103 - SOCIOECONOMICS CHARACTERISTICS AND USE OF NUTRICIONAL ERGOGENICS AIDS FOR PRACTICING ADOLESCENTS OF STRENGTH TRAINING, PETRÓPOLIS

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INTRODUCTION

In recent decades, the search for a more aesthetic standard accepted by society and the improvement of the diet (PEREIRA & CABRAL, 2007; DURAM et al., 2004) mobilized many people engaged in physical activity in gyms, especially the strength training, known as bodybuilding.

Strength training is a physical activity done mainly through analytical exercise, through the force that a muscle or muscle group can exert against a resistance in a maximum effort. With variable load, amplitude, time of contraction and speed controllable using progressive resistance provided by dumbbells, barbells, rings, clusters, modules, extenders, backed pieces, the body itself and/or segment (FLECK, 2006).

According to Guedes (2007), is an option often adopted by men to improve physical appearance through increased lean body mass (muscle hypertrophy). The women seek to improve the aesthetics, while maintaining a lean body.

In recent decades, there has been a growing increase in the practice of physical activity by the population at all ages. However, the greatest demand occurs at academies by adolescents and young adults who seek aesthetic standards imposed by society. These ages can identify with these symbols of beauty in television through the model building lean body and defined musculature.

To speed up the muscle mass gain, especially among men, there is the use of ergogenic agents (EA) misused, often without proper guidance from a professional (SANTOS et al., 2002).

The term ergogenic is derived from two Greek words: ergon (work) e gennan (produce). Therefore, "ergogenic aid" is any substance or device adopted in order to improve performance further enhance the potential for physical work, increased mental strength or advantage of mechanical, physiological agents, nutritional and pharmacological (BRAGGION, 2007).

According to Araújo & Smith (1991), research shows the damaging effects on the human body without the proper prescription of EA, among them the nutritional ergogenics agents (NEA) and a healthy diet by a health professional.

The influence of the media, friends and family leads to the consumption of these products in a disorderly way, most often without indication of specialized professionals such as nutritionists or doctors, may be harmful to health, its indiscriminate use.

In this sense, this study investigated the socioeconomic profile and the use of nutritional ergogenics agents for adolescents practicing strength training who attend four gyms in Petropolis, Rio de Janeiro.

SUBJECTS AND METHODS

This study is a cross-sectional descriptive study with adolescents registered in 4 clubs located in the city of Petropolis, Rio de Janeiro - Brasil, between 13 and 19, who agreed to participate in the survey the month of May 2009.

As all the variables, socioeconomic variables were gender, age, education, familiar income of than less 1 minimum wage (M.W.), 2-3 M.W.; 4-5 M.W.; > 5 M.W.). Use of nutritional ergogenics agents: use, type used, frequency, purpose of use; changes after use, and indication. For this study, we elaborated a semi-structured questionnaire, previously tested.

For data collection, participants were approached by the interviewer when they performed the strength training. Those who were within the age criterion were invited to participate voluntarily in the research being informed about the objectives and characteristics of the study, certificates of absence of risk, confidentiality of information supplied by them.

The analysis, data were digitized, consolidated and analyzed using Excel for Windows 2007. His exploration was done by means of absolute and relative frequencies, and measures of central tendency (average and standard deviation) of selected variables.

RESULTS AND DISCUSSION

Socioeconomics Characteristics:

Of the 50 adolescents practicing strength training academies entered in the 4 Petropolis evaluated, it was discovered that all students, males with a mean (± SD) age of 16.74 ± 1.49 years (Figure 1).

The degree of education was 98% enrolled in high school and 2% were in higher education.

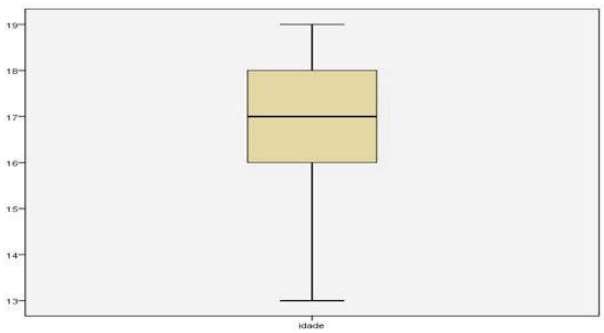

Figure 1. Mean age (years) of practicing adolescents of strength training enrolled in 4 gyms of Petrópolis. May, 2009.

According to the percentage distribution of family income (Figure 2), found that 2% reported less than 1 minimum wage (M.W.), 14% from 2 - 3 M.W., 46% from 4 - 5 M.W. and 38% were unaware of familiar income (Ignored).

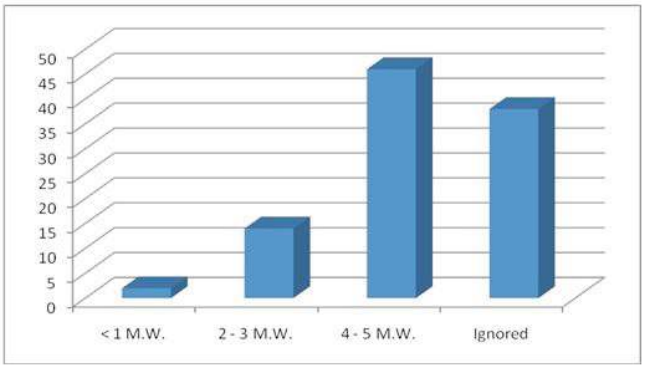

Figure 2. Informed familiar income by practicing adolescents of strength training enrolled in 4 gyms, Petrópolis. May, 2009.

USE OF NUTRITIONAL ERGOGENICS AIDS:

The use of NEA, it was discovered that 28% of teenagers practicing strength training mentioned they used and 72% did not report.

All 28% of teens who reported using the NEA said they used them daily. For the main goals of use, all reported using them to gain muscle mass.

For the most consumed, it was found that 33.3% used Whey Protein®, 22.2% Creatine, 11.1% Albumin, 27.8% others EA proteins and 5.6% Maltodextrin (Figure 3).

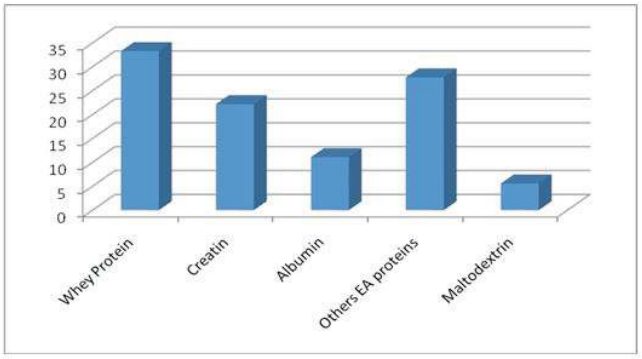

Figure 3. Types of consumed nutritional ergogenics aids by practicing adolescents of strength training enrolled in 4 gyms, Petrópolis. May, 2009

Eighty-three percent of teens reported that they used NEA gain muscle mass, and 78.6% were using less than 3 months, 14.2% were in the period between 3 and 6 months and 7.2% after 7 months.

The sources of information, 55.6% of adolescents were aware of the NEA through the media, 27.7% from friends and 16.7% of the bodybuilding's teacher (Figure 4).

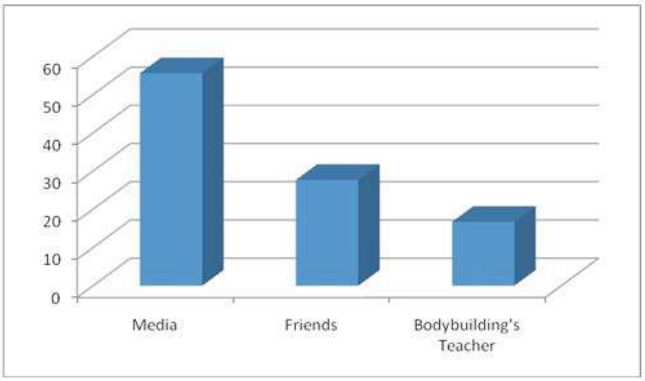

Figure 4. Sources of information of nutritional ergogenics aids by practicing adolescents of strength training enrolled in 4 gyms of Petrópolis. May, 2009.

The practice of strength training among adolescents is increasing in the gyms, as well as the use of EA aiming to gain muscle mass (IRIART & ANDRADE, 2002).

The EA can provide increased strength and endurance, increase muscle, increase metabolism, increase energy supply in the muscle, improves the release of substrates, improved performance, increased physiological processes, muscle

hypertrophy, decreased fat percentage, others (SANTOS et al., 2005; HALLAK et al., 2007).

They can be classified into three categories: nutritional, pharmacological and physiological, can be found in variety and easily on the market. There are those that are acceptable to health professionals and there are the EA that are proven harmful to health and can cause irreversible damage (BRAGGION, 2007).

As for the NEA, Bacurau (2007) describes many types of supplements and their purposes are different, being crucial the knowledge of what the NEA to be best used to avoid damage to physical integrity.

In this study, we observed that the majority of respondents obtained information on NEA through the media and friends, this is an issue of concern, since only qualified professionals can indicate the appropriate supplement for each individual, according to your needs and physiological condition. The indiscriminate use of supplements can cause irreversible damage to health (DOMINGUES & MARINS, 2007).

It is therefore of fundamental importance that the practitioner of resistance training to obtain knowledge of the tasks and the use of NEA from a qualified professional to ensure your health while and achieve their goals.

CONCLUSION

We conclude that all young practitioners of strength training respondents were male, high school students with familiar income between 4 and 5 minimum wages.

It turned out that about 30% of adolescents reported consuming some type of nutritional ergogenic agent in order to increase muscle mass. NEA among the most widely used, there was the Whey Protein®, Creatine and Albumin, detecting the media as the main vehicle for making such products. However, it is known that media is not a reliable source of information since there is often no indication or safe prescription of health professionals to guide adolescents of physical activity and the function of these resources in the body. As a result, the NEA can cause deleterious effects to health if not to the limits of intake, the individual physiology and bodily needs of each.

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SOCIOECONOMICS CHARACTERISTICS AND USE OF NUTRICIONAL ERGOGENICS AIDS FOR PRACTICING ADOLESCENTS OF STRENGTH TRAINING, PETRÓPOLIS

ABSTRACT

The recovery of the body in contemporary society has mobilized many people engaged in physical activity. With a view to obtaining a perfect body, many people physically active use nutritional ergogenics aids to increase muscle mass and improving the aesthetics, especially the male population. The aim of this study was to know about their socioeconomics characteristics and use of nutritional ergogenics aids for practicing adolescents of strength training who attend four gyms, Petrópolis. This study is a cross-sectional descriptive study with adolescents enrolled in four gyms located in the city of Petrópolis, between 13 and 19 years, who agreed to participate in this research during May 2009. Of the 50 adolescents registered, it was discovered that all are students, male, average age (±SD) of 16.74±1.49 years. About use of nutritional ergogenics aids, we found that 28% of adolescent reported to use and 72% did not report. It was found that 33.3% were using Whey Protein®, Creatine 22.2%, 11.1% Albumin, 27.8% other ergogenics aids proteins and 5.6% of Maltodextrin. We concluded that about 30% of adolescents reported to consume nutritional ergogenics aids.

KEYWORDS: Ergogenic Aid, Strength Training, Adolescent

SOCIO-ÉCONOMIQUES ET ERGOGÉNIQUES AGENTS NUTRITIONNELS UTILISÉS POUR LES JEUNES PRATICIENS DE LA RÉSISTANCE DE FORMATION, PETRÓPOLIS

RÉSUMÉ

La récupération du corps dans la société contemporaine a mobilisé de nombreuses personnes engagées dans l'activité physique. En vue de l'obtention d'un corps parfait, de nombreuses personnes physiquement actives utilisation ergogenics agents nutritionnelles pour augmenter la masse musculaire et l'amélioration de l'esthétique, en particulier la population masculine. L'objectif de cette étude était de connaître leurs caractéristiques socio-économiques et utilisation des ergogéniques agents nutritionnels pour les adolescents praticiens de la musculation, qui assisteront à quatre gymnases, Petrópolis. Cette étude est une étude descriptive transversale en coupe avec des adolescents inscrits dans quatre salles de

sport situé dans la ville de Petrópolis, entre 13 et 19 ans, qui ont accepté de participer à cette recherche au cours de Mai 2009. Sur les 50 adolescents inscrits, on a découvert que tous sont des étudiants, hommes, âge moyen (±écart-type) de 16,74±1,49 années. A propos de l'utilisation des aides ergogenics nutritionnel, nous avons constaté que 28% des adolescents signalés à utiliser et 72% n'ont pas signalé. Il a été constaté que 33,3% utilisaient des Whey Protein®, Créatine 22,2%, 11,1% d'Albumine, 27,8% d'autres protéines ergogenics agents et 5,6% de Maltodextrine. Nous avons conclu que près de 30% des adolescents ont dit consommer ergogéniques agents nutritionnels.

MOTS-CLÉS: Ergogéniques Agents, Entraînement de Musculation, Adolescent

SOCIOECONOMÍA CARACTERÍSTICAS Y USO DE AYUDAS ERGOGÉNICAS NUTRICIONALES PARA ADOLESCENTES EN PRÁCTICA DE ENTRENAMIENTO DE LA FUERZA, PETRÓPOLIS

RESUMEN

La recuperación del cuerpo en la sociedad contemporánea ha movilizado a muchas personas dedicadas a la actividad física. Con el fin de obtener un cuerpo perfecto, muchas personas físicamente activas utilizar herramientas de ayuda ergogénica nutricional para aumentar la masa muscular y la mejora de la estética, especialmente en la población masculina. El objetivo de este estudio fue conocer acerca de sus características socioeconómicas y el uso de ayudas ergogénicas nutricionales ayudas para la práctica de los adolescentes de entrenamiento de la fuerza que asistir a cuatro gimnasios, Petrópolis. Este estudio es un estudio transversal descriptivo de corte transversal con adolescentes matriculados en las cuatro gimnasios ubicados en la ciudad de Petrópolis, entre 13 y 19 años, que aceptaron participar en esta investigación en mayo de 2009. De los 50 adolescentes registrados, se descubrió que todos son estudiantes, hombres, edad media (±DE) de 16,74 ± 1,49 años. Sobre el uso de ayudas ergogénicas nutricionales, se encontró que el 28% de los adolescentes informó a utilizar y el 72% no reportó. Se encontró que el 33,3% estaban usando Whey Protein®, Creatina 22,2%, 11,1% de Albúmina, el 27,8% Otras ayudas ergogénicas proteínas y el 5,6% de Maltodextrina. Llegamos a la conclusión de que alrededor del 30% de los adolescentes reportaron consumir ayudas ergogénicas nutricionales.

PALABRAS CLAVE: Ayudas Ergogénicas, Entrenamiento de Fuerza, Adolescentes

CARACTERÍSTICAS SOCIOECONÔMICAS E UTILIZAÇÃO DE AGENTES ERGOGÊNICOS NUTRICIONAIS POR ADOLESCENTES PRATICANTES DE TREINAMENTO DE FORÇA, PETROPOLIS

RESUMO

A valorização do corpo na sociedade contemporânea tem mobilizado inúmeras pessoas a praticarem atividade física. Na perspectiva de obterem um corpo perfeito, muitos praticantes de atividade física utilizam recursos ergogênicos nutricionais para aumento de massa muscular e melhoria da estética, principalmente, a população masculina. Objetivou-se conhecer o perfil socioeconômico e a utilização de agentes ergogênicos por adolescentes praticantes de treinamento de força freqüentadores de quatro academias de Petrópolis. O presente estudo é do tipo transversal, descritivo, com adolescentes masculinos inscritos em 4 academias localizadas na cidade de Petrópolis, entre 13 e 19 anos, que aceitaram participar da pesquisa no mês de maio de 2009. Dos 50 adolescentes praticantes de treinamento de força inscritos nas 4 academias de Petrópolis avaliadas, detectou-se que todos são estudantes, do sexo masculino com média(±DP) de idade de 16,74±1,49 anos. Quanto ao uso de agentes ergogênicos, detectou-se que 28% dos adolescentes praticantes de treinamento de força referiram fazer uso e 72% não referiram. Verificou-se que 33,3% usavam Whey Protein®, 22,2% Creatina, 11,1% Albumina, 27,8% outros agentes ergogênicos protéicos e 5,6% Maltodextrina. Conclui-se que cerca de 30% dos adolescentes referiram utilizar agentes ergogênicos nutricionais.

PALAVRAS-CHAVE: Agentes Ergogênicos, Treinamento de força, Adolescentes

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