

3.0 credits

32.0 h

1q

Teacher(s) :	Larondelle Yvan ; Schneider Yves-Jacques ;
Language :	Français
Place of the course	Louvain-la-Neuve
Prerequisites :	The set of competences, abilities and knowledge acquired during a bachelor degree in the area of Bioscience engineering.
Main themes :	<ul style="list-style-type: none"> - 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 :	<p>a. Contribution de l'activité au référentiel AA (AA du programme) 1.1 ; 1.2 ; 1.4 ; 2.5</p> <p>b. Formulation spécifique pour cette activité des AA du programme At the end of the course, the student will be able :</p> <ul style="list-style-type: none"> - to make to links between the major pathways of the energetic and nitrogen metabolism, - to expose the metabolic relationships between the different organs and physiological functions of the organism, - to discuss the impact of food items, specific nutrients, and feeding behaviours on human metabolism, - to give a justification for the nutrient requirements of humans, - to comment on the concept of « healthy food » , - to give a sound opinion on the industrial developments in the frame of the « healthy food » concept, - to make practical and innovative proposals for the development of food items. <p><i>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".</i></p>
Cycle and year of study :	> Master [120] in Agricultural Bioengineering
Faculty or entity in charge:	AGRO