184 - THE INFLUENCE OF THE LABOR GYMNASTICS FOR THE SERVERS OF THE UNIVERSITY RESTAURANT

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INTRODUCTION

Studies experimental epidemiologists and have detached practical the regular one of continuous or interval physical activities as factor of significant benefit to the health of the diligent human being. Thus, the LABOR GYMNASTICS - GL assumes a role of multidimensional prominence, considering its physiological, motor, affective, social and intellectual dominions in the occupational actions in the environment of work, and here in this study, for the public server of the Federal University of Viçosa.

The Labor Gymnastics is the combination of some physical activities that has as characteristic common, to improve, under the physiological aspect, the physical condition of the individual in its work that will contribute for one better conditioning and physical performance, concentration and one better positioning front to the work ranks (OLIVEIRA, 2002).

Looking for to improve its quality of life in the work, employees of the restaurant of the Federal University of Viçosa had requested the Gymnastics Labor. This be situated in the Zone of Mining Mata, is constituted by some administrative departments, places and areas of support, that count on the work of servers playing diverse functions in the diverse sectors. The University restaurant (RU) be situated in the central region of the Campus, and its physical structure is old, its equipment, materials of the floor, of the walls, furniture and utensils are deficient in quality, amount and variety what, frequently, it limits the mechanical work of the collaborators in this sector.

Currently the RU counts on approximately 75 employees, being approximately 50 in the production sector, that is, general kitchen, services, killed animals sold and maintenance. These are distributed in four turns. In the first turn (preparation of the coffee of the morning) they are approximately 12 employees, in as turn (preparation of the lunch) they are approximately 30 employees, no longer third (preparation of the snack) are 25 employees and in the last one (cleanness) they are 8 employees. 36 weekly hours are fulfilled to 6 daily hours of work, totalizing. It is observed that annually it is made a scale of work for the weekends and holidays. The gymnastics is only offered in the turn of the afternoon, being this physician. 12 people participate of the program.

The mechanical work of the employees is carried through for the most part of the time with the collaborators in the foot position, and with intense request of superior members. The headquarters of the University restaurant when it was constructed, have 43 years, took care of 2500 pupils approximately daily. Currently it supplies around 7000 daily meals, distributed at three moments: breakfast, lunch and supper. The increase of the demand caused for the increasing number of new courses in the UFV has assisted for the overload of work in this place.

Thus, it was perceived necessity to develop a program of Labor Gymnastics with the employees, in virtue of the direct comment of responsible for the sector, of the researchers and, mainly, the informal complaints that if could notice in the spaces of work, medical licenses, inadequate positions and physical efforts in the restaurant.

The program of Labor Gymnastics was implanted in the restaurant has 7 years, only taking care of the turn of the afternoon, which had the scarcity of trainees. The GL is facultative, in such a way, 12 of the 25 employees only participates of the same one.

Being thus, the objective of this study was to analyze the behavior of general flexibility during two months, through the flexi test, carrying through a measure in the March month and another one in the month of May of the participants of the GL program, the sessions had been also analyzed the indices of IMC after and correlation of the same with the values of general flexibility, the levels of stress, occupational stress, pains located and questionnaire of satisfaction on the labor Gymnastics.

METHODOLOGY

This study it can be considered as descriptive, possessing characteristic exploratory, in the measure where it looks for to extend the knowledge level on the influence of the Labor Gymnastics in the servers of the University Restaurant.

For effectuation of the work an invitation to all was made the involved employees, and carried through a meeting for clarification that the same if it dealt with and searching opinions for improvements you specify. Some tasks had been analyzed that the collaborators played better to direct the program and also were carried through a lecture on the benefits of the GL with professor Doctor of the Department of Physical Education.

The ranks of work in this place (RU) have as priority the request of superior members, visa that the carried through work requires the continuous use of this pursuing; however have a consuming of the inferior members since the work is carried through in foot.

Sample

The sample was composed for 12 citizens of the masculine sex with ages between 20 and 53 years that work in the production sector, voluntary participants of the program of Labor Gymnastics promoted by the Department of Physical Education.

The data-collecting and application of the program had in common been made agreement with the direction of the university restaurant, as well as of the participant employees of the program.

Sessions of GL

The program is developed has 7 years, being that for this research, the data had been gotten during 10 weeks of this semester, with 3 weekly sessions (Monday, Wednesday and Fridays), to the 16 hours, totalizing 22 sessions during two months.

Each session of gymnastics lasted 30 minutes and was directed in accordance with the requested muscular groupings more. She was composed for lounges exercises, respiratory relaxation, massage and exercises. During the sessions one emphasized lounge involved the joints of the neck, shoulder, fist, trunk (mainly lumbar region) and knee due the labor request.

Analyzed variable

The data had been collected in the workstation of the servers (university restaurant), involving the verification of:

1. General flexibility, evaluated for the flexi test, considered for PAVEL & ARAÚJO (1987);
2. Stature (cm);
3. Weight (kg);
4. Index of Corporal Mass - IMC = weight/stature ²;

Flexi test

The flexi test considered for Pavel and Araújo (1987), consists of one method that it measures and it evaluates the maximum passive mobility of 20 movements to articulate corporal, in global the joints of the ankle, knee, hip, trunk, fist, elbow and shoulder.

Eight movements are made in the inferior members, the three in the trunk and nine remains in the superior members. The numeration of the movements is made in a distal-proximal direction. Each one of the movements is measured in an increasing and no continuous scale of whole numbers of 0 the 4 make up a total of five possible values.

The measure is made through the slow execution of the movement until the attainment of the maximum point of the amplitude and the posterior comparison enters the diverse positions of the evaluation maps and the maximum amplitude gotten by the appraiser in the evaluated one.

Habitually, the maximum point of the amplitude of movement is detected with easiness for the great resistance mechanics to the continuation of the movement and/or for the information of local discomfort for the evaluated one.

The results gotten in the 20 isolated movements are added and get a global index of flexibility or mobility to articulate, called of Flex Indices.

Anthropometrical evaluation

For collection of data on anthropometry (corporal mass and stature) they had been used scale, established meter and ribbon of proper measurement (meter). The corporeal weight was gotten, using a digital scale mark SOEHNLE, with principle for 200 kg with d_d equal 100g, the citizens were bare-footed and with the minimum of possible clothes.

For the measure of the stature, established meter artisan with 2 was used one length m, that presents scale in millimeters; the evaluated one was in Orton static position, with the together feet and in aspiratory apnea.

The data collected on stature and corporal mass had supplied subsidies to determine the index of corporal mass - IMC, or index of Quetelet.

Its value is calculated dividing it corporal mass (kilograms) for the stature (centimeters), as it follows below:

IMC (cm) = weight/stature ²

It was used classification suggested for the World-wide Organization of the Health. The IMC are used in great scale in the evaluation on nutrition and which had its high correlation with the corporal mass, and for the capacity to predict risks of patologias

Questionareis

1. Evaluation of the level of stress (DELBONI, 1997);
2. COMMUNITY AND PUBLIC stress occupational (SECTOR UNION, 1999; translated per MARTINS, 2000;
3. Interview half-structuralized for qualitative evaluation of the GL next to the employees, described form.

For characterization of the profile of the participant's two questionnaires for evaluation of the level had been used of stress and stress occupational, with closed questions. To carry through qualitative evaluation of the GL a questionnaire half-structuralized with open questions was used.

With intention to verify the regions attacks for pain aiming at the L.E.R/D.OR.T. in the Superior Members it was adapted *Trigger Points* (map of pains), where the evaluated mark in the map of pains (s) local (is) where it feels pain, in case that he will have located pain.

Statistical treatment

It was used descriptive statistics of the data with average and shunting line standard for general flexibility. Also Test “t” was used *student* for variable samples. Adopted level of significance $p < 0,05$. Also the correlation was carried through of *Pearson [r]* for the values of the after-test between general flexibility and IMC, beyond the calculation of the average, shunting line-standard.

RESULTS AND QUARREL

It is presented in this I capitulate the results of the inquiry, as well as its analyzes for evaluation of influences of the program of Labor Gymnastics in servers of the university restaurant (RU/UFV).

Stress

The questionnaire to identify the level of stress general of the citizens of the sample indicated that the all are in Level 1, that is, all had marked points between 25 and 49, this means that all the citizens seem to be well, however so that if it keeps thus she is necessary to give to attention the necessities. To know to dose work and leisure is basic.

Occupational Stress

It was verified that all (12 citizens) had affirmed “to have influence” in the way to organize its work and as well as the proper work. As it was also verified that 10 respondents had affirmed that its work to the times is visible, 1 affirmed that its work is normally prevision and 1 affirmed that its rare prevision work, estimates it majority of the employees, to begins, can be premade use stress it occupational in this item, therefore can have “surprises” in the daily routines of its work that can pre make use the tension in this direction.

In the question “of the employees to know what it is required of it in the work”, all had answered that “yes”, estimating, in such a way, that this item does not contribute for pictures of stress, therefore have information enough employee them to execute its tasks. Already how much to the question on training for the work, all had affirmed that they had been trained adequately stops execute-in, they are in such a way not submitted the pictures of stress occupational, for the fact to be able the sufficient to execute its tasks, causing more easy nesses and little tension when executing its labor actives functions.

By the answers it was verified that all had extremely affirmed "to be requested in its work", factor this that can premade use these employees stress it occupational, and consequently the L.E.R/D.O.R.T., for the fact of being able to be having overloads of tasks, and still for the fact of secular un equation of stated periods of requirement for fulfillment and/or much demand or centralization of tasks.

Already with regard to it lives deeply of situations of conflict in the work, 8 had answered the times had lived deeply some conflict in the work, 3 had never affirmed and 1 answered frequently lives deeply conflict in the work, it can be inferred that this item can help to remake use the employees to reveal pictures of stress occupational, and for the fact to have communication difficulty constantly, of resolution of problems and taking of decisions in the execution of tasks, 0 variable that can remake use for the illnesses and/or riots.

A verified time that 6 citizens had affirmed that "the organizations changes in the work in last the 12 months had not been submitted" and 6 had affirmed "yes" to this question, estimates that this item can collaborate for pictures of stress occupational. Already all had affirmed that never they had taken off license in last the twelve months due the tension in the work, can be inferred that all the citizens had not presented advanced periods of training of stress or tension in the work in this period of time.

The profile of the sample according to pain incidence

The results of the questionnaire of *Trigger Points* (map of pains) they reflect the muscle lesions regions of the sample (citizens). Neck, legs, column, shoulders possibly are affected due to bad position during the work of cleanness and baking of foods.

Analyzing the results it can be noticed that 1 citizen told to feel pains in the joints of the shoulders, elbow and knee, 2 citizens had told to feel pain in the coasts and 1 citizen told to feel pains in the legs, the remain (8 citizens) had told not to feel pain in no place of the body.

General flexibility through the flex test

The results gotten in the daily pay-test had shown that 2 citizens of it had presented levels between 27 and 29 (weak), 6 citizens had presented levels between 31 and 39 (average (-)) e 4 citizens had presented levels between 43 and 45 (average (+)). In the after-test 2 citizens had presented levels between 26 and 30 (weak), 4 citizens had gotten levels between 32 and 39 (average (-)), 4 citizens had gotten levels between 44 and 50 (average (+)) e 2 citizens had gotten levels between 50 and 51 (good), as the classification table.

All the citizens of the sample had gotten significant improvement (level of significance p< 0, 05) in the waited levels of flexibility. Below they follow the values of the average, shunting line-standard, as well as the minimum and maximum values of the initial and final tests.

TABLE 1-Result of the daily pay-test and after-test on general flexibility

	Daily pay - test	After-test
Average	36,67	40,83
Shunting line-standard	6,15	8,38
Maximum	45	51
Minimum	27	26

*p (< 0,05)

Anthropometry

For the total sample of n=12 citizens are had that the average for stature was of 169 $\pm$ 0,0713 cm and for corporal mass were of 68,71 $\pm$ 9.891 kg In the table below one meets the results.

TABLE 2 - Values of stature, corporal mass and IMC

	Stature (cm)	Corporal mass (kg)	IMC
Average	169	68,71	23,89
Shunting line standard	0,0713	9,891	2,56
Minimum	161	57	19,71
Maximum	179	89	26,87

The values recommended for IMC for the World-wide Organization of the Health are placed below of 24, 9 Kg/m^2. The average of the citizens of the sample meets in this band, however overweight was observed that a worker is above of this index, indicating, could be inferred that the majority of the citizens meets in the considered band, without bigger negative implications for the health of these employees.

Also the correlation was carried through of *Pearson [r]* it enters the values of the after-test between general flexibility and IMC, could be verified that it does not have correlation between the 0 variable and IMC.

Qualitative evaluation of the Labor Gymnastics according to participant

It can be observed that according to evaluated after it practices it of the gymnastics, if feel with more disposal for accomplishment of the work, little fatigue and that the program mainly suavity pains in the coasts and the legs.

In accordance with the questionnaire, all are participating of the program because of the social conviviality. They had said that the program helped in the income for having more disposals during the expedient.

CONCLUSIONS AND RECOMMENDATIONS

The results presented in two months of labor gymnastics, during 30 minutes, carried through three times per week, lead to believe that they had caused significantly important alterations in general flexibility, reaching the expectations.

With relation to the questionnaire of satisfaction of the program, note could that the GL influences in positive way on the quality of life same them.

The 0 variable stress and stress occupational, to begins, had not been considered as factors potential, therefore great part of the showed citizens can be considered as of "low risk" for the studied item. Attention must be given to the item "lives deeply of conflicts and load of work", where it had affirmed values significant to estimate that it will be able to have greater future problems. Interventions send regards so that these factors are not stressors in the work rank and that also it does not because

you influence that makes possible the L.E.R/D.O.R.T.

With relation to the results of the questionnaire of *Trigger Points* (map of pains it could be verified that the majority of the citizens affirmed not to feel located pain, in such a way, was inferred that the GL has influences preventive on the musculature.

Analyzing the values of IMC it could be affirmed that the majority of the citizens (11) met inside of the band allowed for the World-wide Organization of the Health, however has a citizen that it is above of the index, which was indicated as overweight, it was also verified that the levels of general flexibility do not influence in the indices of IMC, that is, are independent.

This study is finished , with the certainty of that the professional of Physical Education has a paper important in the direction to develop and to apply its knowledge in areas that it are similar, with the objective to insert each time more people in a style of more healthful life.

Key Words Labor Gymnastic, Antrophometrics Parameters, Males Servers University Restaurant

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THE INFLUENCE OF THE LABOR GYMNASTICS FOR THE SERVERS OF THE UNIVERSITY RESTAURANT

This research had as main focus to analyze the effect of a program of labor gymnastics next to servers of the restaurant of the Federal University of Viçosa on anthropometrics parameters (weight, stature and IMC) and the physical valence flexibility through the flexi test (considered for PAVEL), had been applied questionnaires on dolor's regions, stress, occupational stress and questionnaire of satisfaction of the program. To the sample she was composed for 12 citizens of the masculine sex with ages between 20 and 53 years participant voluntary of the program. The sessions had occurred during thirty minutes, three times per week, to the 16 hours, in a period of two months, totalizing 22 sessions. Through the analysis statistics one evidenced that it had significant improvement ($p< 0, 05$) in the levels of general flexibility. With regard to the values of IMC it could be affirmed that the majority of the citizens (11) met inside of the band allowed for the OMS. Of agreement with the questionnaire of satisfaction of the program, one noticed that the GL influences in positive way on the quality of life same them. The 0 variable stress and stress occupational, the principle, had not been considered as factors potential, therefore great part of the showed citizens was classified as of “low risk” for the studied item. Attention must be given to the item “lives deeply of conflicts and load of work”, where it had significant values to estimate that it will be able to have greater future problems. With regard to the results of the questionnaire of *Trigger Points* (map of pains) it could be verified that the majority of the citizens affirmed not to feel located pain, in such a way, could be inferred that the GL has influences preventive on the musculature.

Key Words: Labor Gymnastic, Antrophometrics Parameters, Males Servers University Restaurant

L'INFLUENCE DE LA GYMNASTIQUE OUVRIÈRE POUR LES SERVEURS DU RESTAURANT UNIVERSITAIRE.

Cette recherche a eu comme foyer principal analyser les effets d'un programme de gymnastique ouvrière près de serveurs du restaurant de l'Université Fédérale de Viçosa sur des paramètres anthropométriques (poids, stature et IMC) et la valence physique flexibilité à travers flexiteste (proposé par PAVEL), ont été appliquées des questionnaires sur des régions doloridas, estresse, estresse professionnel et questionnaire de satisfaction du programme. À l'échantillon il a composé de 12 sujets du sexe masculin avec des âges entre 20 et 53 ans participants volontaires du programme. Les sessions se sont produites pendant trente minutes, trois fois par semaine, aux 16 heures, dans une période de deux mois, en totalisant 22 sessions. À travers l'analyse statistique il s'est constaté qu'il a y eu amélioration significative ($p< 0.05$) nous niveaux de flexibilité générale. Concernant les valeurs d'IMC il s'est pu affirmer que à la majorité des sujets (11) il s'est trouvé à l'intérieur de la bande permise par l'OMS. Conformément au questionnaire de satisfaction du programme, il s'est remarqué que GL influence de manière positive sur la qualité de vie des mêmes. Les variables estresse et estresse professionnel, à début, n'ont pas été considérées mange des facteurs potencializadores, donc grande partie des sujets montrés a été classée comme de « j'abaisse risque » poara les items étudiés. Attention doit être donnée aux items « vit intensément de conflits et de chargement de travail », où il a y eu des valeurs significatives pour que pour estimer qu'il puisse y avoir de plus grands problèmes futurement. Concernant les résultats du questionnaire du Trigger Points (carte de douleurs) il s'est pu vérifier que à la majorité des sujets il a affirmé ne pas sentir douleur localisée, de cette forme, s'est pu inférer que GL a influence préventive sur la musculatura.

Most Clés: Gymnastique Ouvrière, Paramétres Anthropométriques, Serveurs Masculin du Restaurant Universitaire

LA INFLUENCIA DE LA GIMNASIA DE TRABAJO PARA LOS SERVIDORES DEL RESTAURANTE DE LA UNIVERSIDAD.

Esta investigación tenía como foco principal para analizar el efecto de un programa de la gimnasia de trabajo al lado de los servidores del restaurante de la universidad federal de Viçosa en los parámetros de los antropométricos (peso, estatura e IMC) y la flexibilidad física de la valencia a través del flexiteste (considerado para PAVEL), había sido cuestionarios aplicados en regiones, estresse, el estresse ocupacional y el cuestionario de los doloridas de la satisfacción del programa. A la muestra la compusieron para 12 ciudadanos del sexo masculino con edades entre 20 y 53 años de voluntario del participante del programa. Las sesiones habían ocurrido durante treinta minutos, tres veces por semana, a las 16 horas, en un período de dos meses, totalizando 22 sesiones. Con la estadística del análisis una evidenció que tenía mejora significativa ($p< 0.05$) en los niveles de la flexibilidad general. Con respecto a los valores IMC de él podría ser afirmado que la mayoría de los ciudadanos (11) se reunió dentro de la venda permitida para el OMS. De acuerdo con el cuestionario de la satisfacción del programa, notada que las influencias de GL de la manera positiva en la calidad de la vida iguales ellos. Los 0 estresse variables y el estresse ocupacionales, el principio, no habían sido considerados como potencializadores de los factores, por lo tanto clasificaron a la mayor parte de los ciudadanos demostrados en fecha poara “poco arriesgado” el artículo estudiado. La atención se debe dar al artículo “vidas profundamente de conflictos y de la carga del trabajo”, donde tenía valores significativos para estimar que podrá tener problemas del futuro de los greaters. Con respecto a los resultados del cuestionario de los puntos del disparador (mapa de dolores) podría ser verificado que la mayoría de los ciudadanos afirmó para no sentir dolor localizado, de tal manera, podría ser deducido que el GL tiene influencias preventivas en el musculatura.

Palabras Llave: Gimnasia de Trabajo, Parámetros Antropométricos, Servidores Hombres del Restaurante de la Universidad Federal del Viçosa/UFV.

A INFLUÊNCIA DA GINÁSTICA LABORAL PARA OS SERVIDORES DO RESTAURANTE UNIVERSITÁRIO.

Esta pesquisa teve como foco principal analisar os efeitos de um programa de ginástica laboral junto a servidores do restaurante da Universidade Federal de Viçosa sobre parâmetros antropométricos (peso, estatura e IMC) e a valência física flexibilidade através do flexiteste (proposto por PAVEL), foram aplicados questionários sobre regiões doloridas, estresse, estresse ocupacional e questionário de satisfação do programa. À amostra foi composta por 12 sujeitos do sexo masculino com idades entre 20 e 53 anos participantes voluntários do programa. As sessões foram realizadas por trinta minutos, três vezes por semana, às 16 horas, num período de dois meses, totalizando 22 sessões. Através da análise estatística constatou-se que houve melhoria significante ($p<0,05$) nos níveis de flexibilidade geral. Com relação aos valores de IMC afirma que a maioria dos sujeitos (11) encontrou-se dentro da faixa permitida pela OMS. De acordo com o questionário de satisfação do programa, notou-se que a GL influencia de maneira positiva sobre a qualidade de vida dos mesmos. As variáveis estresse e estresse ocupacional, a princípio, não foram consideradas como fatores potencializadores, pois grande parte dos sujeitos amostrados foi classificada como de “baixo risco” poara os itens estudados. Atenção deve ser dada aos itens “vivencia de conflitos e carga de trabalho”, onde houve valores significativos para pressupor que poderá haver maiores problemas futuramente. Com relação aos resultados do questionário dos *Trigger Points* (mapa de dores) pôde-se verificar que a maioria dos sujeitos afirmou não sentir dor localizada, desta forma, pôde-se inferir que a GL tem influencia preventiva sobre a musculatura.

Palavras Chave: Ginástica Laboral, Parâmetros Antropométricos, Servidores RU masculino.