

-12- -31-

**CERTIFICATE COURSE IN SPORTS NUTRITION**  
**COURSE DURATION – 1 SEMESTER**

**Credits: 4**

**Theory: 2 Credits**

**Practical: 2 Credits**

**Key Features**

- Understand the principles behind creating nutrition plans
- Acquire knowledge of nutrition strategies to support various types of sports
- Learn to handle practical challenges faced in the sport and exercise nutrition field
- Apply sports nutrition principles to enhance the performance of your clients

**Description**

With the growing engagement of sports and leisure activities, nutritionists and healthcare professionals already working with athletes from all levels, from amateur to professional, can benefit from the **Certificate in Sports Nutrition course**. This course can provide opportunities for career advancement or self-employment in various settings, such as sports organizations, universities, or health clubs, which can offer additional opportunities for diversity and growth in your career.

The **Certificate in Sports Nutrition** course is designed to provide in-depth knowledge of the principles that underlie diet planning for athletic performance. A well-designed nutrition Plan is vital is active adults and athletes perform at their best by consuming the correct type and amount of food, energy, nutrients, and fluids. Diet plans are individualized and may vary based on personal goals, energy demands, and training schedules.

This course material consists of a detailed analysis of the macronutrients (carbohydrates, proteins, and fats) and micronutrients (vitamins and minerals) that are necessary for athletes to achieve peak performance. It will also delve into the timing of nutrient intake, the importance of hydration, and the role of supplements in sports nutrition.

On successfully completing the course, students will be awarded the **Certificate in Sports Nutrition**, and will be able to create and carry out individualized nutrition regimens based on their unique requirements and objectives, which will help them perform at their peak.

# INSTITUTE OF HOTEL & TOURISM MANAGEMENT

## Certificate Course Sports & Nutrition

**Semester: One Semester Duration**

<b>Course Code</b>	23 IHMEEC01	<b>Course Credits</b>	L: 2 T:0 P:2
<b>Max. Marks</b>	Theory : 50 (Int :15. Ext:35) Practical: 50 (Int :15. Ext:35)	<b>Time of end term examination</b>	3 Hours

**Note:** Examiner will set nine questions in total. Answer to question no. 1 shall be compulsory comprising questions from all four units and remaining eight questions shall be set by taking two questions from each unit. The students have to attempt five questions in total, first being compulsory and selecting one from each unit.

### Learning Objectives:

The learners shall be able to develop an understanding about:

1. Operational Understanding of Sports and Nutrition
2. Nutritional Literacy and Application to Sports
3. Proficiency in Assessing and Meeting Nutritional Needs
4. Supplementation in Sports Nutrition

### Learning Outcomes:

Upon successful completion of this course the learners will possess

1. Comprehensive Understanding of Hospital Sports & Nutrition
2. Application of Nutrition Knowledge in Sports
3. Proficient Assessment and Planning of Nutritional Needs for Sports Personnel
4. Planning & Understating of Supplementation in Sports Nutrition

### Unit - I

An Introduction to Sport, Exercise and Athlete Nutrition, Role of Nutrients and Energy Utilisation in Sports and Fitness; Introduction to Human Anatomy and Physiology; Protein Needs for Exercise, Understanding Fitness Equipments, Muscle Gain and its Myths and Supplementation; Carbohydrates and Fuel Intake during Competition and Training; Pre- and Post-Meal Planning during Competition; Diet Plan for Athlete and different Sports Person

### Unit - II

Introduction to Nutrition, Food & Functions of Food, Macronutrients (carbohydrates, Proteins & Fats) and their functions, Micronutrients (Vitamins & Minerals) and their functions, Water & Hydration, Nutrition, health & well Being

### Unit - III

Food, Nutrition and Nutritional Status, Daily Food Guide and Balanced Diet, Nutritional Status, Food Habits and Food Misconceptions, Recommended Dietary Intakes for Indians Specials Diets and Dietary Restrictions, Dietary Guidelines & Recommendations,, Portioning & Control, Nutrition Assessment and Label Readings, Digital Applications in



Nutrition.

**Unit – IV**

Supplementation in Sports Nutrition; Aerobics and Exercise Techniques; Sport-Specific Strategies to Enhance Performance: Strength and Power Sports, Endurance, Weight Lifting; Nutrition disorder in Athletes; Essential Nutrition for Athletes; Muscular Development Nutrition for Athletes; Practitioner Case Studies; Practical (Diet Plan, Use for Kcal Count, IBW, BMI, Prepared Meals for Different Sports Persons, Dish Planning)

**Suggested Readings:**

1. Nutrition and Dietetics by Shubhangini A. Joshi, Tata McGraw-Hill, New Delhi, India
2. Krause's Food & the Nutrition Care Process" by L. Kathleen Mahan and Janice L. Raymond
3. Nutrition for Health, Fitness, and Sport" by Melvin H. Williams, Eric Rawson, and David Branch
4. Sports Nutrition: A Practice Manual for Professionals" by Marie Dunford
5. Nutrition for Sport and Exercise" by Marie Spano, Laura Kruskall, and D. Travis Thomas
6. The Complete Guide to Sports Nutrition" by Anita Bean

**PRACTICALS**

**Credits: 2**

**Hours: 4**

**Programme Structure**

**Students will be assigned to Department of Physical Education of MDU, Rohtak 4 hours /week and will**

- Analyze real food intake and physical activity of minimum 10 sports persons.
- Nutritional and fitness assessment of minimum 10 athletes/sports persons
- Case study of minimum 5 athletes over a period of 1 month.
- Final project submission

Practical (Diet Plan, Use for Kcal Count, IBW, BMI, Prepared Meals for Different Sports Persons, Dish Planning)