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Effect of nutritional deficiency in cricket players

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Abstract

Nutrition is an important aspect for all especially for sportsperson. They need balanced diet to maintain their stamina. Good food habit provides them energy to perform their activities in a better way. Sports and nutrition are directly related to each other. Taking into consideration the fact of sportsperson need more energy to carry out their sporting activities effectively it become prime importance to take care of the nutrition for sports performance? It may keep fit, healthy and taking good adequate amount of balanced diet in their routine schedule thus improve the quality of life or it can be to participate in playing games of cricket at national and international level and possible competition to achieve success, good nutrition can enhance sporting performance.

Keywords: Effect, deficiency

Introduction

The body requires many different vitamins and minerals that are crucial for both body development and preventing disease. These vitamins and minerals are often referred to as micro-nutrients. They are not produced naturally in the body, so they have to get them from our diet. A nutritional deficiency occurs when the body does not absorb or get from food the necessary amount of a nutrient. Deficiencies can lead to a variety of health problems. These can include digestion problems, skin disorders, stunted or defective bone growth and even dementia. The usual cause of nutritional deficiencies is a poor diet that lacks essential nutrients. The body is able to store some nutrients, so a deficiency may not be caught until it's been without the nutrient for some time.

Objectives

1. To study the socio-economic status of cricket players.
2. To assess the habitual nutrient diet and effect of nutritional deficiency.

Methodology

The study was conducted in Faizabad district. Total 10 colleges (intermediate and degree colleges) were selected in this study. 220 players were selected in these selected colleges. Dependent and independents variables such as age, education, religion, family structure, occupation, family income, nutritional status, physical activity, play etc. The statistical tools were used such as chi-sq., mean, SD, CR etc.

Results

Table 1: Distribution of cricket players according to their fathers' occupation N=220

Occupation	Frequency	Percent
Service	121	55.0
Business	78	35.5
Agriculture	-	-
Retired	9	4.1
Others	12	5.5
Total	220	100.0

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Maximum (55.0%) fathers of cricket players were in service, and they have good knowledge of dietary food stuff, which is very useful for their children's health. They give them chowanpras, juices, squashes, salad, protein drink fruit and soups etc. whereas, 35.5 percent belonged to business and

these fathers were busy in their daily schedule jobs and they are not aware about diet. They provide their children junk food like puries daily and spicy food and only 5.5 percent fathers were in professional line so they know about the dietary food.

Table 2: Frequency distribution of cricket players according to general appearance N=220

Criteria	Frequency	Percent
Healthy	202	91.8
Unwell	18	8.2
Ill	-	-
Total	220	100.0

Majority (91.8%) of respondents were healthy because they were taking adequate amount of balanced diet and remaining 8.2 percent were unwell because they were having nutrient deficient diets no cricketer was found ill. As per general observation, the cricketers were looking very active and playing cricket with interest.

Table 3: Nutrient intake by the cricketers

Sl. No.	Nutrients	Intake	RDA	Deficit (%)
1.	Protein (g)	80	76	+5.3
2.	Energy (Kcal)	2653	2533	+4.7
3.	Vitamins & Minerals (µg)	708	600	+18.0
4.	Carbohydrates (g)	260	400	-35.0
5.	Water (liter)	4	5	-20.0

Cricketers are advised to adjust the amount of carbohydrate they consume for fueling and recovery to suit their exercise level. The GI has emerged of increasing interest to players in the area of sports nutrition. More research is required to

confirm the best recommendations for sports nutrition. protein requirements of sports-active people because individual needs vary. Exercise scientists have found that players need slightly more protein than other people do to repair the small amounts of muscle damage that occur with training, to provide energy (in very small amounts) for exercise (important for endurance players and those engage in intense exercise, where the protein can provide energy if muscle glycogen stores are depleted and blood glucose levels are low), and to support the building of new muscle tissue (essential for growing teenage players for both growth and muscular development). Amino acid supplements will provide extra benefits for players involved in intense training. For most people, sufficient amounts of protein can be obtained from a healthy diet. A well-planned and nutritionally adequate diet should meet a player's vitamin and mineral needs. Supplements will only be of any benefit if the diet is inadequate or the player is diagnosed deficiency, such as an iron or calcium deficiency. Water is a suitable drink, but sports drinks may be required, especially in endurance events or warm climates. Sports drinks contain some sodium, which helps absorption.

Table 4: Effect of nutritional deficiency in cricketers

Sl. No.	Nutrients	Deficiency symptoms	Frequency	Percent
1.	Calcium	Osteoporosis	42	19.1
2.	Sodium	Hypertension	85	38.6
3.	Fat	Cancer, heart disease	22	10.0
4.	Fibre	Cancer	24	10.9
5.	Fruits	Heart disease	22	10.0
6.	Sugar	Tooth decay	32	14.5
7.	Potassium	High blood pressure	84	38.2
8.	Folate	Neural tube defects	98	44.5

Nutrient deficiency diseases occur when there is an absence of nutrients which are essential for growth and health. Lack of food leading to either malnutrition or starvation gives rise to these diseases. Another cause for a deficiency disease may be due to a structural or biological imbalance in the individual's metabolic system. If the cricket player's does not take proper nutrient in their diet so the different nutrient deficiency disease may be caused such as calcium deficiency is osteoporoses, sodium deficiency is hypertension, fat deficiency is concern heart disease, fiber deficiency, cancer, folate deficiency, neural tube defects, potassium deficiency, high blood pressure sugar deficiency is tooth decay.

Conclusion

It is important to realize that every individual has different dietary requirements, based on their age, gender, body type and their levels of activity and all of these factors should be taken into consideration, while planning a diet for a cricket player. Low energy intakes are a restricted for players as they

would not even feel deprived or over hungry with 10-20 percent lower energy intake but on the contrary lose weight.

Recommendations

- Achieve physical fitness by including cardio-vascular conditioning, stretching exercises for flexibility and resistance exercises or calisthenics for muscle strength and endurance.
- Consume a sufficient amount of fruits and vegetables while staying within energy needs. Two cups of fruit and 2 ½ cups of vegetables per day are recommended for individuals consuming a 2,000 calorie diet, with higher or lower amounts required dependent upon a cricket player's actual calorie needs.
- Consume 3 cups per day of fat free or low fat milk or equivalent milk products.

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