ID	2526
Curricular Unit	Nutrition and Physical Activity
Regent	Cristina Paula Fidalgo de Negreiros Monteiro Bento
Learning Outcomes	1. To identify the biological functions of macronutrients: carbohydrates, lipids, proteins, vitamins and other regulatory nutrients. 2. To describe physical and nutritional habits during growth and development (specially during infancy and youth) 3. To relate nutrition, caloric consumption and physical activity (in gerenal population, and in special populations, such as obese persons and athletes). 4. To identify basic and specific concepts related to healthy habits, with proven effects in terms of public health, for the general population and for special populations, such as obese persons and athletes. 5. To substantiate the morphologic adaptations, the quality of life and the human performance attained in different levels of development and activity, in the interaction of nutrition and physical activity 6. To use methods for nutritional assessment, quantification of the energy value of food and body composition.
Syllabus	Feeding and nutrition. Perspective of the different nutritional status in the world. Socio-cultural restrictions of human feeding. Guidelines for healthy feeding. Characterization of food groups. Nutrition and energy: quantification of energy value of food and total energy expenditure. Nutritional functions of macronutrients. Characterization and physiological action of regulatory nutrients: vitamins, minerals, fiber and water. Quantification of nutritional value of food. Physiological processes of nutrition - digestion. Regulation of energy balance and body composition. Methods for essessing nutritional status. Specific nutritional requirements throughout lifespan. Characterization of main eating disorders. Macro and micro-nutrients specific needs of athletes: energy sources; protein needs; water and electrolyte regulation; strategies for intervention. Suplementation and ergogenic aids.

Evaluation	In the lectures contents are transmitted by using the expositive teaching method with the support of slides. In the lecture-practical classes we privilege the adoption of a work group task methodology for the resolution of problems concerning subjects presented both in lecture and lecture-practical classes. The student opts for final or continuous assessment model. The continuous assessment model is based on performing a written frequency on the contents of both the lectures and lecture-practical classes (70%), and, in groups, resolving in the classroom 6 worksheets and elaborating, presenting and discussing a bibliographic research whose theme is changed annually (30%). To be approved, the student needs to obtain a minimum of 9.5 values in each component. The final assessment is obtained through a written test, including the lectures and lecture-practical matters. The student is approved provided he gets a minimum of 10 values.
Bibliography	Almeida, M.D.V. e Afonso, C.I.P.N. (1997). Princípios básicos de alimentação e nutrição. Universidade Aberta, Lisboa. Ferreira, F.A.G. (1994). Nutrição humana. 2ª edição. Fundação Calouste Gulbenkian, Lisboa. Insel, P., Turner, R.E. and Ross, D. (2002). Nutrition. Jones and Bartlett Publishers, Sudbury, Massachusetts. Katch, F.I., McArdle, W.D. (1984). Nutrição, controlo de peso e exercício (2ª ed.) Editora Médica e Científica Lda. Rio de Janeiro. Mahn, L.K., Escott-Stump, S. (2002). Krause – Alimentos, Nutrição e Dietoterapia. Ed Roca. São Paulo. McArdle, W.D., Katch, F.I. and Katch, V.L. (1996). Exercise physiology : energy, nutrition, and human performance. 4th edition. Williams & Wilkins, Baltimore Teixeira, PJ, Sardinha, LB e Themudo Barata, JL (2008). Nutrição, Exercício e Saúde. Lidel – Edições Técnicas, Lisboa