

St Aloysius College (Autonomous) Mangaluru

Postgraduate Studies and Research
in
Food Science



Important dates

Registration starts on 15-01-2023

Registration ends on 31-01-2023

Course starts on 01-02-2023

To register click (Ctrl+Click) the following link

<https://sac-elearning.com/courses/sports-nutrition-2/>

For further details Contact

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Postgraduate Studies and Research in Food Science

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St Aloysius College (Autonomous)

Re-accredited by NAAC with A grade with a CGPA 3.62

Recognized by UGC as “College with Potential for Excellence”

College with ‘STAR STATUS’ conferred by DBT, Government of India

Recognised as a Centre for Research Capacity Building under UGC – STRIDE

National Institutional Ranking Frame work (nirf)

#95 All-India and #3 in Karnataka

Postgraduate Studies and Research in Food Science Offers

Certificate Program on Sports Nutrition



Dr Richard Gonsalves
Director, LCRI Block

Rev. Dr. Praveen Martis SJ
Principal

About the Department

The Department of Food Science and Technology was established in the year 2013 at St. Aloysius College (Autonomous) affiliated to Mangalore University with the grant provided by The Ministry of Food Processing Industries (MFPI) Government of India, under National Mission for Food Processing (NMFP). Department of Postgraduate Studies and Research in Food science offering two post graduate courses: M.Sc. in Food Science and Technology; M.Sc. in Food Science, Nutrition and Dietetics

Sports Nutrition Program

Course Objectives

- To provide a prospect for students to learn new concepts along with the contemporary study design.
- By end of this course student would be able to understand and interpret the concept of sports nutrition
- They would also be able to differentiate the nutritional requirements of sports persons from normal individuals

Salient features

- Lectures by in-house faculty
- Guest lecturers by subject experts the field of Sports Nutrition.
- Interactive sessions for better understanding and elucidation of core concepts related to Sports Nutrition.
- Discussions and sample tests for knowledge assessment.

Prerequisites/Eligibility: Science Graduate (Completed/Pursuing) with Food science or Food technology or Nutrition or Home science or Biochemistry or Chemistry as one of the subjects

Duration of the program: 03 Months – 30 hours

Mode of teaching: Hybrid Mode (Online and Offline)

Course Fee: Rs.1000/-

Career opportunities: The course is tailor made for pursuing a career in Fitness centers, Sports centers, Hospitals and Corporate nutrition sector.

Overview of the program

What is the purpose of this module?

The purpose of this module is to facilitate the students with an adequate knowledge and exposure in the emerging field of sports nutrition. This module is meant to supplement existing course in the Food science Nutrition and Dietetics curriculum, and is not an all-inclusive curriculum by itself.

Who is the target audience for this module?

This module was created for graduate and postgraduate students of Food science, Nutrition and Dietetics and Food technology students of across the country. During the development of this module, it is assumed that a student has completed course work in Human physiology, Essentials of Micro nutrients, Advanced Nutrition and Clinical and Therapeutic Nutrition.

What are the core concepts of this module?

Nutrition and Dietetic students are well educated in nutrition as a science, trained as Clinical and Therapeutic nutritionists and also are expected to be effective nutritionists in sports field as well. An effective sports nutritionist is knowledgeable in nutrition requirements of sports persons and able to formulate effective meal plans according to the requirement of the chosen sport of the individuals, which will reinforce the achievement of excellence in their sport. Within the derived training module, students will be gaining exposure to the acute and chronic difficulties and challenges faced by the sports persons and learning the techniques to deal with those situations, including the current approaches used by the trained professionals in this field.

What are the contents of this module?

The contents of this module are listed below:

- Introductory lectures by in-house faculty.
- Extension activities for grasping the concepts of Sports Nutrition.
- Experts in the field as guest lecturers guiding the students in the intricacies of Sports Nutrition.
- Interactive sessions for better understanding and elucidation of core concepts related to Sports Nutrition.
- Discussions and sample tests for knowledge assessment.

Course objectives:

- To provide a prospect for students to learn new concepts along with the contemporary study design.
- By end of this course student would be able to understand and interpret the concept of sports nutrition
- They would also be able to differentiate the nutritional requirements of sports persons from normal individuals
- To heighten their knowledge on the subject.
- To provide a platform for exposure to new sub-divisions of the course.

Prerequisites: Science Graduate with Food science or Food technology or Nutrition or Home science or Biochemistry or Chemistry as one of the subjects

Duration of the program: 03 Months*

*; (Weekly Three classes; Saturday and Sunday Contact classes - 2 hours and Wednesday Online class – 1 hour)

Course Fee: Rs.1000/-

Career opportunities: The course is tailor made for pursuing a career in Fitness centers, Sports centers, Hospitals and Corporate nutrition sector.

Syllabus

UNIT I

Exercise physiology and metabolism- Definitions, Types of exercises (aerobic and anaerobic), limiting factors. Exercise intensity and duration. Adaptations to exercise: physiological and metabolic adaptations to training. Muscle hypertrophy and performance. Fatigue: types, overtraining, oxygen debt theory, EPOC. Sports injury: causes, types, recovery, role of warm up and cool down. Rehabilitation: concepts, objectives and therapeutic modalities (heat and cold, soft tissue massage).

UNIT II

Assessment and health and fitness of athletes. Ideal body composition and nutrition for different sports (endurance sports, intermittent, strength & power, martial sports, adventure, swimming and yoga) and events (marathon, triathlon and ultrathon). Significance of physical fitness and nutrition in prevention and management of weight control regimes.

UNIT III

Sports specific Nutrition: effect of specific nutrients on work performance (amino acids, vitamins and minerals) and physical fitness. Nutrients that support physical activity, mobilization of fuel stores during exercise. Importance of carbohydrate loading.

UNIT IV

Meal plan development and recipes for peak performance. Nutritional requirement based on condition: vegetarian, female athletes, veteran athletes and young athletes. Pre-game and post-game meals. Diets for persons with high energy requirements.

UNIT V

Clinical sports nutrition: DM, CVD, Endocrinal disorders. Sports psychology and nutritional counselling

Scheme of examination and Assessment

Internal Assessment	
	Tests (2 tests-Multiple choice / Theory)
Assignments	30 + 30 (reduced to 15)
5	15
Total: 20 Marks	

Final Assessment

Course completion test

Duration of exam: **1hr**

No. of questions: 40 each correct answer carries 2 marks, **Total marks: 80**

Grades will be awarded based on the marks obtained by the candidates in both internal and final assessment. (80+20 = 100 Marks)

Mode of teaching: Blended (Both offline and Online)