

## ORIGINAL ARTICLE

# Investigation of Active Fitness Sportsman Attitudes toward Supplement Intake

Bülent Duran<sup>1</sup>, Emrah Aykora<sup>2</sup>

<sup>1</sup>Faculty of Sport Science, İstanbul University- Cerrahpaşa, Department of Coaching Education, İstanbul, Turkey; <sup>2</sup> Faculty of Sport Science, Çanakkale Onsekiz Mart University, Department of Coaching Education, Çanakkale, Turkey

**Abstract.** *Study Objectives:* This study aimed to investigate attitudes of actively doing fitness sportsmen toward nutritional supplements usage and intake. *Methods:* Quantitative experiment group including 104 [n=36 female, n=68 male] sportsmen while qualitative is 17. Data collected with the “Supplement Belief Scale” developed by Hurst, Foad, Coleman and Beedie (2017) (11) and adapted in Turkish by Karafil, Ulaş and Atay (2019) (12). Quantitative data analysed with independent sample t test and one way ANOVA and qualitative data with content and descriptive analyse method. *Results:* It is clear from the study that there is a meaningful difference between gender and years of doing sports variables. Male sportsmen more tended to use supplements than females. Also, beginner fitness sportsman are more inclined either. The final evaluation of findings shows both genders have similar attitudes. *Conclusion:* According to findings because of similar attitudes towards usage of supplements of both genders, in order to reach the most effective results usage preferences come first. It is derived from unconscious intake of supplements by beginners wondering fast body shaping results. Besides one group of participants have a conscious approach and have attitudes for asking expert thoughts about the usage of supplements.

**Key Words:** Fitness, supplement intake, attitudes

## Introduction

Actively doing sports individuals spend large amounts on their branches placing sport at an important point in their lives. Dedicating whole life to sports bring along sort of nutrition problems by and the nutrition style options are the most difficult problem for sportsmen. Notably unemployed students getting hard to afford anything, so it affects career developments in the sports arena. Although having specific nutrients they do also need nutritional supplements either. At that point, synthetic supplements come into for usage. But there are several arguments about the usage of

supplements in marketing. Most countries renewed their marketing procedures explaining that nutritional supplements don't treat or prevent or diagnose illnesses and they are just supplements for nutrition (1). Even so harmful effects of them are also constantly revived (2). Nieper (2005) searched out that %83 don't use and %42 using sportsmen believe to harmful and dangerous effects of supplements (3). Unhappily those question marks about supplements going to exist permanently. Does it carry the risk of having supplements? Yes, most supplements contain strong bioactive molecules for body health. So somehow they can be insecure and may damage to health (4). Especially

using while your body doesn't need (5). But still, supplements are an integral part of a sportsmen's diet. For instance, excluding ephedrine and caffeine alkaloids most of those supplements are allowed at sports competitions for sportsmen (6). In the light of those informations, this study aimed to investigate usage and attitudes of nutritional supplements by qualitative and quantitative data.

## Materials and Methods

### *Experimental Design*

To determine attitudes of supplement use of sportsmen, convergent parallel design from mixed method research designs exerted. In that type of research design qualitative and quantitative data collection together and analyse separately. After that, handled findings were interpreted all together (7). The most important additives of those methods are to make it easier to evaluate the topic from individuals' perspectives and to reach general tendencies and perspectives about the wondered matter. So qualitative variables about the usage of supplements were investigated according to the year of doing sports and gender variables. Both qualitative and quantitative data collected from regular exercising individuals at the fitness centres and interpreted together.

### *Experimental Group*

Study take action in 2019-2020 educational period. %65,38 (n=68) male and %34,62 (n=36) female sportsmen participated to study. Totally 104 sportsmen including %40,38 (n=42) are don't use and %69,62 used supplements until. Sportsmen selected with criterion sampling one of the purposive sampling methods. This type of method requires some researcher conditions about participants before (8). The main condition for this study is doing fitness and getting information about supplements. Participants had focus group interviews separately. I. focus group includes 16 fitness sportsmen who don't use supplements. II. focus group includes 17 fitness sportsmen that are supplement users. According to experts focus group interviewers maximally includes 6 or 15

members (9) (10). For direct interview reports participants called by nicknames.

### *Data Collecting Instrument*

Semi-structured interview form used for data collection. Semi structural interviews occur under the supervision of a view guide having enough information about the examining phenomenon or objective information about that experience (11, 12). Means researcher should be done fitness and coached fitness sportsman. To hinder data loss view voices recorded then written data composed and contents analyses made.

The quantitative part of study made with Sports "Supplement Belief Scale" developed by Hurst, Foad, Coleman and Beedie (2017) (13) and adapted in Turkish by Karafil, Ulaş and Atay (2019) (14). Scale is 6 Likert type and consists of 6 questions. Scale tests the belief of the sportsmen toward nutritional supplements usage based on exercise and competition. Scale score range is between 6-36 pts. Maximum score points out having tendencies for using doping or doping like prohibited substance nutritional supplements.

### *Statistical Analysis*

In the qualitative part of the study after focused group meetings, all interviews transferred to written media then analysed with descriptive and content analyse methods. It was aimed at content analyse to reach explanatory relationships and to inform readers after. In the final content analyse themes about topics defined and direct discourses of participants take place. In addition, levels of supplement intake belief determined quantitatively. Variables analysed with dependent t test or variance analyse method according to depending features (15).

## Results

Qualitative findings are given here by theme separation.

### *Theme 1. Inadequate Knowledge*

Focused group interviews showed many variations about thoughts for the usage of supplements.

During the interview participants declared both supportive and opposite thoughts and feelings about supplement intake so this indicates they had the information elsewhere and seem don't have enough knowledge about it. Hamza replied like "I never use a little sum of supplement never, don't want to lose instead of wondering my health by doing fitness." Mehmet "I don't want to get excess weight because of supplements". Yusuf "I do know supplements harm my body but I either have to use for success and ultimate result. It is in sports nature. In my opinion, no one doesn't use supplements doing sports." İsmail defines himself as mostly confused and replies "Occasionally I want to use supplements in order to take quick action for my body to shape, but now and then I have natural nutrients for that". Aliye explains her obligation for use like "Fitness sportsman all use supplements so do me either. Almost no one not using supplements around me." Differences among focused group interviews arise from inadequate acknowledgement about supplement intakes and uncertain targeting about career acting.

#### *Theme 2. Taking Assist-Support*

Focused group interviews showed in conditions with controlled usage of supplements some sportsmen have positive attitudes toward. Kadir one of the interviewers says "I don't know the contents of supplements and did a lot of examine on the internet and saw lots of different thoughts, but if my coach advised me to use I will". Hüseyin "My exercises hard so for nutritional supply, I do use supplements because I do also knew if I don't use my body gets a lack. So it's okay for me to intake". Participants' discourses show that they don't have prejudgement about supplement usage and they are and will be used for body support. And both some of them replied similarly if their coaches advised intake of supplements they will.

#### *Theme 3. Needs*

Different and interesting aspects are also given. In recent years informing of no need for supplements points such exercises with no use of supplements though. A trend about those exercises targets body building by no supplements intake. Hatice says "Even though supplements made of natural contents

constantly they are all products of trade sector because of that I got concerns. It is unclear what they contain, so unclear stuff shouldn't be taken." Oktay says "I prefer natural nutrition" and adding "it is unnecessary to use such compressed powder pills, we are not astronauts. Better to eat large portions of chicken and eggs." İsmail another fitness sportsmen says "Supplements' intake doesn't sense me sportsmanlike so because I don't prefer. And, they cost much, you can't buy a little sum, not everyone can buy regularly either." Hayri "I have memberships of some abroad networks. Bloggers on those webs don't use and advise using supplements that is a new trend, I will experience this way. Maybe in the future supplement intakes will be found not ethical." Interviews point out abroad web sources hardly against supplements.

#### *Theme 4. Danger*

One of underlined interview report sight is about danger theme. Coach Canberk tells an event around like "First class high school students of mine started doing fitness frail but they get bigger in a short time at 3-4 months. I wonder how they get so bigger in a short time and they replied starting body building and instantly getting protein powders. This situation haz- ardously harms developing aged youth." Younger participant of our study Furkan "When I signed up fitness centre, I saw large boxes around. Attendants told me if I want body building fast and lifting heavy weights, I should have them. Some of my friends bought then me either." That result of action showed again conscious coaches needed it. Just gaining much isn't the fair side of advising supplements.

#### *Theme 5. Anxiety of Look*

The other often reported topic of the interview is appearance or looking anxiety. People mostly don't like their body shapes so this triggers them to do fitness but waiting for rapid effect. That is natural to want evolving during fitness but not so fast. The body can change slow or fast based on lifespan activities an individual did. Also, people think of losing weight by eating or taking pills with no exercise. Fikret says "I longer didn't make exercise. I'll just register a gym and use supplements immediately. Yes! I'm done, ready for

summer.” Serdar one of the participants tells an event like “I am fitness manager for years. It annoys me that young men come to fitness, at the first step they just asking about supplements to have immediate bigger and developed abdomen and wonder if it is possible in a few months.”

### Quantitative Findings

Table 1 shows there is a statistically difference between the gender variable and the predisposition of nutritional supplements intake ( $t=5,266$ ,  $p=,001$ ). Male individuals are prone to using nutritional supplements more than females.

ANOVA test points out there are statistically meaningful differences among beginner, long and much longer time sports doing individuals and predisposition of nutritional supplements intake. The post-hoc test shows that there is a meaningful difference between beginner and much longer time sports doing people. It can be told that much longer sports doing individuals' preference of intake supplements lower than beginners.

### Discussion and Conclusion

Investigated findings show both gender attitudes are similar to each other. Beginning of the study prediction of a male are more tending to use supplements but, in the end, it is found similar for both genders. Especially rapid results claim direct people for intake

(16). Bu this attitude brings along problems with. Beginners of fitness and wondering rapid results directs people to use supplements unconsciously. Also, there is a conscious group either who asks expert sights for intake of supplements. Sürücüoğlu et.al. (1996) (17) declared that in case of appropriate exercise with age, gender, and type of sports branch; being fed enough and balanced can enhance performance through coaches should have enough and efficient knowledge about this topic. Denham (2017) (18) revealed national competitors just only ask the opinion of friends and coaches about supplements, but international ones take the ideas of doctors and nutritionists. Some sportsmen intake those supplies despite believing themselves achieving (19) (20). Petroczi et. al. (2008) (21) put forth similar results to it. Their study results find even %78 of young sportsmen have the thoughts unnecessary of supplements to achieve but %48 of them still use them.

As a result, supplement usage can be advised and followed up by conscious and wise coaches (22) to that are using supplements for several different reasons (23). Another important point is Ministry of Health authorities should check those supplements' usage and production continuously and regularly. Because every past day new supplement species being produced also their dangerous side effects become an investigation topic (24) (25).

Study results indicate the indispensable side of raising conscious coaches in order to direct regular fitness sportsman for the right choices of supplement intake. Therefore, knowledge and awareness levels of fitness branches students in sports faculties should be

**Table 1.** Independent T Test Results According To Gender

Dimension	Gender	n	Mean	SD	SE	t	p
Predisposition of nutritional supplements	Male	68	24,47	8,667	1,051	5,266	,000
	Female	36	15,75	6,656			

**Table 2.** One Way ANOVA Results According To Years of Doing Sports

Dimension	Years of Doing Sports	n	Mean	SD	ANOVA		Scheffe
					f	p	
Predisposition of nutritional supplements	a) Beginner	61	22,03	8,357	3,564	,032	a>c-
	b) Long time does	31	20,39	9,749			
	c) Much Longer does	12	14,50	9,877			

improved. It could be suggested arranging information meetings about harmful effects of unnatural supplement contents and usage to improve consciousness about them. Besides nutritionist advisements could be offered at the selection level of supplement type or dosage or necessity.

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## Correspondence:

Bülent Duran

Faculty of Sport Science, İstanbul Cerrahpaşa University,

Department of Coaching Education, İstanbul, Turkey

Email: bulentdrn@gmail.com