fitness should be offered, in particular, in-school adolescents through school physical education. Tassitano (2007) is emphatic in his study when stating that the benefits of physical activity to health and quality of life of people of all ages are well documented in scientific literature.

It is understood by any body movement physical activity energy expenditure above resting levels. Included are activities of daily living (bathing, dressing), work activities (walking, lifting and carrying objects) and leisure (exercising, playing sports, dancing, etc.), (NAHAS, 2001 ). Nieman (1999), says that the amount of exercise necessary to decrease the risk of heart disease is 30 minutes of moderate-intensity physical activity per day is enough, with greater reduction of risk when they involve larger amounts of more vigorous exercise. It has been proven scientifically that physically active people have a better quality of life, have greater longevity and lower risk for developing cardiovascular and degenerative diseases. Thus, as explained above, the objective of this study was to investigate the indicators of health-related physical fitness of schoolchildren IFAL, and correlate these data with the level of physical activity.

## METHODOLOGY

Was used as a research site, the schoolchildren of the 1 and 2 of high school courses of technical training at the Federal Institute of Alagoas - IFAL campus Maceió, registered in 2010, of both genders, aged 14 to 17 years and participating in physical education classes.

The sample consisted of a group of 83 schoolchildren IFAL enrolled and participating in the physical education classes, of both genders, aged 14-18 years, of which 42 were males and 41 of the same sex female which features a balance of assessed for each sex. Data regarding the levels of habitual physical activity (carrying out household tasks, performance of occupation, transportation, school activities, leisure and free time) were obtained from the Questionnaire of Habitual Physical Activity - HPAQ translated and modified by M. V. Nahas - NuPAF / UFSC for educational use. Regarding the indicator of physical fitness test used the 12-minutes Cooper (1968) which consists of the individual, from a sign, drive fairly constant, as far as possible within 12 minutes timed (McArdle 2003, Fernandes Filho 2003, Novaes 1998). The assessments, measurements and tests were all performed on the premises of the institute-IFAL Federal de Alagoas, Maceio campus.

## PROCEDURE

The procedure initiated by a request to allow use in the study, the dependences of the Instituto Federal de Alagoas IFAL then the students who are within the inclusion criteria were informed about the study purpose, procedures of research, beyond the presentation of the term of free consent which was signed by older students or parents / guardians if a minor. To assess the level of physical activity applied the Habitual Physical Activity Questionnaire (HPAQ). This instrument classifies individuals into four levels of physical activity (inactive, moderately active, active and very active), considering an arbitrary sum from the positive responses related to physical activity habits in daily occupations and leisure activities. This version of the instrument was practical and reliable among adolescents and college students (NAHAS, 2003). For this evaluation the students were gathered in groups of five subjects in a classroom. Study participants received the questionnaire with instructions and recommendations for its completion, no time limit was given for its completion and any doubts raised by the investigation were promptly cleared by the professional in data collection. When filling out the questionnaire the students did not communicate with each other.

The level of physical fitness was evaluated using the Cooper test, performed at the athletics track IFAL 300m from where the students were told beforehand that, based on a signal, go through fairly constant, as far as possible within 12 minutes timed. At the end of this time, warned by another sign, the person must stop and stay where you are until you make note of your brand. Put down the meters covered by the individual during the stated time. This test proposed by Cooper classifies the individual, depending on the age and sex in Very Weak, Weak, Medium, Good and Very Good

## RESULTS

In referring to the level of Habitual Physical Activity - HPA, all 83 schoolchildren, according to HPAQ, the results showed
that the majority, $42 \%$ of the assessed present themselves active, while $13 \%$ are rated as Very assets, $29 \%$ Moderately Active and finally $16 \%$ are inactive. When divided by gender, we find the following values: in males $22 \%$ are very active, $37 \%$ assets, $22 \%$ moderately active and only $19 \%$ Inactive. In the group of girls realize that $47 \%$ are active, while only $5 \%$ are very active, with $36 \%$ $12 \%$ Moderately Active and Inactive. It can be seen in the relationship between boys and girls that there is a slightly larger proportion of students active and very active male. What is reflected even in the practices carried out during physical education classes.


Fig. 1 Graph AFH
In the evaluation of aerobic capacity evaluated by test of 12 minutes Cooper. The results showed as regards the level of physical activity which, at most, $42 \%$ of the assessed present themselves active, while $13 \%$ are rated as Very Active Moderately Active $29 \%$ and finally $16 \%$ are inactive. In relation to aerobic capacity, it was observed that the vast majority are classified as Very Bad with $65 \%$ in aerobic physical activity level assessed by the test proposed by Cooper, where we also note that $19 \%$ is Poor, 10 $\%$ rated as average and only 5\% 1\% Good to Very Good These results are troubling, considering that the levels of aerobic capacity are too low. Studies such as Martin (2000), Nieman (1999), Dantas (1998), Matsudo et al (2002) warn that low levels of physical activity increased risk for developing many diseases


Fig. 2 Graph of the Cooper test

## DISCUSSION

The study results indicate that there are differences, but not so great in the values found when comparing the male students and female.

As regards the level of HPA, we found that schoolchildren are classified in their majority, $55 \%$ between active and very active. Data that makes us stand out as positive, since the knowledge of the benefits of having a regular habit of physical activity daily, which, in addition to feeling good, prevent chronic diseases such as hypertension, diabetes, obesity, in addition to improving the balance, more strength, better psychomotor coordination, flexibility, endurance and cardio-respiratory fitness, as is clear Lopes (2004) in research done recently. Remember that the school for many children, constitutes the only opportunity to access the practices of physical activity (MARQUEZ, 1999).

By analyzing the values of the level of aerobic capacity in the Cooper test, we can observe that both the male subjects as female figures below show, especially when compared with results obtained previously in HPAQ. The state of physical fitness found in the 12-minute test by the school IFAL showed us that the vast majority being classified as Very Low, representing $65 \%$ of the sample. Thus, the probability of occurrence of cardiovascular and other diseases associated with physical inactivity is higher among these individuals.

## CONCLUSION

However, when considering associations between physical activity and indicators of physical fitness, aerobic capacity, there was a negligible association. Since the data collected in the classified HPAQ assessed as physically active, information that is not consistent with the outcome of cardiorespiratory fitness, the results point where most school very weak physically. Thus, the study's findings leads us to conclude that teenagers are usually not necessarily ensure that assets can be physically fit. Other factors, not just the habits of physical activity may influence the components of physical fitness and health.

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TASSITANO, R. M. BEZERRA, J. TENÓRIO, M. C. M. COLLARS, V. BARROS, M. V. G.
CASSIO HARTMANN
RUAARTUR BULHÕES N ${ }^{\circ} 244$ APTO 506
BAIRRO: MANGABEIRAS
CEP: 57037-450
MACEIÓ/ALAGOAS

## PHYSICAL ACTIVITY AND ITS RELATION TO THE LEVEL OF PHYSICAL FITNESS OF STUDENTS OF THE OFFICE OF FEDERALALAGOAS-IFAL <br> ABSCTRACT

The aim of the study was a survey of health indicators, such as habits and physical activity correlate with the level of fitness, aerobic endurance, the students of the Instituto Federal de Alagoas - IFAL. The sample used here consisted of 83 students IFAL, 42 girls and 41 boys enrolled who attend physical education classes, aged between 14 and 17 years. For data collection, we used: the questionnaire of habitual physical activity (HPAQ) test and the 12 minutes Cooper. The results showed as regards the level of physical activity which, at most, $42 \%$ of the assessed present themselves active, while $13 \%$ are rated as Very Active Moderately Active $29 \%$ and finally $16 \%$ are inactive. In relation to aerobic capacity, it was observed that the vast majority are classified as very weak level of aerobic physical activity assessed at $65 \%$, where we also note that $19 \%$ is Poor, $10 \%$ classified as medium $5 \%$ Good and only $1 \%$ as "Very Good" The survey results show that among the students assessed, the fact that they are usually active does not necessarily guarantee that they can be physically fit.

KEYWORDS: Habitual Physical Activity, Inactivity, Physical Fitness.

## L'ACTIVITÉ PHYSIQUE ET SES RELATIONS AU NIVEAU DE CONDITION PHYSIQUE DES ÉTUDIANTS DE L'OFFICE FÉDÉRAL DEALAGOAS-IFAL <br> SOMMAIRE

L'objectif de l'étude était une enquête auprès des indicateurs de santé, tels que les habitudes et l'activité physique en corrélation avec le niveau de condition physique, endurance aérobie, les étudiants de I'Instituto Federal de Alagoas - IFAL. L'échantillon utilisé ici se composait de 83 étudiants IFAL, 42 filles et 41 garçons inscrits qui fréquentent les cours d'éducation physique, âgés entre 14 et 17 ans. Pour la collecte des données, nous avons utilisé: le questionnaire de l'activité physique habituelle (HPAQ) et le test de 12 minutes Cooper. Les résultats ont montré ce qui concerne le niveau d'activité physique qui, tout au plus, $42 \%$ de l'évaluation se présentent active, tandis que $13 \%$ sont classés comme très modérément actives Active $29 \%$ et enfin $16 \%$ sont inactifs. En ce qui concerne la capacité aérobie, il a été observé que la grande majorité sont classés comme très faible niveau d'activité physique aérobie évaluée à $65 \%$, où nous notons aussi que $19 \%$ est pauvre, $10 \%$ sont considérés comme le milieu 5 Bonne\% et seulement $1 \%$ comme «très bon» Les résultats du sondage montrent que parmi les élèves évalués, le fait qu'ils sont généralement actifs ne garantit pas nécessairement qu'elles puissent être en bonne forme physique.

MOTS-CLÉS: activité physique habituelle, à l'inactivité, de remise en forme physique.

## LA ACTIVIDAD FÍSICA Y SU RELACIÓN CON EL NIVEL DE APTITUD FÍSICA DE LOS ESTUDIANTES DE LA OFICINAFEDERAL DE ALAGOAS - IFAL <br> RESUMEN

El objetivo del estudio fue una encuesta de indicadores de salud, tales como los hábitos y la actividad física se correlacionan con el nivel de condición física, resistencia aeróbica, los estudiantes del Instituto Federal de Alagoas - IFAL. La muestra utilizada consistió aquí de 83 estudiantes IFAL, 42 niñas y niños 41 inscritos que asistan a clases de educación física, con edades comprendidas entre 14 y 17 años. Para la recolección de datos se utilizó: el cuestionario de actividad física habitual (HPAQ) de prueba y los 12 minutos Cooper. Los resultados mostraron que en cuanto al nivel de actividad física que, a lo sumo, el
$42 \%$ de los evaluados se presentan activa, mientras que el $13 \%$ son clasificados como Muy activo Moderadamente activo el 29\% y $16 \%$, finalmente se inactivos. En relación con la capacidad aeróbica, se observó que la gran mayoría están clasificadas como nivel muy débil de actividad física aeróbica evaluada en $65 \%$, donde también tomamos nota de que el $19 \%$ es pobre, el $10 \%$ clasificado como medio de $5 \%$ bueno y sólo el $1 \%$ como "Muy Buena" Los resultados de la encuesta muestran que entre los estudiantes evaluados, el hecho de que por lo general son activos no garantiza necesariamente que puedan estar físicamente en forma.

PALABRAS CLAVE: La actividad física habitual, inactividad, el estado físico.
ATIVIDADE FISICA HABITUAL E SUA RELAÇÃO COM O NIVEL DE APTIDÃO FÍSICA DOS ALUNOS DO INSTITUTO FEDERALDEALAGOAS - IFAL RESUMO
O objetivo do estudo foi realizar um levantamento de indicadores de saúde, como hábitos de atividade física habitual e relacionar com o nível de aptidão física, resistência aeróbia, nos alunos do Instituto Federal de Alagoas - IFAL. A amostra utilizada neste foi constituída por 83 alunos do IFAL, sendo 42 meninas e 41 meninos matriculados que frequentam as aulas de educação física, com idades compreendidas entre os 14 e 17 anos. Para coleta de dados, utilizou-se: o questionário de atividade física habitual (QAFH) e o teste dos 12 minutos proposto por Cooper. Os resultados evidenciaram no que se diz respeito ao nível de atividade física habitual, que, a maioria, $42 \%$ dos avaliados apresenta-se ativos, enquanto $13 \%$ encontram-se pontuados como Muito Ativos 29\% Moderadamente Ativos e por fim 16\% se encontram inativos. Já em relação à capacidade aeróbia, pôde-se observar que a grande maioria encontra-se classificadas como Muito Fraco no nível de atividade física aeróbia avaliada com $65 \%$, onde notamos também que 19\% encontram-se Fraco, 10\% classificado como médio 5\% Bom e apenas 1\% como Muito Bom. Os resultados do estudo revelam que dentre os alunos avaliados, o fato de eles serem habitualmente ativos não garante necessariamente que possam ser aptos fisicamente.

PALAVRAS CHAVES: Atividade Física Habitual, Inatividade, Aptidão Física.

