# SPORTS SUPPLEMENTATION EXTENSION COURSE



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# OSWALDO ARANHA FOUNDATION VOLTA REDONDA UNIVERSITY CENTER DEAN'S OFFICE OF RESEARCH AND POSTGRADUATE PROFESSIONAL MASTER'S IN EDUCATION IN HEALTH AND ENVIRONMENT SCIENCES



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According to Silva (2020), the extension has been gaining important characteristics for the university, a movement practiced by academic communities as well as legal measures, such as extension credit in undergraduate courses. When the university is attentive to society's social needs, dialogue through extension brings together the most vulnerable layers, resulting in democracy.

Aiming to promote a greater scope of knowledge related to nutrition and sport by undergraduate Nutrition students, an extension course in sports supplementation was created, being a facilitating tool for theory and practice when they are inserted in the job market.

# Esteemed,

In order to assist in the teaching-learning process of content related to sports supplementation, we have created this Extension Course in Sports Supplementation for nutrition students and trained nutritionists.



## 1) Presentation:

The course is aimed at nutritionists and nutrition students who intend to work in the sports nutrition area, acting safely and effectively in prescribing food supplements. In addition, the course aims to qualify nutritionists capable of working not only with professional and amateur athletes but also with physical activity practitioners in offices, gyms, and clubs. Upon completion of the course, the professional will be able to understand and deepen knowledge related to nutrition and the intrinsic aspects of the functioning of the human organism, with emphasis on physiological and nutritional characteristics and changes resulting from sports practice.

### Objective:

The course aims to train the nutrition professional with the knowledge of the physiological changes of the physical exercise practitioner, their nutritional needs to enhance sports performance, including the prescription of food supplements, classification, dosage, forms of use, and current legislation.

# **Target Audience:**

Nutritionists or Nutrition students.

### Workload:

The workload established was 40 hours total, with weekly realization (4 Saturdays, with 10 hours total), divided into 4 modules. The student will receive the certificate after completing all modules.

# **Modality:**

The course was created in face-to-face mode, to be applied in the city of Volta Redonda/RJ, with the possibility of extending to new locations after the conclusion of the first class. Classes are sequential, therefore, 100% attendance is required from the student to be able to study the next module. It will have as differential practical classes in gastronomy (preparation of healthy recipes for the preparation of athletes).

## **Didactic resources:**

Projector, computer, scientific articles, and books.



# 2) Program Content:

The extension course in sports supplementation has the following structure in 4 modules, as follows:

Module I: Introduction to sports nutrition and main concepts.

Module II: Energy metabolism of the physical exercise practitioner.

Module III: Introduction to sports supplementation, current legislation, and prescription according to the sport.

Module IV: Nutritional education in sports supplementation and practical classes in gastronomy (preparation of healthy recipes to prepare athletes).



# 3) Course structure:

MODULES	WORKLOAD
Module I: Introduction to sports nutrition and main concepts	
Initial concepts in sports nutrition will be addressed so that the student has a base and is able to understand the following modules.	
Fundamentals of sports nutrition	
Metabolism of proteins, carbohydrates, lipids, minerals and vitamins	
Hydration	
Nutritional and pharmacological ergogenic resources of the athlete	10 hours
Prescription of macro and micronutrients aimed at sports nutrition	
Nutrigenomics	
Module II: Energy metabolism of the physical exercise	
practitioner	
Topics related to physical exercise practitioners and their specific needs will be addressed, as well as an assessment of physical conditioning.	
Energy metabolism in exercise	
Exercise physiology and biochemistry	
Morphological and biochemical adaptations resulting from training	10 hours
Cardiovascular functioning and adjustments during exercise	
Respiratory function and adjustments during exercise	
Hormonal secretion during exercise	

Physical fitness assessment	
Module III: Introduction to sports supplementation, current legislation, and prescription according to the sport modality	
Topics related to supplementation and its myths, prescription according to the sport and which laws are in force will be addressed.	
Ingestion, digestion, and metabolism of food supplements	
Specific foods for physical exercise practitioners	
Current legislation on food supplements	10 hours
Myths surrounding food supplementation	
Prescription of specific supplements by sport modality	
Module IV: Nutritional education in sports	
supplementation and practical classes in gastronomy	
(preparation of healthy recipes to prepare athletes).	
The last module has topics related to nutritional	
education focused on sports supplementation and practical	
cooking classes, specifically for athletes in preparation.	
Nutritional education in sports nutrition and gastronomy practice	10 hours

# 4) Assessment:

The evaluation process will take place during the course, using the observational methodology of participation during classes, activities presentation and, at the end of the course, there will be an evaluation with 5 objective questions from each module.

### **Used Bibliography:**

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