THE KNOWLEDGE OF CONSUMING OF SPORT SUPPLEMENTS AMONG ATHLETES IN SULAIMANIYAH CITY

Kashan Alaalddin Bayz , Shanyar Hussen Hamakarim , Rabar Rzgar Karim , Gashbin Fuad Abdulla , Sivan Jabar Mahmood , Bilal Rashid Hamasalh

Department of Food Science & Quality Control, College of Agricultural Engineering Sciences, University of Sulaimani, Kurdistan Region /Iraq. <u>bilalhama666@gmail.com</u>

Abstract

A healthy lifestyle has become a precious commodity with a pace of life. It can be achieved by not just well programed dietary patterns, but also by being physically active. However, nowadays well-balanced energy foods may already be overtaken by sports supplements by athletes. This study investigates the general knowledge of athletes about the benefits and health risks of consuming sports supplements using questionnaire research type using organized proper form. A two group of Participants of both genders has been taken in five sports centers (the GYM) in Sulaymaniyah city. The questionnaire was about their general background information in terms of using the GYM for a better lifestyle and most importantly sports supplement consumptions: for example, selecting the right product, determining a proper amount, appropriate time for consuming, observing their health status, the nature of their workout and goal to achieve. Depending on those questions and according to vast researches that have been conducted in this area, it has been revealed whether to which extent both genders are aware of their lifestyle, advantages and possible health risks of improper use of sports supplements. Further and complicated research is crucially needed to be done to make athletes, especially beginners aware of consuming sports supplements appropriately to achieve their goals healthily.

Keywords: Lifestyle, Sport supplements, Nutrition, Athlete's diet & GYM habits.

Introduction

Being an athlete means one in the competitive mode in a particular sport, especially with new methods of training and professional coaching. Apart from these sports supplements involves that encourage athletes being more competitive. Since dietary supplements can be defined as "nutritional ergogenic aids, and the ones intended for the improvement of an athletic performance and faster recovery are known sports supplements" [1], athletes, especially those who in the early ages see sports supplements as an extra effect and an ergogenic aid to boost their performance and reach their goals sooner [2]. the mass production of sports supplements and the prevalence of its consumption has increased dramatically over the past decade and unfortunately scientific researches do not be able to track all of them in terms of safety and quality. This is because sports supplements market already became a huge and profitable business [3]. Fulfil Energy requirements by adequate food choice is a key for growth and development, which can be a bit time consuming, especially during competitions. To compensate it and boost their performance athletes seeks sport supplements. It can be said that, this can be the reason why sports supplements can be seen as an important replacement of part of healthy foods that responsible for growth and development faster [4].

The reality is that many athletes do not eat a varied diet and/or their lifestyle/training may not allow sufficient time to be able to ingest sufficient food to meet energy needs.

Therefore, there are times when nutritional supplements may be appropriate and useful during training, competition and recovery. For example, an athlete who suffers from iron deficiency anemia will need to take an iron supplement to treat the anemia and meet their physiological requirements. despite Nevertheless, the clear undeniable risks of doing so, nutritional supplements, including vitamins, minerals, herbal preparations and ergogenic aids are widely used by elite athletes in an attempt to maintain their health and improve their performance [5, 6].

Supplements are often used as a replacement for food sources to provide the nutrients needed to fuel the body. In the vast majority of cases the optimum nutritional intake can be achieved through eating and drinking the correct amount of food and fluids at the appropriate time for training and competition. It may be that these food alternatives can also be consumed in a manner that is convenient and integrates well within an athlete's training program [5, 7].

The primary adaptations to training come from the specifics of the regimen itself and an athlete's diet should be constructed to training needs by providing support appropriate amounts of the necessary nutrients at the right times. Nutrition plays a vital role in the periods before, during and after competition. The best food choices may not make a champion out of an athlete with inferior talent, but an inadequate diet can certainly prevent a talented athlete from reaching optimal training and performance levels. In general, choosing a variety of foods in amounts that will support the energy demands of training will provide the nutrients necessary for optimal training [8, 9]. Many athletes do not eat a varied diet and/or may not be able to ingest sufficient food to meet energy needs. Therefore, there

are times when sports supplements may be appropriate and useful during training and competition. For example, there increased calcium requirements of amenorrhoeic athlete. As an area that has been extensively researched in the past, nutritional position statements have been released by a number of bodies including the International Olympic Committee. 'These statements reflect the current consensus of a number of leading experts within the academic community and the world of sport. All athletes should know that they must complement their training with a wellbalanced diet [9, 10].

In Developed countries food culture eating achieve physical performance and muscular strength is a growing phenomenon. The market for sports nutrition products has increased and a range of new market actors appeared. sales channels have and Compared to a decay ago lifestyle pattern has changed a lot. People have been understood more that healthy lifestyle is not just a precious thing to avoid obesity and chronic diseases but also having a strong and muscular body is kind of one of the valuable commodities. Conducting extensive research related healthy lifestyle (diet and physical activity), sport supplements consumption and the market place for sport nutrition supplements yet a major factor behind a change in lifestyle pattern [6]. Specially in developing countries, the number of people that start cautious about their health has increased dramatically. The number of gyms is perpendicular to this increase. People's knowledge toward weight management, choosing healthier food, eating more fruits and vegetables, doing physical activity has also increased surprisingly. Furthermore, the knowledge about the relationship between unhealthy lifestyle and increased chance of developing chronic diseases has fairly understood [11, 12, 13]. Although sport supplement industry and its

market place have a major impact of healthy life style, especially among individuals who are doing physical activity (fitness, and bodybuilding) to get fit, strong and muscular. However, the knowledge of using sport supplements may not be well understood. Since sport supplements are necessary to achieve a desired goal, the basic knowledge about how to use, when to use and most importantly the right amount is crucial to avoid unwanted health issues related using sport supplements and achieve the wanted goal more easily and in a right way [14]. In this study, it has been trying to reveal the basic knowledge of athletes about using sport supplements in Sulaimaniyah gym users. To reveal this, a questionnaire has been made asking them about the reason to go to the gym and using sport supplements.

Material and methods

In Kurdistan, Sulaimaniyah city, five Gyms has been selected randomly, the selection was design to cover Sulaimaniyah city in terms of bodybuilding, fitness and lifestyle. Overall, 40 athletes were participated in the questionnaire. 7-9 participants were selected in each Gym. This process consumes about two weeks. Their ages between a range from 20 to 35 years old. This study was performed by research designed questionnaire style, where a proper form was created. In the form, important questions about the aim of the study were asked. Moreover, a professional staff explained all questions one by one for the participants. This is to increase the chance of obtaining most accurate information possible and avoid any misunderstanding by the participants, thereby avoid getting false information.

Result and discussion

Participant's responses have revealed some vital information about their lifestyle; The people's knowledge and cautiousness about healthy lifestyle, more importantly about the risks, advantages and disadvantages of using sport supplements. Firstly, the women's responses for the questioners will be discussed. For the first question (what is the main purpose for going to the GYM?). the women's desires about going to the GYM was vary; out of 20 women 13 women are going to the GYM to obtain a healthy lifestyle. In the other words, to just have a healthy body and avoid health issues. 6 women are going to the GYM to have both healthy lifestyle and attractive and shaped body. Only one woman is going to the GYM for the purpose of bodybuilding. Furthermore, the time spend in the GYM is much shorter for women compare to men, which is 2-4 time a week for 1-2 hours a dav.

According to the results, the women's history for going to the gym goes back to maximum 2 years ago. This is inline of increasing the number of GYMs in Sulaimni city [15, 16]. Before that, less women went to the gym compare to men. When it comes to using the GYM, it is generally, people desire fitness, to just get read of extra fat and get a fitted shape, or bodybuilding, which is build and grow muscle and get a stronger body. Out of 20 women only 1 woman is going to the gym for bodybuilding, the remain all go to the gym for fitness. This might be because women have more tendency to get an attractive and shaper body compared to men, which that want to appear big and strong by building more muscles [17].

Using sport supplements is one of the most crucial subjects that attract athletes [18].

Using a certain portion of sport supplements also has been misunderstood among them. Since almost all women prefer fitness over bodybuilding, less women use sport supplements compared with men. Out of 20 women only 5 of them has been using supplements, of which three of them just using vitamin supplements. The remaining two has been using piles to lose weight for one month. They explained that using those piles was a suggestion of their friend and based on reading from unreliable sources. Moreover, their answer for whether using those supplements and pills has ever created a health issue or not, their answer was no and they also say "we still have been using them without requiring knowledge about the dose and side effects".

women that don't use sport supplements explained that is because of either for no or qualified experts to guide them to when or how to use sport supplements, or there is a reliable supplier or distributor or low supplements quality. When it comes to sport wen tend to exercise more compared to women. Spending more time at gym and even using sport supplements more.

Results show that out of 20 male participant 5 goes to the gym for body building, 5 to get a better health and avoid undesired health issues, and 10 of them goes to gym to tackle both goals. Furthermore, the number of days those men go to the gym was slightly higher,

(3-5 days) and spend about two hours exercising at the gym compared with women, which is 2-4 day per week and 1-2 hours per day (see chart No.1).

The history of going to the gym and doing exercises also an important parameter. More important than that is continuous exercising. Data suggests that men more obsessed with going to the gym continuously exercise at the gym than women which is no more than 6 months. Apart from the continuous exercising men spend more time and tend to build their muscles than women, which they obsessed with doing fitness and having a regular and fit body type (see chart No.1).

Sport supplement consumption is one of the most popular boosting-exercise factors among athletes. There is no doubt that it has a great advantage in terms of bodybuilding and weight loss. However, lack knowledge about how to used, when to use and right dose consumption might have more disadvantage than advantages [19, 20]. According to the data men using much more sport supplements than women. That is explain that men are going to the gym and exercise more than women. Out of 20 participants 14 confirm that using sport supplements. Nevertheless, only 6 said that don't use sport supplements (see chart No. 1). Furthermore, the main reason of using sport supplements by the participants is for bodybuilding.

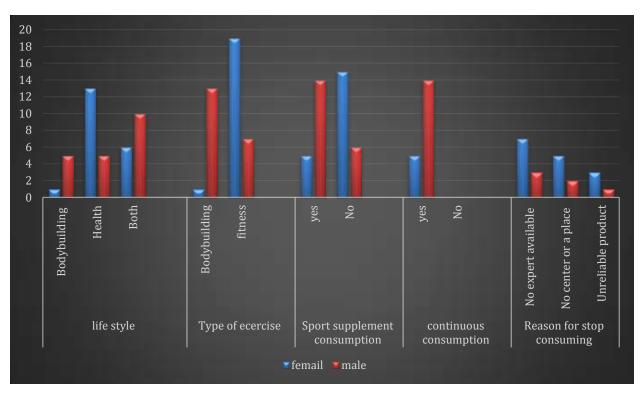


Chart No.1, The differences between men and women in terms of lifestyle, type of exercise and sport supplement consumption among athletes who go to the gym in Sulaimaniyah city.

The right dose of using sport supplements does not have any health issues. However, using them for a period of time or continuous consumption may have serious health issues, such as cardiovascular and kidney issues [19]. Out of 20 participants 14 supplements using sport continuously. The knowledge of using these substances is based on the knowledge of what their trainers told them to, when, how, what dose to consume. The main problem here the trainers that are working in the gyms only have their own information. In the other words, this knowledge must be based of reliable and extensive researches. Regarding this, only two participants are using sport supplements based on their own reading. The period of consuming sport supplements by participants was between 6 months to one year. However, their answer for the question "whether they face any health issues during that period" only one of them said "yes". The side effects of using sport supplements based on wrong information or lack of knowledge may have a long-term side effect.

The rest of participants that don't use sport supplements had a reason to do so. Three of them stop suing sport supplements because of there were no expert available to guide them. 2 of them said that there were no particular center or organization to visit and consult about using sport supplements. Only one participant said that there are many sport supplement products in the market, but is it difficult to find one with a good quality (see chart 1).

Conclusion

From the questionnaire from has been revealed that there is a difference between

men and women in term of life style. Major parameters were analyzed that are both related to life style. This includes general life style, wellbeing, body building and fitness. Women tend to going to the gym more compared to the past ten years ago. they exercise more and concerns about their life style. Men on the other hand, are more obsessed about going to the gym than women. This including the number of days in a week and hours per day. In terms of consuming sport supplements and other enhanced substances during workout, men tend to consume them much more that women. When it comes to the type of exercise, the majority of women go to the gym for fitness. However, men go to the gym for bodybuilding.

Recommendation

This study tried to reveal the basic but crucial information about lifestyle and consuming sport supplements, as there were no or very limited study in this field in Sulaimaniyah city. Further study should be implemented in order to reveal and understand our youth athlete's lifestyle and specially the quality and quantity of using sport supplements.

References

- 1. Position of the American Dietetic Association, 2000. Dietitians of Canada, and the American College of Sports Medicine: Nutrition and athletic performance. *J. Am. Diet Assoc.*, 12, pp.1543-1556.
- 2. Jovanov, P., Đorđić, V., Obradović, B., Barak, O., Pezo, L., Marić, A. and Sakač, M., 2019. Prevalence, knowledge and attitudes towards using sports supplements among young athletes. *Journal of the*

- *International Society of Sports Nutrition*, *16*(1), pp.1-9.
- 3. Darvishi, L., Askari, G., Hariri, M., Bahreynian, M., Ghiasvand, R., Ehsani, S., Mashhadi, N.S., Rezai, P. and Khorvash, F., 2013. The use of nutritional supplements among male collegiate athletes. *International journal of preventive medicine*, 4(Suppl 1), p.S68.
- 4. Wiens, K., Erdman, K.A., Stadnyk, M. and Parnell, J.A., 2014. Dietary supplement usage, motivation, and education in young Canadian athletes. *International journal of sport nutrition and exercise metabolism*, 24(6), pp.613-622.
- 5. American Dietetic Association and Canadian Dietetic Association, 1993. Position stand on nutrition for physical fitness and athletic performance for adults. *Journal of the American Dietetic Association*, 93, pp.691-696.
- 6. Burke, L.M. and Read, R.S., 1993. Dietary supplements in sport. *Sports Medicine*, *15*(1), pp.43-65.
- 7. Garthe, I. and Maughan, R.J., 2018. Athletes and supplements: prevalence and perspectives. *International journal of sport nutrition and exercise metabolism*, 28(2), pp.126-138
- 8. Thompson, J.L., 1998. Energy balance in young athletes. *International Journal of Sport Nutrition and Exercise Metabolism*, 8(2), pp.160-174.
- 9. Birkenhead, K.L. and Slater, G., 2015. A review of factors influencing athletes' food choices. *Sports medicine*, 45(11), pp.1511-1522.

- 10. Smith, J.W., Holmes, M.E. and McAllister, M.J., 2015. Nutritional considerations for performance in young athletes. *Journal of sports medicine*, 2015.
- 11. Mendis, S., Bettcher, D. and Branca, F., 2014. World Health Organization Global Status Report on Noncommunicable Diseases.
- 12. Public Health Agency of Canada., 2016. How Healthy Are Canadians: A Trend Analysis of Canadians From a Healthy Living and Chronic Disease Perspective. Ottawa: PHAC.
- 13. Busse, R., Scheller-Kreinsen, D. and Zentner, A., 2010. *Tackling chronic* disease in Europe: strategies, interventions and challenges (No. 20). WHO Regional Office Europe.
- 14. Oppliger, R.A., Case, H.S., Horswill, C.A., Landry, G.L. and Shelter, A.C., 1996. American College of Sports Medicine position stand. Weight loss in wrestlers. *Medicine and science in sports and exercise*, 28(6), pp.ix-xii.
- 15. https://www.thefreelibrary.com/Erbil
 +becomes+big+growth+market+for+
 fitness+products.-a0246148172

- 16. c. company. (2005-2021, 20/09/2021). Fitness Centers & Gyms in Sulaymaniyah. Available: https://www.cybo.com/IQ/sulaymaniyah/fitness-centers/page-2.
- 17. McDowall J. A. (2007). Supplement use by Young Athletes. Journal of sports science & medicine, 6(3), 337–342.
- 18. Khazan, M., Hedayati, M., Kobarfard, F., Askari, S., & Azizi, F. (2014). Identification and determination of synthetic pharmaceuticals as adulterants in eight common herbal weight loss supplements. Iranian Red Crescent medical journal, 16(3), e15344. https://doi.org/10.5812/ircmj.15344
- 19. Peeling, P., Castell, L.M., Derave, W., de Hon, O. and Burke, L.M., 2019. Sports foods and dietary supplements for optimal function and performance enhancement in trackand-field athletes. International journal of sport nutrition and exercise metabolism, 29(2), pp.198-209.
- 20. Fatihaf, M., SPORT BODYBUILDING. steroids, 79(4.76), pp.0-23.