

01 - ANALYSIS OF THE CORPORAL COMPOSITION; INDEX OF CORPORAL MASS (IMC); RCQ; AND HEART FREQUENCY OF INDIVIDUALS BOTH PRACTICING SEXES OF MUSCULAR ACTIVITY OF CLUBE S.E.R.A'S ACADEMY. OF THE MUNICIPAL DISTRICT OF ALTÔNIA - PR

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INTRODUCTION

The muscular activity is a physical activity that introduces yours practiced diffused globally and it presents objectives as: increase of thin mass; optimization of the muscular force and it gets better of the life quality, besides being important element in the preparation of almost all of the acting athletes.

In agreement with the beginnings of the training of muscular force, the muscular activity or training with weights is one of the most efficient mechanisms in the induction of physiologic answers to the exercise, as well as, adaptations of the corporal composition; adaptations bioenergéticas; endocrine adaptations; adaptations neurais; contractile adaptations. (McARDLE, 1998)

It fits to stand out that, the skeletal muscle is not just a homogeneous group of fibers with metabolic and functional properties similar. Each muscle contains a combination of different types of fibers: of slow contraction - also calls of slow twitch (ST) or tonic fibers, or still fibers of the type I; and of fast contraction - also called fast twitch (FT) or fibers fásicas of the type II, that for his/her time, they become separated in subcategorias of the function (HOWALD apud WEINECK, 1991).

1.1 PHYSIOLOGIC EFFECTS OF THE TRAINING OF FORCE

The basic beginnings of the training related to the improvement of the force date from thousands of years, and the observation of Morpurgo (POWERS, 2000) that the earnings of force was associated to the increase of the size of the muscle.

In what he/she refers to the muscular force, POWERS et al (2000, pg. 247) they affirm that:

The muscular force refers to the maximum force that a muscle or muscular group can generate and it is commonly expressed as a maximum repetition or 1-RM, the maximum load that it can be moved through a movement strip when in good form. And the muscular resistance refers the capacity of accomplishment of repeated contractions against a load submáxima.

The basic beginnings of the training, of the overload and of the specificity they can also be applied here. For instance, the training of high resistance (loads of 2-10 RM) it carts won of muscular force. In contrast, the training of low resistance (loads of 20 RM or more) it carts won in the muscular resistance, with smaller alteration in the force. (POWERS et al, 2000).

WILMORE, J.H. & COSTILL D.L (2001, pg. 627) they affirm that in the training of force:

As his/her force increases, I number him/it of repetitions that you can complete for series will increase. When you reach 15 repetitions for series, you will be ready to progress for the following larger weight. That training technique is denominated progressive resistance exercise.

The training of force and the muscular activity practice cause an increase of the muscular force, as well as, I win of muscular mass and decrease of the percentile of corporal fat, interfering directly in the function of the muscular fibers. (POWERS, 2000). Fibers muscular Type II develop a tension specifies larger (it forces; transverse area) than the fibers Tipo I. however, the increase of any one of them results in force (POWERS et al, 2000).

The fisiculturistas that you/they with sessions of low intensity (high RM) and of great volume they present fibers Type II smaller than the weight lifters that with sessions of high resistance (RM lowers).

Although the fisiculturistas present percentage of fibers of larger slow contraction than the elite weight lifters, subjects exist on if the difference is due to the training or high selection based in a genetic predisposition for the success.

However, fisiculturistas that work with low loads and great training volume demonstrate increase in the tax of capillary for fibers, so much that the capillary density is similar to the one of no-athletes, in spite of the muscular increase.

The programs of training of force of short duration don't alter the capillary density, but the density of the mitocôndrias is reduced in proportion to the hipertrofia degree.

1.2 aging, it forces and training.

Certainly, that presents important implications in the cares of the health in reason to the increase of the number of people classified as senior. POWERS et al (2000, pg. 248) he/she leaves explicit that:

As we aged, the muscular force decreases, with most of the decline happening after the fifty years. The loss of force is associated to the loss of muscular mass due to a decrease of the amount of fibers of the type I and II. Like this, the loss of muscular fibers seems to be related to a neurological alteration at the level of a motoneurônio; everything that affects the motoneurônio affects the fibers to him connected. What is promising, and the progressive training of force for the seniors provokes hipertrofia increases and of the similar muscular force to the observed the youths.

In what he/she refers to the hipertrofia and hiperplasia, during the development human normal, of the birth to the adult life, the size of the muscle increases a lot of times, without alteration of the number of fibers, in other words, a hipertrofia. For that reason, it doesn't surprise that the increase of the muscle associated to the training of force is also due to the hipertrofia of the existent fibers, no the generation of new fibers (hiperplasia). Para the same author, when the training of force produced an increase of 24% of muscular mass, but with an increase of only 11% of the transverse area of the fiber, the scientists suggested that the hiperplasia might have had a paper in that process. (POWERS, 2000)

WILMORE, J.H. & COSTILL D.L (2001, pg. 627) they emphasize that:

The increase of the muscular mass with the growth and the development happens above all for the hipertrofia of the individual muscular fibers, by the increase of their miofilamentos and miofibrilas. The length muscular increase through the sarcômeros addition to increases of the length of the existent sarcômeros.

The fat storage happens for the increase of the size of the existent fatty cells and for the increase of the size of the existent fatty cells and for the increase of his/her amount. Like this, when the fatty cells become full of fat, they indicate the need of creation of new fatty cells. And the force increases as the muscular mass increases with age. The maximum force is usually reached around the 20 years of age for the women and among 20 and 30 years for men. (WILMORE & COSTILL, 2001)

The hormonal alterations that you/they accompany the puberty take to accentuated increases of force in the male adolescents because of the increase of the muscular mass. However, the force intensifies as the muscular mass increases with the age. The earnings of force also depend on the neurological maturation, because the control neuromuscular is limited until the mielinação to be complete, it happens him, in general, when of the sexual maturity.

The muscular force is the maximum amount of force that a muscle or that a muscular group gets to generate. And the muscular potency is the product of the force and speed of a movement. Although two individuals can possess the same force, if one of them to need of less time than the other to move an identical load in the same distance, the first possesses a larger potency.

The muscular resistance is capacity that the muscles present of sustaining repeated muscular actions or a single static action (WILMORE, J.H. & COSTILL D.L 2001, pg. 87).

1.3 BENEFITS OF THE HEALTH RELATED TO THE TRAINING OF FORCE

The volume and the intensity of the training, the rest period between the series and exercises, as well as the selection of exercises, it can influence in the results of a certain study.

The training of force can have an impact on the conditioning cardiorespiratório, mainly about the factors of risks associated to the cardiovascular diseases. With the training of force, the heart frequency in taxes exercise submáximas is usually reduced, with result in the condicionamento cardiorespiratório. The heart can increase of size in reason of the training of force, probably because of the increase of the thickness (hipertrofia).

Some evidences indicate that the training of force favors reductions of the blood pressure of people's rest with blood pressure or bordering blood pressure. The training of force also increases the sensibility to the insulin and the tolerance the glucose. Those two factors are important in the prevention of the diabetes. Besides, the training of force reduces the obesity risk and overweight, as well as, it increases the exempt mass of fat; it reduces the apprentice's fat mass and it increases the metabolic tax of the individual's rest, because the muscle is more metabolic assets. WILMORE, J.H. & COSTILL D L (2001). 627

Certainly that, the training of force favors in the prevention of the osteoporosis and accomplished in group of third age can reduce the bone loss associated to the menopause.

There is to leave explicit, that an exercise session should begin for exercises of heating of low intensity, as well as for exercises calistênicos and of prolongation, in way to prepare the systems cardiovascular, breathing and muscular for them to work more efficiently.

2. OBESITY AND OVERWEIGHT

In what he/she refers the obesity, there is to stand out that the obesity (excess of corporal fat), not of it should simply be faced as an aesthetic problem, on the contrary, it is a serious disturbance of health that reduces the life expectation and his/her threat quality. And presenting as consequence morbosity, hipertensão, dislipidemia, diabetes type 2, disease arterial coronariana, osteo-arthritis, breathing problems and lap cancer.

The term obesity refers to the excessive deposition of fat in the organism.

According to GUEDES et al (2003, pg. 22) it defines obesity and overweight as:

" I increase in the amount widespread or located of fat in relation to the corporal weight, associates to risks for the health. However, for the same author overweight it is " had as excessive increase of the total corporal weight, what can happen in consequences of modifications in just one of their representatives (fat, muscle, bone and water) or his/her group."

It fits to stand out that for specialists of the area, overweight and obesity are terms different, although related.

According to GUYTON (1992), the main cause of the obesity is the excessive ingestion of foods, in other words, larger amounts than the individual gets to consume.

For the World Organization of Health (1998), the obesity is defined as: "excess of corporal fat, being now one of the most serious problems of health publishes". His/her prevalence is growing strongly in you finish them decades, besides in the developing countries, what took the global epidemic.

In what he/she refers to the fat, MCARDLE (1998, pg. 573) he/she affirms that:

The total corporal fat consists of essential fat and the fat of reservation storage. The essential fat is that present in the bone marrow, in the nervous fabric and in the several organs. However, the storage fat is the energy reservation that accumulates in the fabric fatty of bass of the skin.

For the same author, the human body it possesses two types of fat distribution: the) the fat distributed in the abdominal area (obesity type android) and b) fat deposited in the thighs and in the buttocks (obesity type ginóide).

GUEDES et al (2003, pg. 28) he/she affirms that two possible explanations exist for the largest prevalence of the obesity and of the overweight in the countries of North America: "(the) larger proportion of automobiles associated to the I number higher of hours ahead of television, like this, it can suppose significant decrease of the energy demand in relation to the other countries; and (b) differences can exist in the amount and in the quality of the ingestion of foods."

An estimate of the total corporal fat, it is accomplished starting from the mensuração of the subcutaneous fat. Some are accomplished mensurações of cutaneous folds and the obtained values are used in equations for I calculate him/it of the corporal density (POWERS, 2000, pg. 334).

There is to leave explicit that, to be obese is not a problem of health, and also as of aesthetics. He/she fits to emphasize that the benefits of the reduction postural are several as: he/she gets better of the physical appearance, in reason of the aesthetic values of the time; they reduce the blood pressure, the emergence risk or hypertension development proportionally, they reduce levels abnormally high of glucose sanguine associates the diabetes, they control plasmatic concentrations of lipoproteínas and of triglicerídios related to the cardiovascular diseases and they reduce the risk of osteo-artrites (GUEDES, 2003).

There is to leave explicit that, the causes of the excessive mortality associated to the obesity and to the overweight they include: cardiopatia; hypertension; certain cancer types; diabetes and among these other diseases. (WILMORE, J.H. & COSTILL D L 2001, pg. 671).

3. heart frequency

The heart frequency can be measured by the palpação of the radial artery or of the carotid, for the use of a stethoscope on the thoracic wall or for the use of surface electrodes that you/they transmit the sign to an oscilloscope, electrocardiograph or to a monitor that shows the heart frequency directly. In the palpação of the artery carotid, it owes if it takes care for not pressing a lot, once that can reduce FC through the reflex barorreceptor. However, the heart frequency is measured in a period from fifteen to thirty seconds during the exercise in stable level to obtain a reliable estimate of FC. If powder-exercise FC be used as indicator of FC during the exercise, it should be measured for 10 seconds in the first fifteen seconds. After the interruption, because FC loses temper quickly in that period. The counting of the frequency in ten seconds it is multiplied by six to express FC in batimentos/min.. POWERS et al (2000, pg. 272)

For WILMORE, J.H. & COSTILL D L (2001, pg. 696) heart "frequency of rest is heart frequency of rest among 60 to 80 beats for minute and the maximum heart Frequency (FC Máx) the largest value of the attainable heart frequency during a maximum effort until the exhaustion point.

Heart frequency of training (FCT) heart frequency of objective established by use of the equivalent heart frequency to a wanted percentage of the VO₂ máx, for instance, if it be wanted a level of training of 75% of VO₂ Máx, it is calculated 75% of the VO₂ máx, being the equivalent heart frequency to a wanted percentage of the VO₂ máx, being the heart frequency corresponding to that VO₂, selected like FCT. 696

METHODOLOGY

This research is characterized as a traverse experimental study, with quantitative approach that it intends to analyze the composition of corporal of practicing middle age adults of muscular activity.

The convenience sample was constituted of 30 voluntary subjects, of both sexes, being (15 men and 15 women) with age between 30 and 50 years of age, customers of Clube S.E.R.A'S Academy (Sporting Society and Recreational Altoniense) of the municipal district of Altônia - PR, in the year of 2005.

All the participants gave his/her consent in writing for us to participate in the study of the pré-test and powder-test, after they receive all information on the work.

Statistical treatment

The analysis of the data was accomplished through the descriptive statistics (average, standard deviation, standard mistake, values minimum and maximum). Para understanding of the variables and to analyze differences among the corporal composition; percentile of fat and FC rest and effort of the pré-test and powder-test. The "Test was used "t" goes Students for given pareados, together with the obtaining of the averages and standard deviations of the data obtained in the pré-test and powder-test of the study. A level of significância of p was adopted $<0,05$. it was Used for statistical analysis the program Excel, Windows version 2003.

OBJECTIVE

I aim at of the present study was to do a statistical and comparative analysis of the alterations and earnings of the corporal composition (percentile of fat); exempt mass of fat; I weigh ideal, earnings of muscular mass and monitoração of the apprentices' of muscular activity of both sexes heart frequency between 30 and 50 years of age, customers of Clube S.E.R.A'S Academy (Sporting Society and Recreational Altoniense) of the municipal district of Altônia - PR.

Pré-test: March of 2005 and Powder-test: July of 2005

MATERIALS AND METHODS

The used methodology was a field research, with application of a pré it tests and a powders test for future correlations. As instrument was used Plicômetro Scientific Cescorf (precision of 0,1 mm); it stares antropométrica SANNY; it balances electronics CRYSTAL (capacity of 150 kg). AND to verify the heart frequency the monitor of POLAR FC F1 TM it was used.

The sample was constituted of 30 voluntary subjects, individuals both sexes, being (15 men and 15 women) with age between 30 and 50 years of age, customers of Clube S.E.R.A'S Academy (Sporting Society and Recreational Altoniense) of the municipal district of Altônia - PR, in the year of 2005. All participants gave his/her consent in writing for us to participate in the study of the pré-test and powder-test, after they receive all information on the work.

The analysis of the data was accomplished through the descriptive statistics (average, standard deviation, standard mistake, values minimum and maximum). Para understanding of the variables and to analyze differences among the corporal composition; percentile of fat and FC rest and effort of the pré-test and powder-test. The "Test was used "t" goes Students for given pareados, together with the obtaining of the averages and standard deviations of the data obtained in the pré-test and powder-test of the study. A level of significância of p was adopted $<0,05$. it was Used for statistical analysis the program Excel, Windows version 2003.

Analysis and discussion of the data

With base in the results along the four months, they were acompanhados(as) 30 voluntary subjects, individuals both sexes, being (15 men and 15 women) with age among 30 and 50 years of age, muscular activity apprentices. It was observed in the feminine group a percentile one larger of decrease of the corporal composition, in relation to the male group. as well as in the heart frequency. When compared with the results of the own group in the pré-test and with the control in the powder-test ($p < 0,05$). The results of the two groups both practicing sexes of muscular activity were classified according to the pictures to proceed.

Picture 01 - Comparison among variables of the feminine group
Pós Teste (Average dp) Differences of Médias Pré / Pós

	Pré Tests (Average dp)	Pós Tests (Average dp)	Differences of Médias Pré / Pós Tests (P** Tests T de Student) SF
I weigh Corporal (kg)	10,49	10,06	0,13
IMC (kg/m ²)	3,59	3,17	0,01
Relationship Waist Hip	31,24	27,29	0,39
Corporal density (g/ml)	0,01	0,01	0,20
Percentile fat (%)	4,06	3,24	0,15
Absolute fat (kg)	4,47	3,90	0,06
Exempt mass of Fat (kg)	6,52	6,65	0,51
Ideal weight (kg)	8,70	8,77	0,58
I weigh excess (kg)	2,10	2,17	0,65
Weight to Win	2,43	1,87	0,48
Average	7,44	6,71	0,31
Standard deviation	9,98	7,89	0,23
Differences of Averages	73,61	67,12	3,14

Picture 02 - Comparison among variables of the masculine group. muscular activity.

	Pré Tests (Average dp)	Pós Tests (Average dp)	Differences of Médias Pré / Pós Tests (P** Tests T de Student) SM
I weigh Corporal (kg)	13,06	12,09	0,36
IMC (kg/m ²)	4,39	4,20	0,52
Relationship Waist Hip	33,43	18,90	0,30
Corporal density (g/ml)	0,03	0,26	0,38
Percentile fat (%)	3,88	5,69	0,12
Absolute fat (kg)	5,53	6,02	0,20
Exempt mass of Fat (kg)	8,35	8,30	0,84
Ideal weight (kg)	8,77	9,76	0,98
I weigh excess (kg)	5,43	4,83	0,32
Weight to Win	2,58	1,88	0,35
Average	8,54	7,19	0,44
Standard deviation	9,46	5,41	0,28
Differences of Averages	85,43	79,14	4,36

According to the table 02, average / I divert pattern Pré and Pós Teste of the Group male apprentices of muscular activity practicing men of muscular activity. They obtained a difference of averages of the pré / powder-test of 4,36. it Fits to stand out that in the pré-test (average + - dp) 9,46, they put in the powder-test presented (average + - dp) of 5,41.

GRAPH 01. DIFFERENCES OF AVERAGES DOS RESULTED PRÉ-TEST AND POWDER-TEST (P** IT TESTS T OF STUDENT)

With base in the results of the graph 01, Pré Tests pré-test and powder-test / corporal Composition: Corporal density, Percentile Fat, absolute Fat and exempt mass of fat, and as well as IMC (index of corporal mass).

Picture 03 Differences of Averages of the male Group and feminine sex
Pré Tests (Average dp) Pós Teste (Average dp) Differences of Médias Pré / Pós

	Pré Teste (Média dp)	Pós Teste (Média dp)	Diferenças de Médias Pré / Pós Teste (P** Teste T de Student) de FC Cardíaca de Repouso e FC Cardíaca de esforço SM e SF
FC REPOUSO SM	12,02062	11,7169	0,496262
FC ESFORÇO SM	10,98831	9,796987	0,858972
AVERAGE SM	12,02062	10,75694	0,677617
STANDARD DEVIATION SM	0,729955	1,357583	0,256474
FC REPOUSO SF	14,08376	16,26331	0,56241
FC ESFORÇO SF	14,61995	12,02893	0,194904
AVERAGE SF	14,3519	14,14612	0,378657
STANDARD DEVIATION SF	0,3791	2,994156	0,259866

According to the table 03, average / I divert pattern of the heart frequency of rest and of muscular activity apprentices' effort both sexes. They obtained the masculine sex a difference of averages of the pré / powder-test of 0,677617. It fits to stand out that in the pré-test (average + - dp) 0,729955, they put in the powder-test presented (average + - dp) of 1,357583. There is to leave explicit that in the group female average / I divert pattern of the heart frequency of rest and of muscular activity apprentices' effort both sexes. They obtained the masculine sex a difference of averages of the pré / powder-test of 0,259866. He/she fits to stand out that in the pré-test (average + - dp) 0,3791, however in the powder-test they presented (average + - dp) of 2,994156.

Final considerations

With base in the obtained results, the conclusion was arrived that the practicing women of muscular activity after 4 months (powders test) of the first corporal evaluation (pré tests), they reduced the corporal composition: Corporal density, Percentile Fat, absolute Fat and exempt mass of fat, and as well as IMC (index of corporal mass). However, the masculine sex, they presented decrease of the percentile of fat, as well as I increase of the muscular mass. To end, with base in the results of the pré and powder-test that the practicing men of muscular activity presented smaller decrease of the percentile of corporal fat, in relationship the women that obtained a superior result to the male.

There is to emphasize, that in both practicing sexes of muscular activity there were a decrease of the percentile of fat and increase of thin mass; optimization of the muscular force and it gets better of the life quality. As well as, adaptations of the corporal composition; adaptations bioenergéticas; endocrine adaptations; adaptations neurais; contractile adaptations. He/she practices her/it of muscular activity, it interferes in this variable. It is concluded through the collection of data and statistical results that significant differences exist. And as well as, the results obtained in this study, pré-test and powder-test allowed to conclude that women's classification and men exist with overweight and obesity, and besides the with he/she practices her/it of muscular activity, it reduced the percentile of corporal fat and increase of mass thin apprentices both muscular activity sexes.

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ANALYSIS OF THE CORPORAL COMPOSITION; INDEX OF CORPORAL MASS (IMC); RCQ; AND HEART FREQUENCY OF INDIVIDUALS BOTH PRACTICING SEXES OF MUSCULAR ACTIVITY OF CLUBE S.E.R.A'S ACADEMY. OF THE MUNICIPAL DISTRICT OF ALTÔNIA - PR

ABSTRACT: The objective of the present study was to analyze the adult apprentices' of muscular activity of both sexes corporal composition, with age group between 30 and 50 years. The study carcteriza-if I eat a traverse experimental research with quantitative approach. The group convenience amostral was composed by 30 muscular activity apprentices, being 15 women and 15 men, all volunteers (the), in the age group among 30 to 50 years of age; customers of Clube S.E.R.A'S academy (Sporting Society and Recreational Altoniense) of the municipal district of Altônia - PR. For the collection of data the following protocols were used: In the statistical analysis of the work the "Test was used "t" of Students" for given pareados, having been adopted a level of significância of $p < 0,05$. it was Used for statistical analysis the program Excel, Windows version 2003. With base in the obtained results, the conclusion was arrived that the practicing women of muscular activity after 4 months (powders test) of the first corporal evaluation (pré tests), they reduced the following components of the corporal composition: Corporal density, The results obtained in this study, pré-test and powder-test allowed to end that you/they exist women's classification with overweight and obesity, and besides the with he/she practices her/it of muscular activity, it reduced the percentile of corporal fat and and increase of mass thin apprentices both muscular activity sexes.

Percentile fat, absolute Fat and exempt mass of fat, as well as IMC (index of corporal mass). Already the group masculine amostral only presented decrease of the percentile of fat and increase of the muscular mass. It is ended that the practicing men of muscular activity presented smaller decrease of the percentile of corporal fat in relationship the women. In both practicing sexes of muscular activity there were a decrease of the percentile of fat and increase of thin mass; optimization of the muscular force; increase in the exempt mass of fat; increase of the muscular mass and an improvement of the life quality. However in the male group they presented a smaller decrease of the corporal composition, compared the pré-test and powder-test of the same group with the female group. In what he/she refers rest FC and effort, according to the results of the pré-test and powder-test of both groups, they obtained a decrease and alteration in the monitored heart frequency.

Key-Words: Corporal composition, Muscular activity, Percentile of Fat, Thin Mass, Relação Cintura-Quadril; FC Repouso; Effort

ANÁLISE DE LA COMPOSITION CORPORELLE; INDEX DE CAPORAL MASS (IMC); RCQ; ET FRÉQUENCE DU COEUR D'INDIVIDUS LES DEUX SEXES PRATIQUANTS D'ACTIVITÉ MUSCLÉE DE L'ACADÉMIE DE CLUBE S.E.R.A. DU DISTRICT MUNICIPAL D'ALTÔNIA - PR

LE RÉSUMÉ: L'objectif de l'étude présente était analyser les apprentis adultes d'activité musclée des deux sexes composition corporelle, avec tranche d'âge entre 30 et 50 années. Le caractériser de l'étude si je mange une traverse recherche expérimentale avec approche quantitative. L'échantillon de la commodité du groupe a été composé par 30 activité musclée met en apprentissage, en étant 15 femmes et 15 hommes, tous les volontaires (le), dans la tranche d'âge parmi 30 à 50 années d'âge; clients de l'académie de Clube S.E.R.A (Société De sport et Altoniense Destiné aux loisirs) du district municipal d'Altônia - PR. Pour la collection de données les protocoles suivants ont été utilisés: Dans l'analyse statistique du travail la "Épreuve a été utilisée "t" d'Étudiants" pour paires donné, eu été adopté un niveau de significância de $p < 0,05$. il a Été utilisé pour analyse statistique le programme Excel, Windows version 2003. Avec base dans les résultats obtenus, la conclusion est arrivée que les femmes pratiquantes d'activité musclée après 4 mois (épreuve des poudres) de la première évaluation corporelle (le pré teste), ils ont réduit les composants suivants de la composition corporelle: Densité corporelle, Les résultats ont obtenu dans cette étude, pré épreuve et poudre épreuve autorisées à terminer ce you/they existent la classification de femmes avec excès de poids et obésité, et excepté l'avec il/elle l'her/it d'activité musclée pratique, il a réduit le centile de graisse du caporal et et augmentation de de masse mince met en apprentissage les deux sexes de l'activité musclés.

Centile grosse, absolue Graisse et masse exemptée de graisse, aussi bien qu'IMC (index de masse du caporal). Déjà le groupe les amostral masculins ont présenté seulement baisse du centile de graisse et augmentation de la masse musclée. Il est terminé que les hommes pratiquants d'activité musclée ont présenté plus petite baisse du centile de graisse du caporal dans rapport les femmes. Dans les deux sexes pratiquants d'activité musclée il y avait une baisse du centile de graisse et augmentation de masse mince; optimisation de la force musclée; augmentez dans la masse exemptée de graisse; augmentation de la masse musclée et une amélioration de la qualité de la vie. Cependant dans le groupe viril ils ont présenté une plus petite baisse de la composition corporelle, a comparé la pré épreuve et poudre épreuve du même groupe avec le groupe féminin. Dans ce qu'il/elle fait référence FC et effort à reste, d'après les résultats de la pré épreuve et poudre épreuve des deux groupes, ils ont obtenu une baisse et modification dans la fréquence du coeur dirigée.

Les Mots-clef: Composition corporelle, activité Musclée, Centile de Graisse, Masse Mince, Relação Cintura-Quadril;; FC Repouso; Effort

EL ANÁLISIS DE LA COMPOSICIÓN CORPÓREA; EL ÍNDICE DE MASA CORPÓREA (IMC); RCQ; Y FRECUENCIA DEL CORAZÓN DE INDIVIDUOS AMBOS SEXOS PRACTICANDO DE ACTIVIDAD MUSCULAR DE LA ACADEMIA DE CLUBE S.E.R.A. DEL DISTRITO MUNICIPAL DE ALTÔNIA - PR

EL LO ABSTRACTO: El objetivo del estudio presente era analizar los aprendices adultos de actividad muscular de ambos sexos la composición corpórea, con el grupo etario entre 30 y 50 años. El estudio caracteriza-si yo como una investigación experimental atravesado con el acercamiento cuantitativo. El amostral de conveniencia de grupo estaba compuesto por 30 actividad muscular pone de aprendiz, mientras siendo 15 mujeres y 15 hombres, todos los voluntarios (el), en el grupo etario entre 30 a 50 años de edad; clientes de la academia de Clube S.E.R.A (la Sociedad Deportiva y Altoniense Recreativo) del distrito municipal de Altônia - PR. Para la colección de datos los protocolos siguientes se usaron: En el análisis estadístico del trabajo la Prueba se usó "t" de Estudiantes" para el pareados dado, se habido adoptado un nivel de significância de $p < 0,05$. se Usó para el análisis estadístico el programa Aventura, Windows versión 2003. Con la base en los resultados obtenidos, la conclusión se llegó que las mujeres practicando de actividad muscular después de 4 meses (la prueba de polvos) de la primera evaluación corpórea (el pré prueba), ellos redujeron los componentes siguientes de la composición corpórea: La densidad corpórea. Los resultados obtuvieron en este estudio, el pré-prueba y polvo-prueba permitidos acabar ese you/they existen la clasificación de mujeres con el sobrepeso y obesidad, y además del con el he/she el her/it de actividad muscular practica, redujo el percentil de grasa corpórea y y aumento de masa delgado pone de aprendiz ambos sexos de actividad musculares.

El percentil la Grasa gorda, absoluta y la masa exenta de grasa, así como CMI (el índice de masa corpórea). Ya los amostral masculinos de grupo sólo presentaron disminución del percentil de grasa y aumento de la masa muscular. Ha acabado que los hombres practicando de actividad muscular presentaron disminución más pequeña del percentil de grasa corpórea en la relación las mujeres. En ambos sexos practicando de actividad muscular había una disminución del percentil de grasa y aumento de masa delgada; la optimización de la fuerza muscular; aumente en la masa exenta de grasa; el aumento de la masa muscular y una mejora de la calidad de vida. Sin embargo en el grupo masculino ellos presentaron una disminución más pequeña de la composición corpórea, comparó el pré-prueba y polvo-prueba del mismo grupo con el grupo hembra. En qué he/she el resto se refiere FC y esfuerzo, según los resultados del pré-prueba y polvo-prueba de ambos grupos, que ellos obtuvieron una disminución y alteración en la frecuencia del corazón supervisada.

Las palabras claves: La composición corpórea, la actividad Muscular, el Percentil de Grasa, la Masa Delgada, Relação Cintura-Quadril;; FC Repouso; El esfuerzo

ANÁLISE DA COMPOSIÇÃO CORPORAL; ÍNDICE DE MASSA CORPORAL (IMC); RCQ; E FREQUÊNCIA CARDÍACA DE INDIVIDUOS AMBOS OS SEXOS PRATICANTES DE MUSCULAÇÃO DA ACADEMIA DO CLUBE S.E.R.A. DO MUNICÍPIO DE ALTÔNIA PR

RESUMO: O objetivo do presente estudo foi analisar a composição corporal de praticantes adultos de musculação de ambos os sexos, com faixa etária entre 30 e 50 anos. O estudo caracteriza-se como uma pesquisa experimental transversal com abordagem quantitativa. O grupo amostral de conveniência foi composto por 30 praticantes de musculação, sendo 15 mulheres e 15 homens, todos voluntários (as), na faixa etária entre 30 à 50 anos de idade; clientes da academia do Clube S.E.R.A (Sociedade Esportiva e Recreativa Altoniense) do município de Altônia - PR. Para a coleta de dados foram utilizados os seguintes protocolos: Na análise estatística do trabalho foi utilizado o "Teste "t" de Students" para dados pareados, tendo sido adotado um nível de significância de $p < 0,05$. Utilizou-se para análise estatística o programa Excel, Windows versão 2003. Com base nos resultados obtidos, chegou-se a conclusão que as mulheres praticantes de musculação após 4 meses (pós teste) da primeira avaliação corporal (pré teste), diminuíram os seguintes componentes da composição corporal: Densidade Corporal, Os resultados obtidos neste estudo, pré-teste e pós-teste permitiram concluir que existem classificação de mulheres com sobrepeso e obesidade, e além disso a com a pratica de musculação, diminuiu o percentual de gordura corporal e e aumento de massa magra praticantes ambos sexos de musculação.

Gordura Percentual, Gordura absoluta e massa isenta de gordura, bem como o IMC (índice de massa corporal). Já o grupo amostral masculino apresentou somente diminuição do percentual de gordura e aumento da massa muscular. Concluiu-se que os homens praticantes de musculação apresentaram menor diminuição do percentual de gordura corporal em relação as mulheres. Em ambos os sexos praticantes de musculação houve uma diminuição do percentual de gordura e aumento de massa magra; otimização da força muscular; aumento na massa isenta de gordura; aumento da massa muscular e uma melhora da qualidade de vida. Porém no grupo do sexo masculino apresentaram uma menor diminuição da composição corporal, comparado o pré-teste e pós-teste do mesmo grupo com o grupo do sexo feminino. No que refere-se a FC de repouso e esforço, segundo os resultados do pré-teste e pós-teste de ambos os grupos, obtiveram uma diminuição e alteração na frequência cardíaca monitorada.

Palavras-Chave: Composição Corporal, Musculação, Percentual de Gordura, Massa Magra, Relação Cintura-Quadril; FC Repouso; Esforço.