118 - EVALUATION ON THE KNOWLEDGE ABOUT NUTRITION BODYBUILDING PRACTITIONERS OF THE CITY OF ANÁPOLIS

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INTRODUCTION

Food is central to the maintenance of body health, and is directly related to the physiological and psychological functions of athletes and non athletes (KAMEL, KAMEL, 2001).

In this context Gallardo and Moreno (2001) point out that the supply of energy substrates arising from food are indispensable to the attainment of physical activities as well as the ability to work.

In our days is evident that the addition of balanced diet with regular practice of physical activity are essential for maintaining health. Thus Simone et. al. (2007) highlight the important role of knowing so basic components of a diet, which will facilitate the choices and certainly will lead to healthier ways. Forjaz et. al. (2003) add that the type of exercise, endurance or resistance, may influence the choices.

In relation to resistance exercise, a balanced diet, adequate and appropriate composition is necessary for the muscle strength, allowing the intense training can produce gains related to hypertrophy and muscle size. The feed can influence the intensity of training and the process of muscle recovery (FRAGALA; KRAMER; Volek, 2008).

For Katch and McArdle (1996) a balanced diet is able to meet the needs related to the maintenance, restoration and growth of tissues in general, nutritionists agree that active people do not need a supply of nutrients beyond that achieved by balanced diet.

Practitioners of professional sports, or not, and even those people who exercise for recreation, are always interested in improving their performance in their sport. In general practitioners are committed to disciplined training, we observe that these individuals looking to improve their performance, so they have great interest in proper nutrition for the achievement of the proposed objectives (OLIVEIRA et. al.2009).

However Peres et. al. (2009) observed that gym´s frequenters looked for information by bases not scientific. Because of this Silva (2009) says that is clear the lack information about balanced diet by physically active individuals.

PURPOSE

To assess the nutritional knowledge of bodybuilders

Evaluate the dietary habits are showing nutritional intake of bodybuilders who participated in this research is suitable or not.

METHODOLOGY

Participants were 60 bodybuilders aged 30.58 ± 8.6 years, 55% women. The educational level of the participants mostly (53.3%) is comprised of individuals who possess higher incomplete or have completed the academic, the other (46.7%) had completed high school.

In this research three questionnaires were used to collect data. The first questionnaire was designed to assess students' knowledge about nutrition, and was based on Bassit and Malverdi (1998) consisted of 11 questions about nutritional knowledge and 1 in relation to nutritional counseling.

The questionnaire Hirschbruch and Pereira (1999) apud Nahas (2003) was used to evaluate the power of the individuals who made up the sample was healthy and had 20 questions about eating habits.

And the last questionnaire evaluated the use of dietary supplements and was adapted from Albino, Campos and Martins (2009). It consisted of 10 questions about the use of supplementation.

Participants were randomly selected and invited in different gyms of Anapolis city, they were informed about the aims of the research and the confidentiality of information provided by them through the questionnaires. Along with the questionnaires was given a term of informed consent which should be signed, a basic condition to participate in the study. Data were tabulated in a spreadsheet SPSS version 20.0 and treated in level of frequency and percentage.

RESULTS AND DISCUSSION

In the first question they were invited to list each macronutrient with her function, which second Mcardle, Katch, and Katch (2008) são: carbohydrate are energy source and keeps the integrity of the body's tissues. The proteins: they supply amino acid to the anabolic processes of synthesis and tissue renews, and lipids are power supply and thermal insulation.

In our research, 60% answered correctly about macronutrients function, when asked about the calorific value of carbohydrate and lipids, there was a large error percentage (73.3%), which shows that many people believe that carbohydrate is more caloric than fats. But in reality to 1g of lipid oxidation provides 9 calories to the body , while the oxidation 1g of carbohydrate provides only four calories (KAMEL; KAMEL, 2001), this means that the fats have more than twice the calories that the same amount of carbohydrate. The third issue, is related to micronutrients (vitamins and minerals), asked whether these nutrients provided calories to the body. The hit percentage was slightly higher than the errors, which shows that there are still many people who believe that micronutrients are able to provide energy, which is not true (KEYS, 2009).While asked about sources of macronutrients, 21.7% answered correctly sources of carbohydrates, 45% about proteins, and when asked what would be the source of food lipids obtained the highest percentage of correct answers (70%). This difficulty was also perceived by Bassit and Malverdi (1998), especially for the group of carbohydrates, meeting the findings of this study. For these authors these questions are of fundamental importance for the maintenance of adequate food intake.

The third issue, is related to micronutrients (vitamins and minerals), asked respondents to answer whether these nutrients supplied calories to the body. The hit percentage was slightly higher than the errors, which shows that there are still

many people who believe that micronutrients, besides exerting regulatory functions in biochemical reactions in the body would also be able to provide energy , which is not true (KEYS, 2009).

We questioned too how much meals are necessary for proper nutrition. We considered correct alternatives D and E, who claimed to be 5 and more than 5 meals, respectively. Of all participants 36 (60%) marked the correct alternative. The results were similar to those reported by Perez et al. (2009).

When asked what should be the correct distribution of macronutrients in the diet slightly less than half of the subjects, 29 people (48.3%) chose the correct alternative. Pereira and Cabral (2007) found in their research that 50% of subjects responded that the protein is the macro nutrient that should be consumed in larger quantities. But according to Franceschini (2002 apud PEREIRA; CABRAL, 2007) that the protein requirement should not exceed 15% of total dietary energy. The last issue asked if participants had been instructed by dietitians, and reveals that majority of the sample did not receive guidance for a nutritionist. So before the result of the classification of the sample according to their nutritional knowledge and corroborate with Bassit and Malverdi (1998) when these authors argue that the large percentage of error, especially in matters related to sources of nutrients in the diet, may be the reason of inadequate diet . So seems to be essential for monitoring a professional nutrition in order to establish the most appropriate nutritional knowledge that can lead to healthier eating habits.

From the data collected through the questionnaire on feeding practices, and de Pereira Hirschbruch (1999 apud NAHAS, 2003) classified the study participants according to their practices in relation to diet. According to each response of the students was given a score, and then his eating habits were classified into the following categories: Suitable, Good but can improve and need to improve a lot.

The collected sample result reached only 3 people who rated their diet as appropriate; 27 subjects were classified as having good food, but it could improve, and more than half of the sample obtained scores that ranked them with food practices that need to improve a lot, which means that these individuals maintain unhealthy eating habits. In a survey conducted by Silva (2009) found the result was similar to our results.

Of all the participants in the sample 22 people (36.7%) use supplementation and 38 people (63.3%) said they did not use any type of supplement or ergogenic resource. Other studies have found similar results, Trog and Teixeira (2009) 39% use some kind of supplements; Pereira and Cabral (2007) found the percentage of 38.3% of respondents are users of supplements.

For the majority of these subjects (47.3%) is not necessary supplementary because they have balanced diet. In search of Albino, Campos and Martins (2009) 52.65% of the interviewees answered that they did not consider it necessary, if the person has a proper diet. These responses show that many people have the knowledge that a balanced diet and quality, except in special cases, is able to meet the food needs of practicing physical exercises, including up to the competitive level athletes, eliminating the consumption of nutritional supplements (Carvalho et al., 2003).

when questioned why they use supplementation, we used six alternatives, which were grouped into two major groups. The first group: Health and quality of life (whose alternatives were: Quality of life, prevent disease and disability offset feed). And the second group was: Improving sports performance (formed by the alternatives: Increase energy, athletic performance, decrease recovery time and optimize results.

We found that most participants who reported using dietary supplementation makes use of such products for reasons related to physical exercise. The alternatives and health-related quality of life were cited by 31.8% of the sample, while 68.2% said they make use of supplementation for reasons that relate to the improvement of athletic performance. Albino, Campos and Martins (2009) in a study on the consumption of supplements in gyms supplement users questioned about what would be the reasons why using supplements and the answer was the most cited increased energy and athletic performance (48.27 %).

The data obtained seem to confirm the statement of Carvalho et al. (2003) in Brazil that nutritional supplements are used with purpose sportive (ergogenic and aesthetics), and that this habit has grown in local sports practices such as gyms.

Most users supplementation (68.2%) consume protein and amino acid products, other products were mentioned most vitamins and minerals (18.1%), while carbohydrates and other compounds obtained only 9.1% and 4.1 % respectively. Linhares and Lima (2006) also observed the prevalence of protein in the sample of their study: 78% of users consume proteins, amino acids utilize approximately 13%, energy use by 4.2% and 5% of the participants make use of complex vitamin supplementation for feed. As Albino Fields and Marins (2009) whose values found in the search are as follows: 30% of consumers mentioned protein products, amino acids 29%, the remaining 15% of the sample using high-calorie, 13% consuming vitamins and minerals, 10% used products based on carbohydrates and only 3% make use of fat burners.

CONCLUSION

The Anapolis bodybuilders possess reasonable knowledge regarding nutrition, leaving the desired especially in relation to the establishment of nutrient sources, as well as correct distribution of macro nutrients, showing that some practices such as excessive consumption of proteins are still considered as healthy and ideal.

The present study confirms the data found in the literature on nutritional supplementation: observed relative percentage of people who reported using nutritional supplements (36.7%), and among the most popular products we highlight the products composed of proteins and amino acids.

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EVALUATION ON THE KNOWLEDGE ABOUT NUTRITION BODYBUILDING PRACTITIONERS OF THE CITY OF ANÁPOLIS

ABSTRACT

Food is central to the maintenance of body health, and is directly related to the physiological and psychological functions of athletes and non athletes. Aim: To assess the nutritional knowledge of bodybuilders of Anápolis city. Methods: Participants were 60 bodybuilders aged 30.58 ± 8.6 years, 55% women. Three questionnaires were used to collect data, which assessed students' knowledge about nutrition, diet and use of supplements. Results: It was shown that much of the sample did not know the functions of macronutrients as well as their caloric value. What happens also as micronutrients. The majority of the sample means having a greater number of meals is the best choice, which goes against the scientific evidence. Evidenced an excessive intake protein, probably due to the lack of proper professional guidance. We highlight an indiscriminate use of supplements of various kinds. Conclusion: The bodybuilders possess reasonable knowledge regarding nutrition, leaving the desired especially in relation to the establishment of nutrient sources, as well as correct distribution of macro nutrients, showing that some practices such as excessive consumption of protein also are regarded as healthy and ideal. The present study confirms the data found in the literature on nutritional supplementation: observed relative percentage of people who reported using nutritional supplements (36.7%), and among the most popular products we highlight the products composed of proteins and amino acids.

KEYWORDS: Nutrition, Supplementation, Bodybuilding.

EVALUATION DE LA CONNAISSANCE DES PRATICIENS DE MUSCULATION NUTRITION DE LA VILLE DE ANAPOLIS

RÉSUMÉ

La nourriture est primordiale pour le maintien de la santé du corps, en soient directement lié aux fonctions physiologiques et psychologiques des athlètes et des non-athlètes. Objectif: évaluer les connaissances sur nutrition par des ville d'Annapolis. Méthodes: Les participants étaient 60 pratiquants de musculation, âge 30, 58 ± 8,6 ans, femmes 55%. Trois questionnaires ont été utilisés pour recueillir les données, qui ont évalué leurs connaissances sur nutrition, régime alimentaire et utilisation de suppléments. Résultats: la plupart de l'échantillon ne connaissait pas les fonctions de macronutriments ainsi que leur valeur calorique. Pas non plus qu'est-ce qui se passe avec les macronutriments. La majorité pense qu´avoir un plus grand nombre de repas est le meilleur choix, ce qui va à l'encontre des preuves scientifiques. Il y a un excès de protéines alimentaires, probablement en raison d'une manque d'orientation professionnelle adéquate. Nous mettons en évidence une utilisation anarchique des suppléments de toutes sortes. Conclusion: Les pratiquants d´Annapolis semble posséder une connaissance raisonnable sur la nutrition, en ayant une méconnaissance en ce qui concerne la mise en place de sources d'éléments nutritifs, ainsi que la distribution correcte des macronutriments. Il y a encore certaines pratiques telles que la consommation excessive de protéines qui sont considérées sain et idéal. La présente étude confirme les données de la littérature sur la supplémentassions nutritionnelle: une pourcentage significatif des personnes qui ont déclaré utiliser des suppléments nutritionnels (36,7%), et parmi les produits les plus populaires, nous mettons en valeur les produits qui sont constitués de protéines et d'acides aminés.

MOTS-CLÉS: nutrition, supplémentassions, culturisme.

EVALUACIÓN EN EL CONOCIMIENTO DE LOS PROFESIONALES NUTRICIÓN DEL BODYBUILDING DE LA CIUDAD DE ANÁPOLIS

RESUMEN

La comida es fundamental para el mantenimiento de la salud del cuerpo, y está directamente relacionado con las funciones fisiológicas y psicológicas de los atletas y los no atletas. Objetivo: Evaluar los conocimientos de nutrición de los culturistas de la ciudad de Annapolis. Métodos: Los participantes fueron 60 los culturistas edad 30,58 ± 8,6 años, 55% mujeres. Se utilizaron tres cuestionarios para recoger datos, que evaluaron el conocimiento de los estudiantes acerca de la nutrición, la

dieta y el uso de suplementos. Resultados: Se ha demostrado que gran parte de la muestra no se conocen las funciones de macronutrientes, así como su valor calórico. Lo que pasa también como micronutrientes. La mayoría de la muestra significa tener un mayor número de comidas es la mejor opción, lo que va en contra de la evidencia científica. Lo demuestra un exceso de proteína dietética, probablemente debido a la falta de una orientación profesional adecuada. Destacamos un uso indiscriminado de suplementos de diversos tipos. Conclusión: Los culturistas de La ciudad Anapolis poseen conocimiento razonable con respecto a la nutrición, dejando la deseada especialmente en relación con la creación de fuentes de nutrientes, así como la distribución correcta de los macro nutrientes, que muestra que algunas prácticas, tales como consumo excesivo de proteínas también se consideran como saludable e ideal. El presente estudio confirma los datos encontrados en la literatura sobre los suplementos nutricionales: porcentaje observado relativo de personas que reportaron el uso de suplementos nutricionales (36,7%), y entre los productos más populares que destacan los productos compuestos por proteínas y aminoácidos.

PALABRAS CLAVE: Nutrición, Suplementación, culturismo.

AVALIAÇÃO SOBRE OS CONHECIMENTOS NUTRICIONAIS EM PRATICANTES DE MUSCULAÇÃO DA CIDADE DE ANÁPOLIS

RESUMO

A alimentação é fundamental para a manutenção da saúde corporal, estando diretamente relacionada com as funções fisiológicas e psicológicas de esportistas e não esportistas. Objetivo: Avaliar os conhecimentos nutricionais de praticantes de musculação da cidade de Anápolis. Metodologia: Participaram da pesquisa 60 praticantes de musculação com idade de 30,58±8,6 anos, 55% mulheres. Foram utilizados três questionários para a coleta de dados, os quais avaliavam conhecimentos dos alunos sobre nutrição, hábitos alimentares e uso de suplementos alimentares. Resultados: Ficou evidenciada que boa parte da amostra não sabem as funções dos macronutrientes, bem como seu valor calórico. O que ocorre também como os micronutrientes. A maior parte da amostra entende que ter um maior número de refeições é a melhor escolha, o que vai de encontro as evidências científicas. Ficou evidenciada uma utilização excessiva de proteínas na dieta, provavelmente devido à falta de orientação profissional adequada. Destaca-se uma utilização indiscriminada de suplementos de vários tipos. Conclusão: Os praticantes de musculação de Anápolis possuem conhecimentos razoáveis com relação à nutrição adequada, deixando à desejar principalmente em relação ao estabelecimento das fontes de nutrientes, bem como na distribuição correta dos macro nutrientes, evidenciando que algumas práticas como o exagerado consumo de proteínas ainda são consideradas como saudáveis e ideais. O presente estudo confirma os dados encontrados na literatura sobre suplementação nutricional: observamos relativo percentual de pessoas que afirmaram utilizar suplementos nutricionais (36,7%), e dentre os produtos mais utilizados destacam-se os produtos compostos por proteínas e aminoácidos.

PALAVRAS-CHAVE: Nutrição; Suplementação; Musculação.