

**163 - ENERGY WASTE IN FORRÓ AND PAGODE RHYTHMS IN THE STUDENTS OF THE STATE SCHOOL MADRE BELÉM, IN PALMAS, IN TOCANTINS, IN BRAZIL.**

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**INTRODUCTION**

One of the challenges for humanity today is to understand the correlation between energy waste and regular physical activity and then, seek viable solutions for the weight control through energy balance according to Melby C, Hickey (2006). It is known that the energy balance is directly caused by an unregulated diet and a sedentary lifestyle that is a fact commonly observed today in modern society as it is pondered in the studies of Bouchard (2003). The sum of these factors with genetics are pointed as risk factors for the onset of obesity and associated diseases, concepts expressed by authors such as Melby C, Hickey (2006), Bouchard (2003), Carvalho (1996), Silva (2007) and Vanina (2007).

In contrast, it is known that a balanced diet, joined to appropriate physical exercise, can provide a neutral or negative energy balance favoring weight loss or weight control as well as provide a balance in bodily functions, according to Silva (2007), Alves (2007) and Meirelles (2004).

The recommendation of physical activity and exercises program is now a consensus between health professionals and the health organization, which adopt as an effective method to combat obesity in children, adolescents or adults, according to Bouchard (2003). There are new prospects that involve physical activity programs, such as shaking Sao Paulo, which aims to promote adherence to healthy lifestyle, the philosophy of accumulating physical activity throughout the day.

Promoting a healthy lifestyle can be stimulated in different ways, for example: the practice of dance as physical activity. For Castro and Gill (2009) as well as for Lima and Fleet (2007), the dance, among other activities, is another alternative to promoting global health and education. That's because dance is a pleasurable activity that promotes energy waste that can be practiced in different age groups, inherent to all cultures and social classes.

Nunes-Ribeiro et al (2007) found that a walking program was correlated with the practice of folk dance. These results are confirming the issue raised in the guidelines of the ACSM that variables related to adherence to physical activity and exercise physical, noting that the satisfaction of performing a physical activity should be taken into consideration when prescribing. Thus, the importance of promoting the practice of dance in the formation of healthy habits, combined with the well-being during its practice. The adequacy or even considering the activities in favor of individual satisfaction is to promote greater benefits.

Dance is a physical activity that promotes energy waste providing significant adjustments on physical fitness and metabolism, according to Prati (2006) and Guidetti (2007). In addition to the mobilization of metabolic demands explained by Leon (2009), the dance develops imaginative motor skills as well as a space-body awareness that are fundamental to the development of the individual as a whole, relating to the idea of Strazzacappa (2001) and Carbonera (2008). Although explicitly realized the principles of physical exercise incorporated into a dance class, which respects relate to the concepts and criteria of frequency, duration and intensity. In the case of the intensity that would be the most important variable (21) that is determined by musical time expressed by beats per minute (bpm), which allows the Physical Education teacher control of physiological responses.

All physical activity provides increases in energy demand, which is confirmed by the studies of Gross et al (2009) and Hauser et al (2004). This metabolic demand is also proven in folk dance and ballet, Ribeiro-Nunes et al (2007) and Guidetti et al (2007) respectively. However, in the genres of popular dance as the forró and pagode dance, ballroom dancing it is not known, especially in teenagers how is the response of energy waste. Based on this gap, the purpose of this study is to investigate the energy waste in the genres of forró and pagode dance class, with variation in musical time between 103 to 113 bpm.

**METHOD**

A descriptive, quasi-experimental research single cross-section of a attempt according to Thomas (2007) which had a sample, of a intentional kind, consisting of 17 students aged between 13 and 15 years, enrolled in the State School Madre Belém, in Palmas, city, in, Tocantins, Brazil.

**PROCEDURES**

The students were tested in the ones that have mastery in forró and pagode genres as a way to identify the anamnesis in the genres. Then practice was made to obtain data: age, health history and physical activity. Later, the parents and / or the guardians of selected students were informed about: the research objectives and procedures for collecting data, the guarantee of anonymity in the publication of research results; freedom of refusal to participate or withdraw of the consent to any stage of the research. They were also advised about the absence of risk to physical and moral integrity of the participants. Parents or guardians who agreed, signed the consent form. This study caters to the standards for conducting research in human beings, which caters to Resolution No. 196/96 and 251/97 of the National Council for Health. The research was approved by the Ethics Committee of the Autonomous University of Asuncion, in Paraguay.

Subsequent to the selection of volunteers and signing of free and consented document, body mass was measured by means of a Britania digital corpus model 2 Brazil scale, with a capacity of 150 kg and 0,1 kg of acuity The students were measured with appropriate clothing (shorts and shirt), barefoot, with lateral spacing of the feet, the center of the platform. The determination of height was by a Wiso-Brazil 2 compact tape stadiometer in centimeters, fixed on the wall. The students were in standing position: feet together, arms along the body, trying to put the rear surfaces of her heels in contact with the wall surfaces of her heels, buttocks, shoulder girdle and the occipital region. The measurement was done with the individual in inspiratory apnea. The head positioned in the Frankfurt plane.

The determination of energy expenditure was made by the accelerometer Caltrac® (100/100 Plan - MDO19B, Ellis's, Gregory - California - USA). The data: weight, height, age and both gender were entered into the device and then the equipment was turned on, to start the reading of the energy waste is placed at the waist of the student, for 50 minutes for each dance style. Each student participated in two sessions of dance, performed on alternate days. Eight students began testing with the dance

and the second time come to dance the pagoda. Another part of the group began to dancing pagode dance and later changed forró dance. All tests were performed in the afternoon, in a room equipped with air-conditioning to control temperature. With spacious space, mirrors, adequate lighting and sound environment.

In dance session for the forró genres, the assessed students danced in pairs (girls and boys), with exchange of partners among themselves after each song, and it was only determined the energy waste of the girls. As for the pagode genre, the assessed students performed the solo. The intensity was established through the ongoing musical, with songs of forro and pagode range from 103 to 113 bpm for both genders. The musical time score (bpm) was done by a professional master's degree in music.

The classes lasted 50 minutes for each style, with 5 minutes of stretching at the beginning and end, 5 minutes of warming up and 35 minutes of dancing with free movements, no choreography, however, using traditional and basic steps of each style.

**STATISTICAL TREATMENT**

We used the SPSS (Statistical Package for the Social Sciences) version 14. The statistical analysis was made by descriptive data analysis to obtain its profile through measures of location (média and median) and dispersion (standard deviation). It was used Kolmogorov-Smirnov tests to observe the normal distribution of sample data. For comparing the data it was used the paired Student t test. The coefficient of correlation comparison was done through Pearson's test. For a better analysis of the relationship among the study variables, it was applied the simple linear regression, in order to determine the relation of cause and effect of time on energy waste in different dance genres. The range established for acceptance or rejection of the hypotheses of the study was  $p < 0.05$  for a confidence interval of 95%.

**RESULTS**

The analysis of the distribution curve of the sample data was within normal limits. The results showed that energy waste in kcal for the pagode genre was at the limit of the normal distribution curve for a  $p=0,05$ .

The average age of students was  $14,06 \pm 0,90$  years - old, with a body mass of  $50,49 \pm 6,57$  kg for an average height of  $159,74 \pm 7,13$  cm. The result obtained for the energy waste can be seen in Table 1, where the energy loss of the pagode dance was superior to the forró genre. This observed difference is statistically significant ( $p < 0,05$ ) when compared to the average values.

Table 1 – Average values and standard deviation of energy waste by accelerometer in the students (n = 17) of basic education in dance classes.

	Min.	Max.	Average±DP
KcalP	178	436	256,18±63,20
KcalF	111	242	156,41±34,47**

KcalP = energy waste in a dance class for the pagode genre; KcalF = energy waste in a dance class for the forró genre, \*\* =  $p < 0,01$ , \* =  $p < 0,05$

The study results answer the study hypothesis, which focuses on the empirical concept that the energy waste in the genres of dance that show musical time between 103 and 113 bpm, do not represent a significant difference in the total energy waste for the same time interval. With the results showed presented in Table 1, its accepted the hypothesis H1 of the study, showing that the total energy waste in the forró genre is significantly different ( $p < 0,05$ ) from the genre of pagode dance for the same period of time. In the figure 1 it can be observed the behavior of the energy waste for each student in different genres dance. It was highlighted the behavior of the student 4, that shows a very high energy waste for the pagode dance, which may be interfering in the average values.

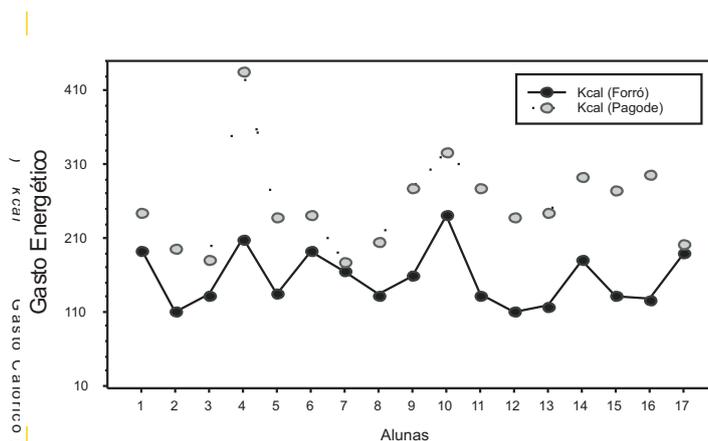


Figure 1 – Presentation of the energy waste for high school students attending dance classes (50 minutes).

The correlation between class time and energy waste was not significant for the two genres of dance where it was got for forró dance ( $r = -0,11$ ;  $p = 0,66$ ) and for pagode dance ( $r = 0,11$ ;  $p = 0,69$ ). A simple linear regression analysis between time and energy waste in different dances genres, demonstrated that pagode genre, although it is showing a significant waste of energy when compared to forró, does not present a regression line that can explain the Kcal class time as it can be observed by the values of R2 and SEE (Fig. 2). In Figure 3, it can analyze the behavior of the regression line for the forró genre, which does not depart from the pagode gender, while the EPE is smaller. The respective equations for estimating energy waste were: Pagode - Kcal =  $230,40 + [0,82 \cdot (\text{Time})]$ ; Forró - Kcal =  $144,20 + [0,83 \cdot (\text{time})]$ .

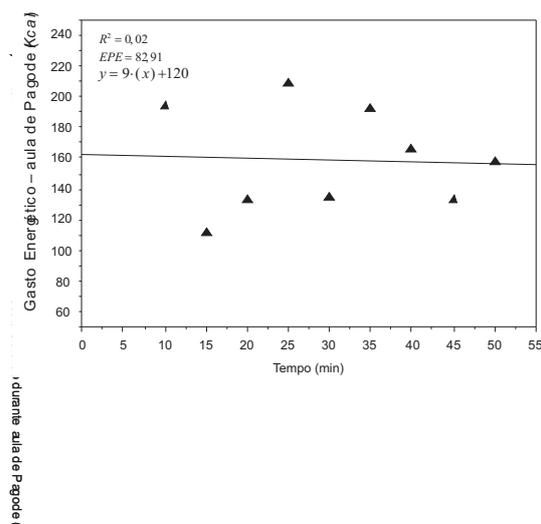


Figura 2 – Relationship between energy waste and Dance class time in the pagode genre in students of (n=17) elementary school.

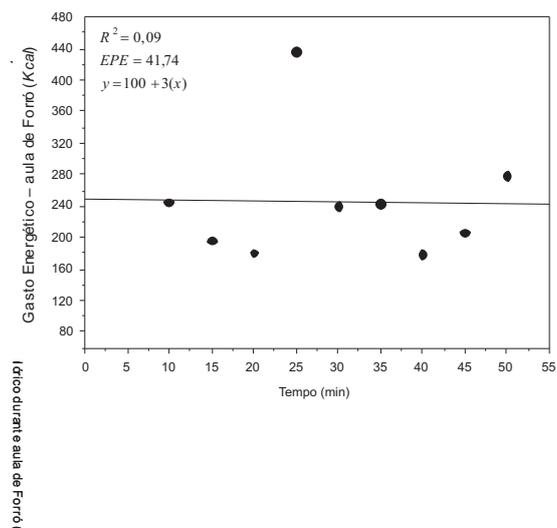


Figura 3 - Relationship between energy waste and Dance class time in the forró genre in students of (n=17) elementary school.

It is emphasized that the equations showed can not be applied as a method to estimate energy waste of dance classes. These equations are representative of the variables study behavior and they only allow a more accurate analysis of the same phenomenon.

## DISCUSSION

The results of this study show that dances of different genres with the same variation of musical time (intensity) and duration, can have different variations of energy waste. In this case, the forró dance had a lower rate of energy waste for all participants. This lower waste for forró dance may be due to the economy of motion generated by the greater experience in performing this dance, influencing the energy waste in a direct way. The 17 participants reported dominance in the two styles of dancing. However, 9 students reported having greater experience and practice in the forró genre which confirms the hypothesis raised above. Sharing with Wilmore and Costill (2001), who argue that the experience of a such movement tends to reduce energy waste. Another component would be the dance partner in the case of forró dance. For being leading the dance, it appears that it may help reducing the movement of the lady reducing the effort.

As energy waste varies with the type of physical activity, intensity and duration, as McArdle (2008), it can be said for the duration of activities that the results of this study contrasts with those of Ribeiro, Nuno et al (2007) that while making studies with university students of both sexes in the activities of folk dance and walking, got  $255,1 \pm 18,5$  kcal in dance in the group of beginners and  $289,5 \pm 10,7$  Kcal in dance in the advanced group, and  $265,4 \pm 26,2$  Kcal in the group of beginners on the walking. The average values for the observed kcals for the pagode dance ( $256,18 \pm 63,20$  kcal), are similar to those described in this study, however, the forró genre has averaged lower ( $156,41 \pm 34,47$  kcal). Nuno Ribeiro, et al (2007) concluded that there was no significant difference in energy waste for the same duration of effort between the folk dancing and walking. Since, in this study, class time was equal for both kinds of dances, and the results were divergent, shows that the determining factor for the increase in energy waste may be the stimulus generated by the music and not the time duration, as described by the regression line obtained among the variables.

Another variable in energy waste is motivation, which was not controlled in this study, which influences the energy waste while performing the movement. This can be proven by the studies of Malavasi (2005) and Andrade (2006), which say that the practice of movements, performed with difficulty or considered very easy can provide, respectively, frustrations, tiredness or lack of stimulus for the performer, interfering in the form of movement execution. This interference in the energy waste of motivation may have influenced the results, since some students felt tired at the end of the pagode class, which is related to the complexity of pagode dance steps or more practical experience in forró dance. This assertion is consistent with studies by Adams (2005) and Weineck (2003), by claiming that the dances are distinguished by the variability of their different step techniques, directions with representative movements and turns.

Based on the results, it is understood that not necessarily only the variation in the musical time will influence the energy waste, since the type of movement and the different techniques are what characterize each genre of dance, and other variables such as coordination and emotional issues which also undermine the movement.

## BIBLIOGRAPHIC REFERENCES

- ALBIN, RC. **Dicionário houaiss: música popular brasileira**. Rio de Janeiro: Paracatu; 2006.
- ALMEIDA, CM de. **Um olhar sobre a prática da dança de salão**. Movimento & Percepção, Espírito santo de Pinhal, São Paulo, 2005; 6(5):1679 - 8678.
- ALVES, USI. **Não ao sedentarismo, sim à saúde: contribuições da educação física escolar e dos esportes**; São Paulo, 2007; 31(4):464-9. Acesso agosto de 2009.
- ANDRADE, C; KELLER, B; OKAZAKI, FHA; OLIVEIRA, S; COELHO, RW. **A Influência de Tempo de Prática na Motivação Intrínseca de Atletas de Futebol Masculino da Categoria Juvenil de Clubes Profissionais**. 2006; 11(96): 1-7. Disponível em [efdeportes.com/efd96/motivac.htm](http://efdeportes.com/efd96/motivac.htm). Revista Digital.
- ARAÚJO, CAA. **Balançando o Brasil: a emergência do axé music e do pagode nos anos 90**. UFMG Belo

Horizonte, 2000.

BOUCHARD, C. **Atividade física e obesidade**. Barueri: Manole; 2003.

BREGOLATO, RA. **Cultura corporal da dança**. São Paulo: Ícone; 2000.

CARBONERA, D; CARBONERA, AS. **A importância da dança no contexto escolar**. ESAP (pós Graduação)

Cascavel-PR; 2008.

CASTRO, GC; GONÇALVES, A. **Intervenção e formação em Educação Física com destaque à saúde**. *Motriz*.

2009;15(2): 374-82.

DOS ANJOS, TC; LEITE, JP; ALONSO, PT; GONÇALVES, A; PADOVANI, CR. **Variáveis de condicionamento físico relacionado à saúde em adultas jovens submetidas a dois programas de atividade física: rebound exercise em solo e água**. *Fitness & performance journal*. 2006;5(1):18-23.

GARCIA, A, Haas AN. **Ritmo e dança**. Canoas: Ulbra; 2003.

GARIBA, CMS. **Dança Escolar: Uma abordagem possível na educação física, 2005**. Disponível em:

<http://www.efdeportes.com> Revista Digital, Buenos Aires. 2005;10(85).

GUIDETTI, L; EMERENZIANI, GP; GALLOTTA, MC; BALDARI, C. **Effect of warm up on energy cost and energy sources of a ballet dance exercise**. *Eur J Appl Physiol*, 2007; 99:275–81.

GROSS, IT; GUGLIELMO, LGA; SILVA JF,Vieira G. **Respostas cardiorrespiratórias e metabólicas na aula de ciclismo indoor**. *Motriz* 2009; 15(2): 330-39.

HAUSER, C; BENETI, M; REBELO, FPV. **Estratégias para o emagrecimento/ Weight loss strategies**. *Rev. bras. cine. desemp hum*, 2004;6(1): 72-81.

HOLANDA, ABF de. **Novo dicionário da língua portuguesa**. 2 ed. Rio de Janeiro: Nova Fronteira;1986.

LEÓNA, HB; VIRAMONTESB, JÁ; GARCÍAC, CMR; SÁNCHEZD, MED. **Study of the body dimensionsof elite professional ballet dancers**. *apunts med esport*. 2009; 1 (61):3-9.

LIMA, PRF; FROTA, MA. **Dança - educação para crianças do ensino público: é possível?/ Education dance for children from the public teaching: is it possible?** *Rev. bras. ciênc. mov*. 2007; 15(3): 137-44.

MALAVASI, LM. **Motivação: uma breve revisão de conceitos e aplicações**. Disponível em <http://www.efdeportes.com/> Revista Digital, Buenos Aires. 2005; 10(89). Acesso em março de 2009.

MARQUES, IA. **Dança na escola**. *Motriz* v.3 n. 1 junho/1997

MATSUDO, SM; MATSUDO, VKR. **Atividade física e obesidade: prevenção e tratamento**. São Paulo: Atheneu; 2007.

MEIRELLES, CM, Gomes PSC. **Efeitos agudos da atividade contra resistência sobre o gasto energético: revisando o impacto das principais variáveis**. *Rev. Brás. Méd. Esporte*. 2004; 10(2):122-30. Acesso junho de 2009.

MELBY, C, Hickey M. **Balanco energético e regulamentação do peso corporal, 2006 disponível em: http://www.gssi.com.br/publicacoes/sse/pdf/gatoradesse48.pdf. Acesso julho de 2009.**

MERRIOTT, S. **Dance as a form of exercise**. *Br J Gen Pract*. 2007; 1; 57(537): 325-26.

MONTEIRO, GM; SILVA, SG; MONTEIRO, GA; ARRUDA, M. **Efeitos do andamento musical sobre a frequência cardíaca em praticantes de ginástica aeróbica com diferentes níveis de aptidão cardiorrespiratória**. *Rev Bras de Atividade Física e Saúde*. 1999; 04(2):30-8. acessado em 11 de outubro de 2009.

OLIVEIRA, MM, Maia J. **Avaliação da atividade física em contextos epidemiológicos: Uma revisão da validade e fiabilidade do acelerômetro Tritrac-R3D, do pedômetro Yamax Digi-Walker e do questionário de Baecke**. *Revista Portuguesa de Ciências do Desporto*, 2001;1(3):73 - 88. Acesso em junho de 2009.

PRATI, SRA; PRATI, ARC. **Níveis de aptidão física e análise de tendências posturais em bailarinas clássicas**. *Rev. Bras. Cineantropom. Desempenho Hum*. 2006;8(1):80-7

REIS, V M, Guidetti L, Silva AJ, Carneiro AL, Baldari C. **Deficit de Oxigênio Acumulado e Produção de Energia Anaeróbia**. *Rev Trein Desp*. 2006; 7 (1):87- 92.

RIBEIRO-NUNES, SM; Irene-Monte AS, Ferreira-Emygdio R e Knackfuss MI. **Dança Folclórica e Caminhada: Um Estudo Comparativo do Gasto Calórico de Universitários**. *Revista Salud Pública*. 2007; 9(4):506-515.

SILVA, RA. **Índices de sobrepeso, obesidade e o volume da atividade física como preditores da condição de saúde de escolares adolescentes no nordeste do estado de São Paulo**. São Paulo: Capes, 2007. Acesso agosto de 2009.

STRAZZACAPPA, MA. **Educação e a Fábrica de Corpos: A dança na escola**. *Cadernos CEDES*. 2001; 21(53):1-11. Acesso em fevereiro de 2008.

THOMAS JR; NELSON, JK; SILVERMAN, SJ. **Métodos de pesquisa em atividade física**. 5 ed. Porto Alegre: Artmed, 2007.

TREIN, P. **A linguagem musical**. Porto Alegre: Mercado Aberto; 1986.

VANINE, JR. **Promoção de saúde e prevalência da obesidade em escolares no município de Barretos**. São Paulo: Capes, 2007. Acesso agosto de 2009.

WEINECK, J. **Atividade física e esporte para quê?** Barueri: Manole, 2003.

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## ENERGY WASTE IN FORRÓ AND PAGODE RHYTHMS IN THE STUDENTS OF THE STATE SCHOOL MADRE BELÉM, IN PALMAS, IN TOCANTINS, IN BRAZIL.

### ABSTRACT:

A challenge for the physiology of the effort now is to understand the correlation between energy waste and regular physical activity as a method of controlling or reducing of the weight and prevention of diseases that come from sedentary lifestyle. The aim of this study was to compare the energy waste in forro and pagode dance in 17 students (age = 14,6 ± 0,9 years-old, body mass = 50,5 ± 6,6 kg and height = 159,7 ± 7, 1cm) of the elementary school of the State elementary School Madre Belem where they were submitted to 50 minutes of music dance with between 103 to 113 bpm. The students attended two sessions of dance, on alternate days. The estimated energy waste (EE) was through the accelerometer Caltrac® 100/100 plan. The comparison of WE the Student t test indicated significant differences (p < 0,05) among the pagode rhythms (256,18 ± 63,20 kcal) more superior than the forró dance (156.41 ± 34.47). The analysis of the simple linear regression showed no significant relationship between classroom time and WE both for the pagode dance (R2 = -0,02 and SEE = - 82,91) and for the dance (R2 = 0,09 and SEE = 41,74). Conclusion: Both dances showed considerable levels of WE and the greater ones were in pagode dance.

**KEYWORDS:** Physical activity. Energy waste. Dance.

**DEPENSE D'ENERGIE DANS LES RYTHMES FORRÓ ET PAGODE LE CAS DE QUELQUES ETUDIANTES DE L'ECOLE ESTADUAL MADRE BELEM – PALMAS/TO, BRASIL.**

**RESUME:**

Un défi actuel pour la physiologie de l'effort est celui de comprendre la corrélation entre la dépense d'énergie et la pratique régulière d'activités physiques en tant que moyen de réduction ou de contrôle du poids et de prévention des maladies résultantes de l'inactivité physique.. L'objectif de cette étude a été celui de comparer l'énergie dépensée dans des classes de Pagode et de Forró. Le corpus était formé par 17 étudiantes (âge =  $14,6 \pm 0,9$  ans, poids =  $50,5 \pm 6,6$  kg et taille =  $159,7 \pm 7,1$  cm) de l'éducation de base de la Escola Estadual Madre Belém. Ces étudiantes ont suivi des classes de danse de 50 minutes dans le rythme de 103 à 113 bpm. Les étudiantes ont participé à deux séances de danse, un jour sur deux. La dépense d'énergie (DE) a été estimée par l'accéléromètre Caltrac® 100/100 plan. La comparaison de la DE par le test t de Student a signalé une différence importante ( $p < 0,05$ ) entre les rythmes Pagode ( $256,18 \pm 63,20$  kcal) supérieure au Forró ( $156,41 \pm 34,47$ ). L'analyse de la ligne de régression lineaire simple n'a pas mis en évidence un rapport significatif entre la durée de la classe et la DE ni pour le Pagode ( $R^2 = -0,02$  et  $EPE = -82,91$ ), ni pour le Forró ( $R^2 = 0,09$  et  $EPE = 41,74$ ). Conclusion : les deux rythmes, Forró et Pagode, ont présenté des niveaux considérables de DE, ce niveau étant plus important pour le Pagode.

**MOTS-CLÉS:** Activité physique. Dépense d'énergie. Danse.

**GASTO ENERGÉTICO EN LOS RITMOS FORRÓ Y PAGODE EN ALUMNAS DE LA ESCUELA ESTADUAL MADRE BELÉM - PALMAS/TO, BRASIL.**

**RESUMEN:**

Un desafío para la fisiología del esfuerzo actualmente es comprender la correlación entre gasto energético y práctica regular de actividades físicas, como método de reducción o control de peso ponderal y prevención de las enfermedades advindas del sedentarismo. El objetivo de este estudio es comparar el gasto energético en clases de danza forró y pagoda en 17 clases (edad =  $14,6 \pm 0,9$  años, masa corporal =  $50,5 \pm 6,6$  Kg y estatura =  $159,7 \pm 7,1$  cm) de la enseñanza fundamental de la Escuela Estadual Madre Belém. Que fueron sometidas a las clases de 50 minutos de danza con andaduras musicales entre 103 y 113 bpm. Las alumnas participaron de dos sesiones de danzas, en días alternados. La estimativa del gasto energético (GE) fue através del acelerómetro Caltrac® 100/100 plan. La comparación del GE por la test t de Student apuntó diferencia significativa ( $p < 0,5$ ) entre los ritmos pagode ( $256,18 \pm 63,20$  Kcal) superior al forró ( $156,41 \pm 34,47$ ). El análisis de la recta de regresión lineal simple no presentó relación significativa entre el tiempo de clase y el GE tanto para la pagode ( $R^2 = 0,02$  y  $EPE = -82,91$ ) como para el forró ( $R^2 = 0,09$  y  $EPE = 41,74$ ). Conclusión: ambas las danzas presentaron niveles considerables de GE, siendo mayor en la pagode.

**PALABRAS-LLAVE:** Actividad física. Gasto energético. Danza.

**GASTO ENERGÉTICO NOS RITMOS FORRÓ E PAGODE EM ALUNAS DA ESCOLA ESTADUAL MADRE BELÉM – PALMAS/TO, BRASIL.**

**RESUMO:**

Um desafio para a fisiologia do esforço atualmente é compreender a correlação entre gasto energético e prática regular de atividades físicas como método de redução ou controle de peso ponderal e prevenção das doenças advindas do sedentarismo. O objetivo deste estudo foi comparar o gasto energético em aulas de dança forró e pagode em 17 alunas (idade =  $14,6 \pm 0,9$  anos, massa corporal =  $50,5 \pm 6,6$  Kg e estatura =  $159,7 \pm 7,1$  cm) do ensino fundamental da Escola Estadual Madre Belém, onde foram submetidas a aulas de 50 minutos de dança com andamentos musicais entre 103 a 113 bpm. As alunas participaram de duas sessões de danças, em dias alternados. A estimativa do gasto energético (GE) foi por meio do acelerómetro Caltrac® 100/100 plan. A comparação do GE pelo teste t de Student apontou diferença significativa ( $p < 0,05$ ) entre os ritmos pagode ( $256,18 \pm 63,20$  kcal) superior ao forró ( $156,41 \pm 34,47$ ). A análise da reta de regressão linear simples não apresentou relação significativa entre o tempo de aula e o GE tanto para o pagode ( $R^2 = -0,02$  e  $EPE = -82,91$ ) como para o forró ( $R^2 = 0,09$  e  $EPE = 41,74$ ). Conclusão: ambas as danças apresentaram níveis consideráveis de GE, sendo maior no pagode.

**PALAVRAS-CHAVE:** Atividade Física. Gasto Energético. Dança.