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Good nutritional diet for cricket players

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Abstract

Sports nutrition has recently emerged as a recognized specialty area within the field of nutrition. Cricketers challenge their bodies on a regular basis through physical training and competitions. In order to keep up with the demands of their activity or sport cricketers need to adequately fuel their bodies on a daily basis. This fueling process requires a specialized approach; therefore, cricketers who want to make dietary changes should seek out professionals who are experts in sports nutrition and experienced in developing individualized plans.

Keywords: Nutrition, diet, cricket players

Introduction

Sports nutrition is a science that requires a solid understanding of the nutritional factors effecting performance, recovery and health, a knowledge of the nutritional value of food and fluids and the necessary skills to implement appropriate nutritional strategies into daily training and competition. A key priority for cricketers is to establish a well-chosen training diet that can be easily manipulated when special situations emerge (for example, changes to training load, changing body composition goals, or special competition needs). A good base diet will provide adequate nutrients and energy to enhance adaptations from training, support optimal recovery and avoid excessive food-related stress. Heavy training increases the need for nutrients, particularly carbohydrate, protein and micronutrients (vitamins and minerals).

These increased requirements

- provides adequate total energy (kilojoules)
- balances carbohydrate intake with daily exercise loads
- Includes a wide variety of nutrient – rich foods including protein – containing foods.

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 age N=220

Age group (years)	Frequency	Percent
14 - 16	40	18.2
16 - 18	105	47.7
18 - 20	75	34.1
Total	220	100.0

Cricket players were belonged to the age group of 16–18 years and they acquired to eat especially junk foods, spicy food stuff in their daily diet, followed by players from the age group of 18–20 years (34.1%) and this age group of cricket

players like to eat specific foods and high proteins diet and player form the age group of 14–16 years (18.2%) they like all type of food, which is available easily in their home or in practice field canteens.

Table 2: Distribution of cricket players on the basis of level of game viz. international/national/state and district N=220

Play	Frequency	Percent
International	-	-
National	28	12.7
State	66	30.0
District	126	57.3
Total	220	100.0

Majority of players (57.3%) were playing cricket at district level because they were taking good nutritional food in their routine schedule of diet, whereas 30.0 percent were playing cricket at state level and only 12.7 percent players were playing cricket at national level.

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: Food intake of the cricketers by food frequency questionnaire

Preparation of food	Once/day	More than once/day	Once week	Once twice week	Once/month	Never	Other food which is not specified included in your diet
Cereals							
Wheat flour	100.0	-	-	-	-	-	-
Maize	-	-	-	-	100.0	100.0	
Rice	-	100.0	-	-	-	-	-
Bread	-	-	100.0	-	-	-	-
Other							
Pulses							
Red gram	95.0	-	5.0	-	-	-	100.0
Green gram	-	-	-	50.0	20.0	30.0	100.0
Black gram	-	-	10.0	10.0	70.0	10.0	100.0
Soybean	-	-	82.0	18.0	-	-	100.0
Rajma	-	-	90.0	10.0	-	-	100.0
Peas	10.0	2.0	8.0	40.0	40.0	-	100.0
Fats and oils							
Butter	40.0	10.0	20.0	20.0	20.0	10.0	100.0
Ghee	50.0	30.0	20.0	10.0	-	-	-
Hydrogenated oil	-	100.0	-	-	-	-	-
Cooking oil	-	100.0	-	-	-	-	-
Groundnut	-	-	-	-	40.0	60.0	-
Almond	10.0	5.0	18.0	20.0	20.0	-	-
Coconut	10.0	-	20.0	15.0	15.0	40.0	-
Cashew nut	18.0	8.0	20.0	15.0	39.0	-	-
Walnut dates	-	-	-	-	-	100.0	-
Linseed	-	-	-	-	-	100.0	-
Milk and milk products							
Cow milk	15.0	10.0	10.0	5.0	20.0	40.0	-
Goat milk	-	-	-	-	-	100.0	-
Buffalo milk	30.0	60.0	-	10.0	-	-	-
Buttermilk	-	-	20.0	10.0	30.0	40.0	-

Cheese	50.0	5.0	20.0	10.0	15.0	-	-
Khoa	-	-	10.0	5.0	50.0	35.0	-
Meat-fish							
Egg	10.0	2.0	20.0	15.0	50.0	3.0	-
Fish	12.0	5.0	30.0	20.0	20.0	18.0	-
Chicken	10.0	-	50.0	10.0	20.0	15.0	-
Mean meat	5.0	-	50.0	10.0	20.0	15.0	-
Leafy vegetables							
Amaranthus	10.0	-	20.0	L10.0	50.0	10.0	-
Bathua	5.0	5.0	30.0	50.0	10.0	-	-
Cabbage	25.0	5.0	20.0	20.0	20.0	10.0	-
Spinach	5.0	5.0	10.0	10.0	30.0	40.0	-
Radish	20.0	30.0	50.0	-	-	-	-
Root tubers and other							
Potato	40.0	50.0	-	10.0	-	-	-
Onion	30.0	30.0	10.0	10.0	10.0	10.0	-
Carrot	10.0	10.0	10.0	10.0	50.0	10.0	-
Radish	20.0	20.0	10.0	10.0	30.0	10.0	-
Beetroot	-	-	-	-	-	100.0	-
Sweet potato	-	-	-	-	50.0	50.0	-
Fruits							
Apple	30.0	10.0	20.0	10.0	30.0	-	-
Banana	50.0	20.0	10.0	10.0	10.0	-	-
Orange	30.0	10.0	20.0	20.0	10.0	10.0	-
Grapes	30.0	20.0	20.0	10.0	20.0	10.0	-
Sweeteners							
Jaggery	30.0	20.0	50.0	-	-	-	-
Sugar	100.0	-	-	-	-	-	-

As per consumption of the cricketers, it was observed that whole wheat flour consumed by all the players more than once per day and rice (milled) was consumed by players more than once/day. Among the fats and oils group, butter was the most commonly consumed by 40.0 percent players once per day followed by ghee 50.0 percent of players once per day. Majority of players i.e. 60.0 percent never had consumed the ground nuts. In case of cheese majority (50.0%) players consumed once per day and the 35.0 percent players never consumed khoa. In case of fruits, 30.0 percent consumption of apple once per day, 50.0 percent consumption of banana once per day 30.0 percent and 30.0 percent consumption of grapes once per day.

Conclusion

Food fulfils three basic needs: (1) to provide energy; (2) to support new tissue growth and tissue repair; and (3) to help regulate metabolism. These three requirements are met by components of foods called "nutrients", which consist of six classes: carbohydrates, fats, proteins, vitamins, minerals, and water. Foods that are "nutrient dense" supply a significant amount of these nutrients for their calories.

Recommendations

- A well planned, nutritious diet should meet most of a Cricket player vitamin and mineral needs, and provide enough protein to promote muscle growth and repair.
- Foods rich in unrefined carbohydrates, like wholegrain breads and cereals should form the basis of the diet.
- Water is a great choice of fluid for cricketers to help performance and prevent dehydration.

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