

57 - DETERMINATION OF THE USE OF ERGOGENICS IN BODYBUILDING PRACTICE

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INTRODUCTION

We live in a globalized world in which the media have great influence on the population, therefore, the number of people seeking gyms to aid in the search the desired aesthetic standard is increasing. On the other hand, with this demand, the Physical Education professional should always reflect on their practice because his work is aimed at the public and it is extremely important that he has knowledge and works in the field relevant to his area (SILVA and DAMATTO, 2018).

As the demand for bodybuilding, the use of ergogenic substances also increased, in order to provide health maintenance or even improve sports performance (RODRIGUES, 2017).

These substances are used to increase the capacity of the bodywork due to the intensification of physical power, mental strength or mechanical limit and thereby prevent or delay the onset of fatigue, with a target to improved performance (REIS et al, 2017).

Food supplements are products added to diets in order to meet the nutritional and physiological needs of individuals who are deficient in some specific nutrient and are not able to feed only. They may also improve some aspect of physical performance, such as increasing muscle mass, reducing body fat, increasing aerobic capacity, promoting improves the performance of athletes and help post-workout recovery (RIGON and ROSSI, 2012).

In the same way that dietary supplements, anabolic steroids are also considered ergogenics, these, in turn, are synthetic derivatives of testosterone, being developed in the late 1930. Its origin was in medical intervention and specific clinical conditions, such as male hypogonadism. Among athletes, it is used to improve performance, however, consumption is currently widespread in the general population (MACEDO et al, 2017).

Among the gym practitioners, at the beginning of exercise practice, it is common to purchase any supplement, especially that promise muscle hypertrophy, believing that supplements will bring success to training faster. However, even people who attend the academies and are very concerned about ideal food, knowledge about the use of these substances is empirical or superficial (RIGON & ROSSI, 2012).

The overkill in the use of anabolics, both inside and outside the sports scene, causes great concern on the part of society, governments and sanitary and sports agencies. When individuals attending gyms, they fail to achieve the desired results, at the desired time, end up resorting to these resources, which in turn, without medical guidance, can lead to several systemic and behavioral complications (LIMA, MEDEIROS and CARDOSO, 2015).

Physical exercise is the programmed activity, designed to maintain and improve one or more components of physical fitness. These provide increased muscle strength, cardiac-respiratory conditioning, decreased adipose tissue, improved bone mineral density, decreased anxiety, among other benefits. Resistance training is essential for maintaining health, avoid and prevent injuries and muscle and joint diseases, fitness, form of recreation and a way to get the body appreciated by society and disseminated by the media (SANTOS, 2018).

In the gyms, the physical education teacher is the first professional to have contact with the individual who goes or already practices physical exercise and with this, it is of the utmost importance that they have knowledge about sports nutrition, but without the prescription of supplements or diets, by simply targeting the right professional. The occurrence of this practice is considered an illegal practice of the profession, and this task is the responsibility of the nutritionist (OLIVEIRA, RIBOLDI and ALVES, 2017).

The aim of this paper was to determine the incidence of the use of ergogenic and characterize the individual practitioner's fitness to make use of egogénics substances.

MATERIAL AND METHODS

The study presents a quantitative-qualitative approach, of an applied nature, with procedures that characterize it as a Survey survey. The method of application used in this survey was transversal, and its realization was given through questionnaires.

We evaluated 164 bodybuilders of both genders aged between 15 and 75 years.

Participants answered a questionnaire developed in platform Google Docs regarding the use of ergogenics. The questions applied followed objective and multiple choice. Were included in the analysis, individuals of both sexes, who answered the questionnaire completely, and incomplete records and those that did not authorize the disclosure of data were excluded.

RESULTS AND DISCUSSION

The sample consisted of 164 bodybuilders, 63.2% of the female gender and 36.8% of the male gender. Interviewees were divided according to their age group and answered questions about time practicing bodybuilding and weekly attendance at the gym. Posteriorly, being answered more specific questions on diet, supplementation, use of ergogenic and prescription thereof (Table 1).

Table 1. Characterization of the sample.

	Women (%)	Men (%)	Both sexes (%)
Age			
Up to 20	18.7	17.0	18.0
20 to 30	41.7	58.5	48.0
30 to 40	27.5	17.0	24.0
40 to 50	7.7	3.8	6.0
More than 50	4.4	3.7	4.0
Bodybuilding practice time			
1 to 6 months	28.6	34.0	30.0
6 months to 1 year	18.7	15.0	18.0
1 year to 2 years	18.7	17.0	18.0
More than 2 years	34.0	34.0	34.0
Week Frequency			
1 time	3.2	0.0	1.4
2 times	6.4	5.7	6.2
3 times	22.0	28.3	24.3
4 times	28.4	18.9	25.0
5 times	33.0	35.8	34.0
6 times	7.0	11.3	9.1

Data expressed as percentage (%)

The data of the individuals who stated to do some type of diet are divided by their genders and ages. According to the data presented, it can be highlighted that the percentage of people who do not follow some type of diet (63.2%) is higher than those who follow (36.8%) and that this is accentuated with individuals which are up to 20 and over 50 years old (Table 2).

Regarding dietary prescription, 15.6% of the women and 23.8% of the men stated that the Physical Education teacher was the one who prescribed it. In contrast, only 19% of men follow a dietitian's diet, in comparison to women, this number grows to 34.5% of the interviewees.

Table 2. Characterization of the sample regarding the age and accomplishment of some type of Diet.

Age (years)	Do diet (♀/♂)	Do not diet (♀/♂)
Up to 20	41.2 / 33.3	58.8 / 66.6
20 to 30	31.6 / 45.2	68.4 / 54.8
30 to 40	36.0 / 22.2	64.0 / 77.8
40 to 50	28.6 / 50.0	71.4 / 50.0
Above 50	50.0 / 50.0	50.0 / 50.0

♀ = female; ♂ = male. Data expressed as a percentage (%).

Regarding the use of supplements, 50% of the female audience and 70% of the male audience stated that they use some type of supplement. The age group of 40 to 50 years stands out the most regarding the use of supplements, 85.7% of women and 100% of men claim to use supplements (Table 3).

Table 3. Use of supplements according to age and gender.

Age	Use supplements (♀/♂)	Do not use supplements (♀/♂)
Up to 20	41.2 / 55.6	58.8 / 44.4
20 to 30	63.2 / 64.5	36.8 / 35.5
30 to 40	52.0 / 88.9	48.0 / 11.1
40 to 50	85.7 / 100	14.3 / 0.0
Above 50	0.0 / 50.0	100 / 50.0

♀ = female; ♂ = male. Data expressed as a percentage (%).

Overall, 80% of women and 94.4% of men reported using some form of supplementation. Of these, Whey Protein achieved the highest percentage of users, both among women (28%) and men (28%). It is important to note that some respondents used more than one type of supplement. Figure 1 shows the frequency of consumption of supplements cited by the interviewees.

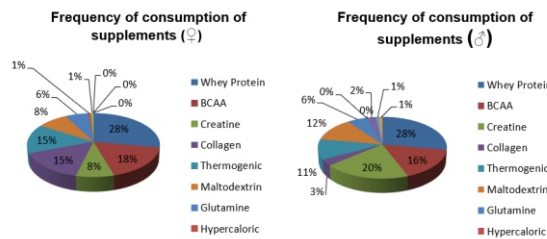


Figure 1. Frequency of supplement use. ♀ = female; ♂ = male. Data expressed as a percentage (%).

Regarding the indication for the use of supplements, it was observed that 37.2 % of the individuals use supplements indicated by friends, followed by an indication of a Physical Education teacher with 20%, nutritionist prescriptions 16.3%, and the rest, by other professionals or through surveys done on the internet.

The use of steroids was observed in only 6 individuals, being 1 of the female gender and 5 of the male, representing only 3.65% of the volunteers of the research. All individuals who reported using steroids are situated in the range between 20 and 32 years old.

Regarding steroid prescription, none of the users had a medical prescription, being guided by friends or by surveys conducted by them on the internet.

CONCLUSION

Based on the data presented, it is concluded that the use of supplements is very common among bodybuilders, but most of the time, their prescription is not being performed by the appropriate professional.

However, the use of steroids is not so common, however, it also happens without medical follow-up, performed on the account of known or by prescription of the individuals themselves.

It is important to emphasize that the Physical Education professional is responsible solely and exclusively for the prescription of physical exercises, never for the prescription of any type of ergogenic substance.

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ABSTRACT

Daily the number of people looking for gyms to aid in the search for the desired aesthetic standard increases. With the increasing demand for bodybuilding, the use of ergogenics has also increased, aiming to maintain health or even improve sports performance. The objective of the present study was to verify the incidence of ergogenic use and to characterize the bodybuilding individuals who use ergogenic substances and to verify which professional is prescribing these substances. A total of 164 bodybuilders were evaluated. The participants answered a questionnaire elaborated in Google Docs with the theme about the use of ergogenic substances. The questions applied followed objective and multiple choice. Based on the data presented, it is concluded that the use of steroids is not so common among bodybuilders, but their prescription does not happen due to the fact that in no case was there a medical prescription. With regard to supplements, its use is very common, for the various objectives, however, it is not frequent the indication made by a nutritionist. From the analysis of the data, it is noticed that there is even the intervention of Physical Education Professionals, which is not in accordance with the functions they must exercise, emphasizing that each professional should act in the area in which he is responsible formation.

Keywords: Physical exercise; bodybuilding; ergogenic;

Resumé

Chaque jour, le nombre de personnes à la recherche de salles de sport pour aider à la recherche de la norme esthétique souhaitée augmente. Avec la demande croissante de musculation, l'utilisation de l'ergogénie a également augmenté, visant à maintenir la santé ou même à améliorer les performances sportives. L'objectif de la présente étude était de vérifier l'incidence de l'utilisation ergogénique, de caractériser les personnes en musculation qui utilisent des substances ergogéniques et de déterminer quel professionnel prescrit ces substances. Un total de 164 bodybuilders ont été évalués. Les participants ont répondu à un questionnaire élaboré dans Google Documents sur le thème de l'utilisation de substances ergogéniques. Les questions posées suivaient des choix objectifs et multiples. Sur la base des données présentées, il est conclu que l'utilisation de stéroïdes n'est pas si courante chez les bodybuilders, mais que leur prescription ne se produit pas, car il n'y a jamais eu d'ordonnance médicale. En ce qui concerne les suppléments, son utilisation est très commune, pour les différents objectifs, cependant, il n'est pas fréquent l'indication faite par un nutritionniste. L'analyse des données montre qu'il existe même une intervention de professionnels de l'éducation physique, ce qui n'est pas conforme aux fonctions qu'ils doivent exercer, soulignant que chaque professionnel doit agir dans le domaine qui relève de sa responsabilité formation.

Mots clés: exercice physique; musculation; ergogénique

Resumen

Diariamente aumenta el número de personas que buscan gimnasios para la ayuda en la búsqueda del patrón estético deseado. Con la creciente demanda por la musculación, aumentó también el uso de ergogénicos, con el objetivo de proporcionar el mantenimiento de la salud o incluso, mejora en el desempeño deportivo. El objetivo del presente estudio fue verificar la incidencia del uso de ergogénicos y caracterizar a los individuos practicantes de musculación que hacen uso de sustancias ergogénicas y verificar cual profesional está realizando la prescripción de esas sustancias. Se evaluaron 164 individuos practicantes de musculación. Los participantes respondieron a un cuestionario elaborado en Google Docs con la temática sobre el uso de sustancias ergogénicas. Las cuestiones aplicadas siguieron carácter objetivo y de múltiple elección. En cuanto a los datos presentados, se concluye que el uso de esteroides no es tan común entre los practicantes de musculación, pero su prescripción no ocurre de forma debida, ya que en ninguno de los casos hubo prescripción médica. En lo que se refiere a los suplementos, su utilización es muy común, para los diversos objetivos, sin embargo, no es frecuente la indicación realizada por nutricionista. A partir del análisis de los datos, se percibe que hay la intervención incluso de Profesionales de Educación Física, lo que no está de acuerdo con las funciones que los mismos deben ejercer, resaltando que cada profesional debería actuar en el área en que le corresponde entrenamiento.

Palabras clave: Ejercicio físico; peso; ergogénico;

RESUMO

Diariamente aumenta o número de pessoas que procuram academias para o auxílio na busca do padrão estético desejado. Com a crescente da procura pela musculação, aumentou também o uso de ergogênicos, com o intuito de proporcionar a manutenção da saúde ou até mesmo, melhora no desempenho esportivo. O objetivo do presente estudo foi verificar a incidência do uso de ergogênicos e caracterizar os indivíduos praticantes de musculação que fazem uso de substâncias ergogênicas e verificar qual profissional está realizando a prescrição dessas substâncias. Foram avaliados 164 indivíduos praticantes de musculação. Os participantes responderam a um questionário elaborado no Google Docs com a temática sobre o uso de substâncias ergogênicas. As questões aplicadas seguiram caráter objetivo e de múltipla escolha. Tendo em vista os dados apresentados, conclui-se que o uso de esteroides não é tão comum entre os praticantes de musculação, porém sua prescrição não acontece de forma devida, visto que em nenhum dos casos, houve prescrição médica. No que diz respeito aos suplementos, sua utilização é muito comum, para os diversos objetivos, entretanto, não é frequente a indicação realizada por nutricionista. A partir da análise dos dados, percebe-se que há a intervenção até mesmo de Profissionais de Educação Física, o que não está de acordo com as funções que os mesmos devem exercer, salientando que cada profissional deveria atuar na área em que lhe cabe sua formação.

Palavras chaves: Exercício físico; musculação; ergogênicos.