

NUT 339 – FUNCTIONAL FOODS: MICROBIOLOGICAL, TECHNOLOGICAL AND HEALTH ASPECTS

GENERAL

- Lectures on Tuesdays and Thursdays.
- Exact time to be defined on the first lecture, 26.08.2014 at 10 o'clock.
- This course is taught in ENGLISH.
- Only students “oficialmente matriculados nesta disciplina”.
- Total presence during the course = 75%.
- 10 min delay for a lecture is OK.

EVALUATION

- Active participation during the course (discussions).
- Activities during the course (one oral presentation).
- Test (open and closed questions).

PROGRAMME

1. Introduction to functional foods.
2. Probiotics.
3. Probiotics in health and disease.
4. Probiotics in food.
5. Prebiotics and synbiotics.
6. Antioxidants.
7. Manuscript preparation to journals in field of nutrition and health.
8. Seminar – presentation.
9. Test.

LITERATURE

Books are available in the main library or in the Dept. Nutr. & Health or in online databases.

Collado MC, Grześkowiak Ł, Salminen S. The role of microbiota and probiotics on the gastrointestinal health: prevention of pathogen infections. In: Watson RR and Preedy VR (eds.) *Bioactive Food as Dietary Interventions for Liver and Gastrointestinal Disease*, pp. 201-213. Elsevier. San Diego: Academic Press.

Ferreira CL, Salminen S, Grześkowiak Ł, Brizuela MA, Sanchez L, Carneiro H, Bonnet M. Terminology concepts of probiotic and prebiotic and their role in human and animal health. *Revista de Salud Animal* 2011.

Fuller R. *Probiotics: the scientific basis*. London, New York: Chapman & Hall, 1992.

Grześkowiak Ł. *Gut microbiota in early infancy: effect of environment, diet and probiotics*. University of Turku, Turku, Finland 2012.

Grześkowiak Ł, Isolauri E, Salminen S, Gueimonde M. Manufacturing process influences properties of probiotic bacteria. *British Journal of Nutrition* 2011.

Gutteridge JMC. *Antioxidants in nutrition, health and disease*. Oxford, New York: Oxford University Press, 1996.

Kneifel W, Salminen S. *Probiotics and health claims*. Chichester, West Sussex: Wiley-Blackwell, 2011.

Magalhaes da Silva M, Salminen S, Anna de P, Marchelli R, Ferreira CL, Tommola J. Terminology: functional foods. probiotics. prebiotics, synbiotics, health claims, sensory evaluation of foods, molecular gastronomy. *Functional Foods Forum*, University of Turku, Turku, Finland 2011.

Raton BFL. Handbook of fermented functional foods. CRC Press, c2008.

Global databases: www.scopus.com; www.pubmed.com etc.

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