UCLouvain

Ibral2102a

2020

Physiological and nutritional biochemistry: partim parts 1, 2 and 3

Due to the COVID-19 crisis, the information below is subject to change, in particular that concerning the teaching mode (presential, distance or in a comodal or hybrid format).

2 credits	18.0 h	Q1
2 credits	10.011	QΙ

Teacher(s)	Debier Cathy ;Larondelle Yvan ;				
Language :	English				
Place of the course	Louvain-la-Neuve				
Main themes	 A detailed description of the processes of digestion and absorption A review of the main aspects of the metabolism of glucides, lipids and protides, with a special focus on the regulation and on the fate of the dietary constituents An integrated view of the main metabolic pathways via the analysis of some specific physiological situations (fasting, diabetes, exercise, pregnancy, lactation) A detailed analysis of the dietary requirements of humans (energy, nitrogen, amino acids, essential fatty acids, vitamins, water, minerals, dietary fibre), including the biochemical, metabolic and physiological justifications for them A detailed presentation of the concept of 'healthy food' in relation with some chronic diseases such as type-II diabetes, cardiovascular diseases, metabolic syndrome, osteoporosis, obesity, neurodegenerative diseases, intestinal diseases. 				
Aims	The contribution of this Teaching Unit to the development and command of the skills and learning outcomes of the programme(s) can be accessed at the end of this sheet, in the section entitled "Programmes/courses offering this Teaching Unit".				
Evaluation methods	Due to the COVID-19 crisis, the information in this section is particularly likely to change. Ongoing evaluation with written tests organized throughout the quarter (no exam during the session in January)				
Teaching methods	Due to the COVID-19 crisis, the information in this section is particularly likely to change. Coordinated package of lectures given by the teachers and seminars given by invited experts Food industry visits Most of the activity requires the presence of the students.				
Content	1 – Digestion and absorption 2 – Post-absorptive nutrient utilization • Nutrient utilization during the absorptive phase • Nutrient utilization during the postabsorptive phase • Nutrient utilization during prolonged energy malnutrition or complete food deprivation 3 – Physiological and pathophysiological situations • Sport • Lactation • Cancer • Obesity and metabolic syndrome				
Inline resources	Moodle				
Bibliography	Notes de cours données par les professeurs (dias disponibles sur Moodle) Livres de référence conseillés mais non imposés Slides used by the professors are available on Moodle Several references books are recommended (but not mandatory)				
Other infos	This course can be given in English				
Faculty or entity in charge	AGRO				

Programmes containing this learning unit (UE)					
Program title	Acronym	Credits	Prerequisite	Aims	
Additionnal module in Biology	APPBIOL	2		•	