

# Nutrition Management in Sports State High School Athletes, Riau Province

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**Abstract** - Proper and balanced nutrition delivery for athletes is indispensable in an effort to pursue maximum achievement. One important aspect that is often forgotten in coaching athletes is the athlete's nutritional factor. The research aims to 1) know the nutritional management of athletes in high school sports Riau province; 2) know the suitability of nutritional needs in high school sports athletes Riau province. This method of research is a qualitative descriptive, with data collection techniques through observation, interviews, and documentation. The informant is selected purposive sampling. The Data is analyzed using Interaktiv analysis model of Miles. The code of Neuman in Jenning (2001) which states for the number of populations under 1000 the size of the required sample is 30% of the total number of existing populations. Research sampling is done with purposif sampling technique. The results of the research obtained that 1) the management of nutrients athletes in sports high school Riau Province has been conducted school management in cooperation with food managers or catering parties; 2) suitability for the nutritional needs of athletes in sports High school Riau Province has not been met with maximum. It can be concluded that the athlete's nutrition is done by school management with the food organizer or catering has not been running with maximum and need for improvement in order to help the athlete's nutritional needs can be covered Good. It can be advised to improve the service in nutrition fulfillment by increasing the budget in food management as well as performing nutrient improvement and maintenance of the nutritional status of athletes to better so as to improve performance and achievement Athletes.

**Keywords:** *management, nutrition, athletes*

## I. INTRODUCTION

Sports achievement is an activity to improve physical performance, technique, tactics and psychological maturity that brings a positive impact on the health of athletes. Exercise can improve the physical quality is by increasing the efficiency of muscle work and physical health. The energy needed for physical

performance is gained through the metabolism of food ingredients, which are consumed daily. Food for an athlete must contain nutrients in accordance with what is needed for daily activities and exercise. The selection of proper and balanced nutrition for athletes can help even be needed in his quest to pursue maximum sports achievements. The role of nutritional substances for athletes is undoubtedly because appropriate nutrition not only affects the functional body at rest, but also contributes a significant contribution to efficiency during exercise activities.

An athlete to achieve maximum achievement in a sports branch requires an optimal training system, including availability and nutritional coverage according to the type of sport. Nutritional intake, especially energy intake and protein that is not appropriate will affect the incidence of chronic energy deficiency in adolescent students (Pujiatun, 2014) and also affects performance that does not match the potential.

The planning of nutritional needs of athletes should also be supported with adequate budget because the fulfillment of nutritional adequacy requires a budget that is not minimal when adjusted to the daily adequacy of nutritional athletes. Therefore, the role of the government as a policy stakeholder is expected to provide food budgeting in accordance with athletes' daily adequacy standards. So coaching athletes who live in dormitories will get the feasibility of food intake according to their daily needs.

The existence of the education and Training center of students and High school sports is a potential container to foster athletes in their teenage years. A potential student who is capable of having the power, ability, and capacity to be developed. Growth in the age of teenagers often faces several problems in terms of needs in nutrient intake, such as the restriction of intake due to the desire to control weight or dissatisfaction of the body shape and eating patterns are irregular because of the solids School activities. This results in declining performance and slow growth of athletes' body even excess nutrients to make it more unideated athlete's body.

The education and Sports center of Students and sports-based schools such as SMA Sports is the warehouse

of a tough Indonesian future for young athletes... In an effort to print talented young athletes, not only to sharpen the Skil but to support from it all must take into account the adequacy of balanced nutritional intake.

SMA Negeri Riau Province is the only sports-based school in Riau province. Established in the year 2012 by combining the concept of curriculum 13 and development expertise in the field of sports. SMA Negeri Riau Province has six majors in the sports department, sports Paddle, Bolavoli, football, futsal, athletics and table tennis. All athletes occupy and live in dormitories with a total of 287 athletes.

Based on observation there is a phenomenon that occurs in the field. The school management provides a food menu for high school athletes in Riau province three times a day, morning and evening. Food distribution is done by food processing personnel then athletes take it according to predefined portions. The food provided by the dorm is uniform or the same menu for all athletes who come from six sports and sometimes the menus served do not match the master menu. During the athlete to eat high school sports in Riau province also no supervision from the trainer or nutritionist so that the possibility of the nutritional needs of athletes is very large.

The key to the success of nutrient management in school is good. If the management of the school understands the nutritional needs of athletes, the energy adequacy of athletes will be better so that achievements will be easily achieved. Therefore, this research in will discuss about the management of sports nutrition in the athlete High School sports state of Riau Province.

## II. METHODOLOGY

The draft of this research is using qualitative descriptive research methods. This research was conducted in high school sports Riau province. The subject of this study is all athletes of sports in the state high school sports. The code of Neuman in Jenning (2001) which states for the number of populations under 1000 the size of the required sample is 30% of the total number of existing populations. Research sampling is done with purposif sampling technique. The data collection techniques used in this study were observations, in-depth interviews and documentation. Data analysis techniques using Interaktive model of Miles and Huberman analysis consist of four stages: data collection, data reduction, data presentation and withdrawal of sympulsion/verification.

## III. RESULTS AND DISCUSSION

### *Nutrition Maagement In High School Sports Athletes In Riau Provine*

Management of High school athletes in Riau province has a very important position in managing and fulfilling the nutritional needs of athletes placed in dormitories therefore it is necessary to have serious attention in the nutritional settings of athletes. Based on in-depth interviews to coaches. Setting up an athlete's meal along with exercises is a priority in coaching. " In addition, athletes ' nutritional fulfillment is a key capital in the performance improvement of athletes. "Attention to food intake athletes get first priority, because food is very large in effect on the health and fitness of athletes to increase performance." Athletes should have the opportunity to learn about food, nutrition and Health, creating healthy eating habits. Thus, efforts to achieve high-quality athletes in sports can be achieved. Adequate dietary intake for an athlete will have a good impact on the exercises he can do. It will further support achievement. Food providers are an important aspect in the nutrition arrangement of an athlete. Based on interviews to trainers and athletes, "During this time the food I get from the hostel is provided by the food officer or catering. Some trainers say that each sports branch has its own calorie portion in each meal. The setting pattern of the athlete's meal for 24 hours is mentioned according to the interview to the athlete is 3 times a day, which is morning (breakfast), lunch and dinner. "In the day I eat 3 times, morning, noon and night." "Meals 3 times a day, breakfast at 07.00, lunch time. 13.00 and dinner o'clock. 19.00. Each meal (morning/afternoon/night) is said to be a dish containing rice, side dishes, vegetables and fruit. Every meal that athletes eat does not understand how many calories each they eat. "I never count (take into account) the composition of food, just as you wish." Based on the athlete's dietary intake pattern, athletes ' opinions on the adequacy of food intake needs vary. Some say it's enough, some say not enough needs. "The food provided by the hostel is sufficient for my needs, the food is delicious and nutritious." "The food I ate is already healthy 4." The food provided I feel has sufficient health for the body although without the intake 4 healthy 5 perfect. " As for some opinions of athletes who mention food intake is insufficient, among others "food that I consume so far I think not enough needs, because the menu is never complete." "The food provided is lacking in the needs of my body, the food is less varied."

Coaches and athletes in sports High school Riau Province expressed the need for improvements to the athlete's nutritional management. A higher concern for athletes ' food intake patterns since the initial construction, the preparation of matches up to the game. Increased food diversity to achieve 4 healthy 5 perfect, including dietary supplements (vitamins). The use of nutritionist as a party who can provide nutritional management of athletes in order to be as close as necessary. Until the education of trainers and athletes on nutritional management.

### *Conformity Of Nutritional Needs In High School Athletes In Riau Province*

An athlete needs a higher amount of energy than non-athletes around 2000 calories. In general, athletes need a planned meal well with calories, macronutrients (especially carbohydrates and proteins) are adequate, and mikronutrein (especially iron, zinc and vitamins A, D, E, B6, and B12) to maintain health and performance. A balanced healthy food proportion of 60% carbohydrate, 25% fat, and 15% protein from total needs or energy output per day.

Based on interviews and observations, it was discovered that during this time there were no calorie needs calculations against athletes. Athletes mention that their diet is generally three times a day, sometimes coupled with snacks and supplements/vitamins. "In one day the athlete Eats 3 times a day, each meal 1 portion (one plate). Not determined how much content in one portion of the meal." The amount of food intake given only by estimates is even often adjusted to the wishes of athletes.

The nutritional needs of an athlete differ from the needs of non-athlete nutrients. Because an athlete has an intensity of exercise and work of heavier body organs. Especially for teenage athletes whose nutritional needs are very high, in addition to supporting their physical activities, but also must meet the needs of its growth that is in its lifetime. The effort to fulfill nutritional adequacy should be supported by athletes, coaches, families and the environment in order to always maintain health with good nutrition or balanced food arrangement.

Nutritional factors play an important role in physical training programmes to support athletes' achievements. Nutrition is a factor that must be considered to support athletes' performance, especially in the balance between intake and energy expenditure during training and when competing. The proper fulfillment of nutritional intake will create the athlete performance before, during and recovery time. The fulfillment of proper nutritional intake will make the athlete's performance to maximum. Any athlete who seeks to improve performance during training and competition should focus on fulfilling nutritional intake in phases before and after training or playing.

But conversely, if the deficiency will affect unexpected performance due to less energy supply, and can also cause Fatigue and pain, so that muscle growth is not maximal. All of this will affect the performance of an athlete.

In the world of sport is not only a method of exercise or also talent that will determine the achievement that can be achieved by an athlete, mamun consumption of proper nutrition in the daily directly will also give energy intake (calories) is great for Support their activities.

Some athletes with a different sports background show that nutrition and exercise together will produce good achievements. Consumption patterns of athletes who do not excel tend to not fit the needs of fat and excess protein

consumption but do not consume carbohydrates according to the target, as well as consumption of vitamins C and Fe that tend to exceed Needs. To meet the needs of nutrients, should arrange a balanced menu that is used as a guide.

The fulfillment of nutritional intake is key to the success of athletes. Athletes who get nutritional intake according to individual characteristics and sports branches will have the adequacy of nutrients to practice and improve performance, the good performance of athletes will support the athlete to gain the best achievement.

The Menu of an athlete must contain all the necessary nutrients that are carbohydrates, fats, proteins, vitamins, minerals and water. This Menu is based on the amount of energy needs and balanced nutrient composition of energy generation the results showed that both the athlete and the trainer put the nutritional intake pattern as one of the priorities in the athlete's coaching. This is in line with the theory that optimal nutrition is important for the best performance of athletes. Despite being one of the priorities, but in the implementation of nutritional management athletes have not been fully handled well. Each sports branch has its own setting in terms of food intake. However, on some branches there is a help given to athletes, namely in the form of vitamin supplements. The addition of this supplement is felt quite helpful for athletes.

Based on the results of the study, researchers found that the master menu that had been drafted showed that the intake of food given to athletes by as many as three times a day, morning and evening. It is not standard in fulfillment of nutritional needs, should athletes be given nutritional intake before exercise, breakfast or breakfasts, after-workouts, lunch, and snacks after afternoon exercise, dinner and extra food.

Specifically, the advantages that will be gained with good nutritional management are optimal development results, improvement of the athlete's condition of increased, weight and physical that is idel, decreased risk of accidents and pain, the level of confidence that Increase and stable performance. As for the losses that will occur when the nutritional management of athletes is not good in addition to the absence of the above benefits is the increasing cost of health maintenance, poor food selection (not appropriate body requirements). Selection of food and beverages with poor availability and improper use of dietary supplements. Adequacy of nutritional needs based on the research results found that it has not been fully fulfilled. Often in the portion of feeding the athlete does not include nutrient needs as appropriate.

The percentage of athlete's nutrition has not fulfilled the balanced healthy food. Related to calorie needs per day, based on the results of research found that so far there is no calculation of energy needs for athletes. The fulfillment of nutrients is based solely on the estimate of each athlete, no dosing. The demfish condition will adversely affect the athlete.

#### IV. CONCLUSION

Based on the results of research and discussion, it can be withdrawn as follows: 1) nutritional intake patterns as one of the priorities in the development of athletes, but in the implementation of nutritional management athletes have not been fully handled with maximum. 2) The nutritional management of athletes has not been in accordance with the calculation of energy needs of athletes concerned. It can be suggested: improve the service in the nutrition fulfillment of athletes by increasing the budget in food management as well as carrying out nutritional and maintenance status of athletes' nutrition. For better so it can improve performance and achievement Athletes.

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