

29218 - Sport: Nutrition and Food

Información del Plan Docente

Academic Year	2016/17
Academic center	229 - Facultad de Ciencias de la Salud y del Deporte
Degree	441 - Degree in Human Nutrition and Dietetics
ECTS	6.0
Course	3
Period	First semester
Subject Type	Compulsory
Module	---

1.Basic info

1.1.Recommendations to take this course

1.2.Activities and key dates for the course

2.Initiation

2.1.Learning outcomes that define the subject

2.2.Introduction

3.Context and competences

3.1.Goals

3.2.Context and meaning of the subject in the degree

3.3.Competences

3.4.Importance of learning outcomes

4.Evaluation

5.Activities and resources

5.1.General methodological presentation

5.2.Learning activities

5.3.Program

Theoretical program

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Part I: General aspects

- Introduction to sports nutrition
- Skeletal muscle fibers: constitution and properties. Skeletal muscle contraction
- Skeletal muscle metabolism during exercise. Functional classification of exercise according to substrate utilization

Part II: Physiological adaptations to physical activity

- Cardiovascular, respiratory and blood adaptations during exercise
- Renal adaptations, hydromineral and acid-base balance during exercise
- Effects of exercise in the gastrointestinal functions
- Thermoregulation and neuroendocrine adaptations during exercise

Part III: Nutritional needs of athletes

- Nutritional needs of athletes: energetic macronutrients and fiber. Water and electrolytes. Vitamines, minerals, micro and oligoelements
- Nutritional Status Assessment in Athletes
- Measurement of energy expenditure in athletes
- Diet planning for athletes

Part IV. Complementary aspects

- Fatigue and ergogenic aids
- Physical activity for health
- Eating disorders in athletes

Practical program

- Cardiovascular adaptations to physical activity and their applications to sports nutrition.
- Variation in glycemia during physical activity and its application to sports nutrition.
- Analysis and/or elaboration of sport drinks.
- Anthropometric evaluations and somatotype.
- Team sports diet planning: training diet.
- Half-marathon diet planning: diet. Pre and post competition menú. Hydration and nutrition during the event.

5.4.Planning and scheduling

5.5.Bibliography and recommended resources