

SUBJECT GUIDE
NUTRITION

Academic year 2016-2017

| MODULE | CONTENT | YEAR | TERM | CREDITS | TYPE |
|---|-----------|----------------|---|---------|------|
| Nutrition and Health | Nutrition | 3 ^a | 1 ^o | 6.0 | |
| LECTURER(S) | | | Postal address, telephone n°, e-mail address | | |
| <ul style="list-style-type: none"> • Belén García-Villanova Ruiz • Reyes Artacho Martín-Lagos | | | Department Nutrition and Food Science, Faculty of Pharmacy belenv@ugr.es , artacho@ugr.es | | |
| DEGREE WITHIN WHICH THE SUBJECT IS TAUGHT | | | | | |
| Degree: Food Science and Technology | | | | | |
| PREREQUISITES and/or RECOMMENDATIONS (if necessary) | | | | | |
| Having studied the subjects of Biology, Biochemistry, Physiology | | | | | |
| BRIEF ACCOUNT OF THE SUBJECT PROGRAMME (ACCORDING TO THE DEGREE ¿??) | | | | | |
| <ul style="list-style-type: none"> • Functions and metabolic utilization of nutrients. • Dietary recommendations, dietary goals and dietary guidelines. • Assessment of the nutritional status of individuals and communities. | | | | | |
| GENERAL AND PARTICULAR ABILITIES | | | | | |
| | | | | | |
| OBJECTIVES (EXPRESSED IN TERMS OF EXPECTED RESULTS OF THE TEACHING PROGRAMME) | | | | | |
| <ul style="list-style-type: none"> • Know the basic principles in nutrition with special attention to nutrients and their functions and utilization in the body as well as the most important food sources. • Use and interpret tables of recommended intakes, nutritional objectives and guidelines of the power as a basis for the assessment of diets. • Learn to determine and interpret the nutritional status of an individual through the use of dietary surveys, anthropometric data, biochemical and clinical parameters. | | | | | |



DETAILED SUBJECT SYLLABUS

Theoretical program

1. Food and nutrition. Concepts and relationships. Historical evolution. Current situation and prospects. Concept of food and nutrient. Bioactive compounds in food.
2. Digestion. General aspects of the process. Regulation.
3. Energy requirements of the human organism. Components of energy metabolism: basal metabolism, thermogenesis and physical activity. Methods of measurement.
4. Nutritional requirements and recommendations. Dietary goals and food guides.
5. Food: supply of energy, nutrients and other bioactive components. Energy value of nutrients. Tables and food composition databases.
6. Proteins. Classification and functions. Essential amino acids. Evaluation of protein quality. Nutritional recommendations. Dietary sources.
7. Carbohydrates: classification and functions. Nutritional recommendations. Dietary sources.
8. Dietary fiber. Classification. Functions. Nutritional recommendations. Dietary sources.
9. Lipids. Classification. Functions. Essential fatty acids. Quality of fat. Nutritional recommendations. Dietary sources.
10. Water soluble vitamins. Functions. Use. Nutritional recommendations. Dietary sources.
11. Fat soluble vitamins. Functions. Use. Nutritional recommendations. Dietary sources.
12. Minerals: Macro and microelements. Functions. Use. Nutritional recommendations. Dietary sources.
13. Body water and electrolyte balance. Nutritional value of water.
14. Nutritional status assessment. Anthropometric parameters and body composition. Immunological and biochemical indicators of nutritional status.
15. Measuring of food intake.
16. Nutrition and chronic diseases.

READING

- Bellido Guerrero D, de Luís Román DA (2006). Manual de nutrición y metabolismo. Ed. Díaz de Santos, Madrid.
- FESNAD (2010). Ingestas dietéticas de referencia para la población española. Ed. Eunsa, Pamplona.



- Gibney MJ, Kok Frans J, Voster Hester H (2005). Introducción a la nutrición humana. Ed. Acribia, Madrid.
- Gil A. (2010). Tratado de nutrición clínica (4 tomos). Ed. A. Médica.
- Mahan LK, Escott-Stump S (2009). Nutrición y dietoterapia de Krauser, 12ª ed. Ed. Interamericana McGraw-Hill, Madrid.
- Martínez JA (2004). Fundamentos teórico-prácticos de nutrición y dietética. Ed. Interamericana McGraw-Hill, Madrid.
- Mataix J. (2009). Nutrición y alimentación humana. Ed. Ergon, Madrid.
- Salas-Salvadó J, Bonada A, Trallero R, Saló ME, Burgos Pelaez, R (2008). Nutrición y dietética clínica. 2ª ed. Ed. Elsevier Masson, Barcelona.
- Serra Majem LL, Aranceta Bartrina J (2006). Nutrición y salud pública. 2ª ed. Ed. Masson, Barcelona.
- Shils ME, Olson JA, Shike M (2002). Nutrición en salud y enfermedad. 9ª ed. (2 tomos). M cGraw-Hill. Madrid.
- Soriano del Castillo JM (2006). Nutrición básica humana. Ed. Universidad de Valencia.
- Vázquez C, de Cos AI, López Momdedeu C (2005). Alimentación y nutrición. Manual Teórico-Práctico 2ª ed. Díaz de Santos, Madrid.
- Wardlaw GM (2008). Perspectivas sobre Nutrición, Ed. Paidotribo, Badalona

RECOMMENDED INTERNET LINKS

- Agencia Española de Seguridad Alimentaria y Nutrición : <http://www.aesan.msc.es>
- Sociedad Española de Nutrición: <http://www.sennutricion.org/>
- Sociedad Española de Nutrición Básica y Adaptada: <http://www.senba.es/>
- Sociedad Española de Nutrición Parenteral y Enteral: <http://www.senpe.com/>
- Sociedad Española de Dietética y Ciencias de la Alimentación <http://www.nutricion.org/>
- Sociedad Española de Nutrición Comunitaria <http://www.nutricioncomunitaria.com/>
- Federación Española de Sociedades de Nutrición, Alimentación y Dietética <http://www.fesnad.org/>

