Food Parasitology

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**LECTURER(S)**

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**PREREQUISITES and/or RECOMMENDATIONS (if necessary)**

- Have studied the subjects Biology
- Have adequate knowledge of: Scientific English, Basic computer skills

**BRIEF ACCOUNT OF THE SUBJECT PROGRAMME (ACCORDING TO THE DEGREE OF HUMAN NUTRITION AND DIETETICS)**

- Basic concepts of Parasitology. Current importance of parasites in developed and developing countries: immunodepression, tourism, immigration and adoptions. Parasites and nutrition.  
- Main diseases producing parasites in man and their relationship with food.  
- Parasites that deteriorate food: General techniques of detection, identification and control.

**GENERAL AND PARTICULAR ABILITIES**

CG1.1, CG1.2, CG1.3, CG2.1, CG2.2, CG3.4, CG5.4, CG7.4, CG8.1, CEM2.6, CEM3.1, CEM3.7, CEM3.8

**OBJECTIVES (EXPRESSED IN TERMS OF EXPECTED RESULTS OF THE TEACHING PROGRAMME)**

- Understand the current importance of parasites and their relationship to food / nutrition.  
- Know the main parasites that produce diseases in man transmitted by food. Prevention and control of parasitic diseases.  
- Know the main parasites that deteriorate food. Techniques of sampling and identification of
Parasites in food.

**DETAILED SUBJECT SYLLABUS**

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<td>UNIT 2.</td>
<td>Geographical distribution of parasites: Factors that influence. Current importance of parasitic diseases in developed and developing countries: Immunodepression, tourism, immigration, adoptions and food customs.</td>
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<td>UNIT 8.</td>
<td>Epidemiology, prophylaxis and control of fecal-oral transmission protozoa. Drugs against these diseases.</td>
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**UNIT 12.** Lung and intestinal flukes of man. Study of the morphology, biological cycle, main symptoms, epidemiology, prevention and control measures. Drugs against trematodes.


**UNIT 14.** *Taenia saginata* and *Taenia solium*. Study of the morphology, biological cycle, main symptoms, epidemiology, prevention and control measures. Cysticercosis. Other species of interest.


**UNIT 16.** *Hymenolepis* spp. Study of the morphology, biological cycle, main symptoms, epidemiology, prevention and control measures.


UNIT 22. Emerging nematodes in our environment. Anisakids: *Anisakis* spp.

UNIT 23. Other human interest helminths transmitted by water and/or food.


UNIT 25. Major mites that cause disease in man and deteriorate foods: *Acarus, Tyrophagus* and *Glycyphagus*. Other mites of interest.

UNIT 26. Control of arthropods food spoilage.

UNIT 27. Methods of detection of parasites in water and food.

PRACTICAL SYLLABUS:

Seminars / Workshops
- Exercises, clinical cases and their resolution on programme topics.
- Epidemiology, prevention and control of diseases caused by protozoa of oral-fecal transmission.
- Epidemiology, prevention and control of toxoplasmosis.
- Mechanisms of transmission, prevention measures and control of trichinellosis.
- Prevention measures and control and anisakids.
- Control of arthropods food spoilage.
- Methods of detection of parasites in water and food.

Laboratory practices
1.- Identification of Protozoa.
2.- Identification of Cestodos and Trematodos.
3.- Identification of Nematodes.
4.- Identification and observation of adults, larvae of *Trichinella*.
5.- Obtention and observation of larvae of anisakids.
6.- Identification of insects and mites.

READING
BASIC BIBLIOGRAPHY


COMPLEMENTARY BIBLIOGRAPHY


**RECOMMENDED INTERNET LINKS**

- [http://www.ugr.es/~parasito/otros enlaces.html](http://www.ugr.es/~parasito/otros enlaces.html)
- [http://www.dpd.cdc.gov](http://www.dpd.cdc.gov)
- [http://www.who.int/](http://www.who.int/)
- [http://www.fda.gov/default.htm](http://www.fda.gov/default.htm)
- [http://www.aesa.msc.es/aesa/web/AESA.jsp](http://www.aesa.msc.es/aesa/web/AESA.jsp)