



ISSN: 2456-0057
IJPNPE 2019; SP2: 10-12
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C Rajesh
Assistant Professor, Department
of Physical Education, Govt.
Arts and Science College,
Kozhinjampara, Nttukal(PO),
Palakkad, Kerala, India

Dr. Vivekanandhan T
Associate Professor, Department
of Physical Education, Christ
College Irinjalakuda, Kerala,
India

Corresponding Author:
C Rajesh
Assistant Professor, Department
of Physical Education, Govt.
Arts and Science College,
Kozhinjampara, Nttukal(PO),
Palakkad, Kerala, India

(Special Issue- 2)

“International Seminar on Application of Engineering in Sports”

(October 11th-12th, 2019)

The effect of ICT training enhances nutritional knowledge among elite athletes

C Rajesh and Dr. Vivekanandhan T

Abstract

The purpose of the research was to investigate the effect of four weeks ICT training enhances Nutritional Knowledge among Elite Athletes. In this experimental study, demographic questionnaire, Nutritional Knowledge scale was used. Sixty elite Male athletes from University Calicut were chosen with randomized way allocated into an experimental and a control group. The experimental group participated in daily ICT training and they were watched Nutrition Knowledge questions which was presented in the power point for twenty minutes and once a day for thirty days. The data were analysed using descriptive Mean, SD and independent t-test in statically methods. Result exposed significant increase in Nutrition Knowledge.

Keywords: ICT training, nutrition knowledge, elite athletes

1. Introduction

Technology such as software programs are being used to monitor and analyse an athlete's nutrition and fitness levels in much more accurate ways. Athletes need regular well balanced meals and snacks to conserve the high energy difficulties of training, competition, and the rigor of an academic program. Assessment of meal patterns not only can assist the development of health promotion and prevention, but also provide evidence about desirable dietary behaviours. In turn, serve as an aid for nutritional advising and applied in the assessment for an eating disorder. An increased interest and accessibility of nutritional information seems to be on the rise, however, it is unclear if athletes are more knowledgeable about the role of nutrition on athletic performance. Professionals can help athletes recognize the role of nutrition in sports and help them choose the most appropriate foods and fluids to attain peak performance. Athletes can obtain nutritional knowledge from a variety of sources; such as magazines, parents, coaches and teammates. Athletic trainers, who are medical professionals, can also be a source of information for the athlete. The athlete, who has control over what to eat, must make decisions and become aware of his/her nutritional habits. The proper decisions can be obtained with the proper nutrition education. Athletes can understand the key concepts behind the food that they are eating with proper education and good decisions when it comes to their food choices. The ideal diet for an athlete is 40% carbohydrates, 30% protein and 30% fat. Carbohydrates are not only the favoured fuel but also the body's most efficient source of energy. A low intake of carbohydrates will not meet the energy demands on an athlete who requires long durations of activity. Carbohydrates should also be included in the pre-game meal, which should be eaten three to four hours ahead of competition along with plenty of fluids.

According to Green (2002) with the rapid developments in technology, ICT has made a significant impact on a number of athletes, and has the potential to enhance teaching and

learning in athletics. Clark (2013) Athletes typically require modestly increased intakes of macronutrients and micronutrients. The extra intake is required for proper repair and recovery, energy, metabolic function, and endocrine function. Naughton, (2011) the problem is that the typical collegiate athlete has a nutritionally inadequate diet, and their knowledge of nutrition is more commonly characterized by misconceptions rather than research-based information Cpsda (2014) the nutrition knowledge of college athletes. It has generally been found that an adequate knowledge base of proper intake is missing from this population. Wilson (2014) A potential exception to this rule would be students in nutrition or exercise-related as they would be expected to have higher levels of nutrition knowledge, due to their education in the field. It has also been found that athletes generally have slightly higher nutrition knowledge than their non-athlete counterparts, but it is still not at the desired level. Maibach (2003) It is common dogma that knowledge does not equal behaviour change or habits, and this can be clearly seen in the collegiate athlete population

2. Materials and Methods

2.1 Subjects for the study

To achieve the purpose of the study sixty Elite athletes were randomly selected in sixty elite Male athletes from University Calicut and their age ranged between 21 to 25 years.

2.2 Variables

Nutritional Knowledge scale is measured widely used in social-science research.

2.3 Methods

The purpose of the study was to investigate the effect of ICT training enhances Nutritional Knowledge among Elite Athletes. For the tests randomized group design which consists of control group and experimental group were used. The subjects were randomly assigned to two equal groups of thirty each and named as Control group and Experimental group. Experimental group undertook ICT training and they were watched Nutrition Knowledge questions were presented in the power point for twenty minutes and once a day for thirty days and control group undertook not any practice and they had their routine life. Nutritional Knowledge Scale is

measured widely used in social-science research.

2.4 Statistical Analysis

The data was collected before and after four weeks of training Paired 't' ratio was computed the level of significance was set at 0.01.

3. Result and Discussion

ICT training has significant effect enhances Nutritional Knowledge level between control group and experimental group. The experimental group university Elite men athletes were greater Nutritional Knowledge than the control group players.

3.1 Tables and Figures

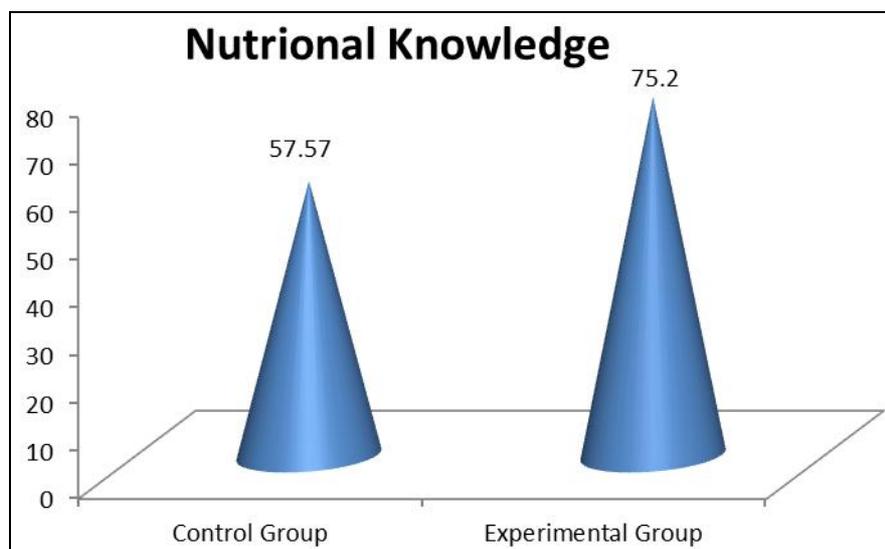
The primary objective of the paired 't' ratio was to describe the differences between the Control group and Experimental Group mean among Elite Athletes (Men) has been presented in the table 1.

Table 1: Showing mean difference of Control and Experiment group among Elite Athletes in their ICT training of Nutritional knowledge (men)

Nutritional Knowledge	N	Mean	SD	t-Value	Significant NS Level
Control Group	30	57.57	8.34	12.35	S (0.01)
Experimental Group	30	75.20	3.70		

Required table value: 2.58 (0.01)

Table 1 reveal that ICT training has significant effect enhances Nutritional Knowledge level between control group and experimental group. As the mean value control group is 57.57 and Experimental group is 75.20. An examination of table indicates that the obtained 't' ratio was 12.35 for Nutritional Knowledge respectively. The obtained 't' ratio was found to be greater than the required table value of 2.58 at 0.01 level of significance for 1, 29 degrees of freedom. Hence it was found to be significant. An elite athlete consumed good training and conditioning and a sensible diet for achieving the goal. Optimal nutrition is essential for peak performance.



Graph 1: Graphical representation Mean and SD of Nutritional Knowledge of Elite men athletes

4. Conclusion

The following conclusions were drawn on the basis of the analysis of the present data was significant difference found sixty elite Male athletes from University Calicut to Nutritional Knowledge. On the basis of mean scores Experimental university Elite men athletes were greater in Nutritional Knowledge level than the Control group Elite athletes. During the study investigator was realized that the Nutritional Knowledge depends upon player`s ICT knowledge experience and number of participation in the different tournaments. ICT training is all powerful tools that stimulate the brain and improve the power of the mind. Proper nutrition is vital for athletes to attain proper growth and perform optimally in sports.

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