10 (1) (2023) 58 - 63



Journal of Physical Education, Health and Sport



http://journal.unnes.ac.id/nju/index.php/jpehs

Status of Nutritional and Physical Condition of Football Athletes

Sumbara Hambali^{1⊠}, Bangbang Syamsudar², Muchamad Ishak³, Dindin Bernhardin⁴, Muhamad Syamsul Taufik⁵

Department of Physical Education, Health and Recreation, STKIP Pasundan, Indonesia¹⁴
Department of Magister Physical Education, STKIP Pasundan, Indonesia²³
Department of Physical Education, Health and Recreation, University of Suryakancana, Indonesia⁵

History Article

Received June 2023 Approved July 2023 Published vol 10 no 1 2023

Keywords

Nutritional Status; Physical Condition; Football Athletes

Abstract

This study aims 1) To find out how much the level of nutritional status of football athletes in SSB Alexis is. 2) To find out how much the level of physical condition of football athletes in SSB Alexis is. The research method used is a descriptive method through a survey approach. The research instruments used to measure nutritional status and physical condition are: 1) Nutritional status using Body Mass Index, 2) Physical condition using Bleep test. The population used in this study was the entire number of SSB Alexis U-17 players as many as 25 players. While the sample in this study was 25 SSB Alexis U-17 players. The sampling technique uses the total sampling technique. Guided by the findings of the research results on the nutritional status and physical condition of SSB Alexis U-17 football athletes, several conclusions can be drawn, namely as follows: 1) Based on the results of the Body Mass Index (BMI) test conducted on 25 SSB Alexis U-17 athletes showing normal category results. 2) Based on the results of the bleep test conducted on 25 SSB Alexis U-17 athletes, it showed moderate category results.

How to Cite

Hambali, S., Syamsudar, B., Ishak, M., Bernhardin, D., & Taufik, M. S. (2023). Status of Nutritional and Physical Condition of Football Athletes. *Journal of Physical Education, Health and Sport*, 10 (1), 58-63.

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INTRODUCTION

Nutritional status in sports should not be a separate part of supporting athletes> performance training during or competition. Nutritional status is an expression of the state of the body caused by food consumed, absorption of food, and use of energy that can be expressed in the form of variables (Maksum, 2014). Nutrition should be an integral part because good nutrition will make the body able to do a good job of doing well because of the availability of energy to support the movement. Increasing knowledge of nutritional status allows better management of resources so that one can choose types of food that are of high nutritional quality at affordable prices, so nutritional knowledge also has an important role to maintain the nutritional status of football player students (Luxbacher, 2011). Nutritional Status plays a very important role for athletes in achieving their best performance. Good nutritional status is needed to maintain a degree of fitness and health, as well as support the coaching of sportsmen's achievements (Bryantara, 2016). Therefore, efforts are needed to maintain the fitness of athletes with the best nutritional fulfillment during recovery so that athletes after competing can recover their physical condition.

The importance of football athletes to know their nutritional status and physical condition, so that athletes can be good from their nutrition and physical condition. If the athlete knows what foods good nutrition for the needs of the athlete are such as in the period of muscle development and to maintain endurance, so that when the athlete is given a weight program such as, strength (strength), endurance (endurance), muscular power (muscular power), speed (speed), flexibility (flexibility), agility (agility), balance (balance). Factors that affect the nutritional status of football players are energy intake, protein intake, and physical activity (Mahfud, Gumantan, & Nugroho, 2020). Nutritional status is an important part of human health. The results showed that both athletes and coaches put nutritional intake patterns as one of the priorities in coaching athletes, this is in line with the theory that optimal nutrition is petting for the best performance of athletes (Anam et al., 2016).

After the athlete already knows his nutritional status, the athlete must also know his physical condition, whether his training has progress or not in his physical condition, which is worried that the athlete is constantly training but there is no progress in his physical condition.

Therefore, athletes must know how to train and increase maximum strength, maximum speed, maximum endurance. If the athlete already knows how to train and improve physical condition, then the athlete will have very good progress. Physical condition is a unity of components that cannot be separated casually, both improvement and maintenance (Erfayliana & Wati, 2020).

If the athlete does not know the physical condition of the athlete, it can be the origin of being tired or the origin of doing without thinking about which one is right and which is not. Usually there are athletes who do excessive training (over training). The impact of over training can be decreased performance/appearance, reduced ability to do high-intensity exercises, high fatigue. Over training is a process of overtraining without adequate rest, resulting in a decrease in the condition of the athlete in the middle of the training program process which is marked by a decrease in the body-s ability to do exercises (Nasution, 2018).

Physical condition coaching aims to optimize the physical abilities of sportsmen as a basis for supporting performances when competing for the achievement of peak achievements. Sportsman Nutrition status planning to obtain optimal achievements, it is necessary to compile a futures food plan, both short, medium, and long term which is further described in athletes food planning programs. Athlete food planning needs to be aligned with exercise program planning.

Observing this problem, the author is interested in conducting a study and to find out the nutritional status and physical condition of football athletes in SSB Alexis U-17 on the grounds that nutritional status and physical condition are very basic things in playing football that every football player must have to obtain optimal achievements, So in this case it will be very helpful for researchers to obtain research data. Although there have been studies on nutritional status and physical condition in athletes, but in this study, the renewal lies in the subject, where and the characteristics of the age being scrutinized.

METHOD

This research is descriptive research with a survey method. the population used in this study was all ssb alexis u-17 players asak 25 players. the sampling technique uses the total sampling technique, so the entire population is sampled. of this study the instrument used is an instrument

for nutritional status using the body mass index while the physical condition uses the beep test. the technique used in the analysis of research data is to use descriptive statistics with analytical methods descriptive percentage, with groupings of categories very good, good, medium, less and less once.

RESULTS AND DISCUSSION

Body Mass Index (BMI) Test Result

The distribution of nutritional status categories of SSB Alexis U-17 football athletes with the Body Mass Index (BMI) test can be seen in the **Table 1.** below:

Table 1. BMI Test Result Data

No	Age	Body Mass Index		TA ATT	Infor-
		Height	Weight	IMT	mation
Sample 1	17	180	68	21	Normal
Sample 2	16	178	65	20,5	Normal
Sample 3	16	170	50	17,3	Normal
Sample 4	17	165	55	20,2	Normal
Sample 5	16	169	55	19,3	Normal
Sample 6	17	172	63	21,3	Normal
Sample 7	17	169	62	23,7	Normal
Sample 8	17	178	75	21,7	Normal
Sample 9	17	169	62	23,7	Normal
Sample 10	16	171	81	21,7	Normal
Sample 11	16	169	68	26,4	Normal
Sample 12	16	171	55	23,8	Normal
Sample 13	17	165	57	18,8	Normal
Sample 14	17	163	55	20,9	Normal
Sample 15	17	165	50	20,7	Normal
Sample 16	16	171	62	18,4	Normal
Sample 17	17	170	65	21,2	Normal
Sample 18	16	171	69	22,5	Normal
Sample 19	17	178	70	236,	Normal
Sample 20	16	168	58	22,1	Normal
Sample 21	17	175	63	20,6	Normal
Sample 22	16	164	55	20,4	Normal
Sample 23	17	160	47	18,4	Normal
Sample 24	16	160	55	21,5	Normal
Sample 25	17	175	47	19,6	Normal
Average	16,56	169,84	88,94	4,24	Normal

Based on the results of the Body Mass Index (BMI) test conducted on 25 SSB Alexis U-17 athletes, an average age of 16.56, height of 169.84, weight of 88.94, and Body Mass Index (BMI) of 4.24 were obtained , while the maximum score of height 180 cm and a minimum

score of 160 cm and a maximum score of 75 kg of body weight and a minimum score of 47 kg. Based on the decryption of data on the results of the Body Mass Index (BMI) test conducted on the SSB Alexis U-17 athlete, out of 25 athletes, normal category data were obtained

Beep Test Results

The distribution of the categories of physical condition of SSB Alexis U-17 football athletes with tests using the bleep test can be seen in the **Table 2.** below:

Table 2. Beep Test Results Data

No	Age	Durability		Веер	Informa-
		Levels	Flip	Test	tion
Sample 1	17	9	4	44,5	Good
Sample 2	16	9	3	44,2	Good
Sample 3	16	9	2	43,9	Good
Sample 4	17	9	2	43,9	Good
Sample 5	16	9	2	43,9	Good
Sample 6	17	8	9	42,7	Good
Sample 7	17	8	7	42,0	Good
Sample 8	17	8	6	41,8	Good
Sample 9	17	8	3	40,8	Good
Sample 10	16	8	2	40,5	Good
Sample 11	16	8	1	40,2	Good
Sample 12	16	7	8	39,2	Moderate
Sample 13	17	7	7	38,8	Moderate
Sample 14	17	7	6	38,5	Moderate
Sample 15	17	7	3	37,5	Moderate
Sample 16	16	7	3	37,5	Moderate
Sample 17	17	7	2	37,1	Moderate
Sample 18	16	6	7	35,3	Moderate
Sample 19	17	6	5	34,7	Moderate
Sample 20	16	6	5	34,7	Moderate
Sample 21	17	6	4	34,4	Moderate
Sample 22	16	6	4	34,4	Moderate
Sample 23	17	6	3	33,9	Moderate
Sample 24	16	6	3	33,9	Moderate
Sample 25	17	6	3	33,9	Moderate
Average	16,56	7,32	6	38,8	Moderate

Based on the results of the bleep test conducted on 2 5 SSB Alexis U-17 athletes, an average age of 16.56, level 7.32, turn 6, and bleep test 972.2 were obtained, while the maximum score of the level was 90 cm and the minimum score was 6 cm, and a maximum score of 9 and a minimum score of 1. Based on the decryption of data on the results of the beep test conducted on the SSB Alexis U-17 athlete, out of 25 athletes, 11

people were obtained in the good category and 14 in the medium category.

Based on the results of the study above, it shows that the nutritional status and physical condition of SSB Alexis U-17 football athletes show that athletes have good abilities and conditions, it can be seen from the average data of their nutritional status and physical condition. The nutritional status of SSB Alexis U-17 football athletes has a normal status. This situation shows that SSB Alexis U-17 football athletes have a category of requirements for players who have normal nutritional status as a condition of being a football player who has an ideal nutritional status. Football is one of the sports that requires its athletes to have an ideal Body Mass Index (Mahfud, Gumantan, & Fahrizqi, 2020). Basically, football in addition to mental and emotional factors as a determinant of high achievement, also really requires physical readiness, mastery of techniques and nutritional status which is good. A footballer must be able to perform explosive movements, move agilely and flexibly, therefore an ideal nutritional status is needed (Alfiansyah et al., 2021). A football player is required to have a normal body mass index, an above-average posture, and a proportional body composition, where muscle mass and fat must be according to its ideal level (Fithra Dieny et al., 2020).

In addition, the level of physical condition of SSB Alexis U-17 football athletes still has 11 players who have a good category and 14 people in the medium category. The game of football requires very good physical condition to play optimally. This is because players must be able to play fully so as not to harm their own team (Bryantara, 2016). Most coaches will have more players who have a good level of physical condition than players who have good playing skills but do not have a good level of physical condition (Fajeri & Pramono, 2017). The pressure from the opponent in the game will affect the level of fatigue for football players. Normal nutritional status will help players to move and have maximum support in the game of football in teams as well as individuals (Wibowo & Hakim, 2019).

Football is one of the sports that has strict requirements for players to be able to play good football and have high achievement goals. The Soeratin Cup is a youth football competition played throughout Indonesia. Coaching is a key goal for 17-year-old age group competitions, but achievement is also an important goal for any team they want as a manifestation of a good training process. Football achievements must be sup-

ported by the conditions and abilities of players to the maximum. Nutritional status and level of physical condition are one of the supports for players to achieve maximum achievement (Rohman & Effendi, 2019; Suryana & Fitri, 2018). Physical condition does have a relationship with the idealization of one's body, people who have an ideal body tend to have better physical qualities than someone who has a state of affairs his body falls into the above normal category (Baihaqi & Hariyanto, 2020).

Nutritional status is an expression of the state of equilibrium in the form of certain variables or it can be said that nutritional status is an indicator of the good and bad of daily food provision. The nutritional status of athletes is an important thing that needs to be studied more deeply, so that the expected training goals can be formed (Lopez-Sanchez et al., 2019). In line with this opinion that a good nutritional status will be beneficial to maintain a degree of fitness and health and as a source of growth for the child as a means for coaching the achievements of football players (Fister et al., 2019). A good nutritional status will help players to prepare themselves for training that gradually has an increased load. The better the nutritional status, the better the player's preparation will be to improve aerobic endurance and improve their playing skills (Tutus Eshananda Hars, Hermawan Pamot, 2014).

Physical preparation is an important thing for a team to achieve optimal achievements as previously explained that physical condition greatly affects the appearance of a player on the field through physical training, the condition of players who are not good will improve. Moreover, football is a team sport, where every player needs the quality of physical fitness related to muscle strength, speed, agility and high energy (Fink & Mikesky, 2020). The factor of training is very influential on the achievement of an athlete, the development of physical condition is focused on the dominant component of physical ability to achieve achievements (Ihsan et al., 2018). In addition to general needs, each branch also requires physical condition development.

Physical condition coaching aims to optimize the physical abilities of sportsmen as a basis for supporting performances when competing for the achievement of peak achievements. Sportsman Nutrition status planning To obtain optimal achievements, it is necessary to compile a futures food plan, both short, medium and long term which is further described in athlete food planning programs (Mujika et al., 2018), and regarding athlete food planning needs to be alig-

ned with physical exercise program planning as well (Reale et al., 2017).

Based on the discussion, it appears that the development of the physical condition and nutrition of an athlete is needed and taken more seriously and is carried out in accordance with the science that supports. The correct coaching process will make the achievement of the goals of the applied exercise program will run optimally. A reliable coach will be able to combine all aspects that can affect the quality performance of the athlete.

CONCLUSION

Guided by the findings of the research results on the nutritional status and physical condition of SSB Alexis U-17 football athletes, several conclusions can be drawn, namely as follows: (1) Based on the results of the Body Mass Index (BMI) test conducted on 25 SSB Alexis U-17 athletes, it showed normal category results. Based on the results of the bleep test, the test conducted on 25 SSB Alexis U-17 athletes showed moderate category results. (2) Based on the results of this study, it is recommended to coaches and coaches of football sports, to pay more attention to the nutritional status and physical condition of the athletes. Every test that uses test kits needs to show the procedure for using test kits so that there are no errors in use.

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