

MODULE **DESCRIPTOR**

MODULE TITLE	PERFORMANCE NUTRITION		
MODULE CODE	XS2601 (L5)	CREDIT VALUE	20/10 ECTS
SCHOOL	SCHOOL OF SCIENCE		

MODULE AIMS

This module will develop your understanding of the importance of nutrition for optimising sports performance. It will introduce concepts of determining energy expenditure through different methods including predictive equation, heart rate monitoring and power output assessment and how these energy expenditures influence nutritional needs for a range of sports. The module will also investigate the idea of nutritional periodization and the ways in which diet can be manipulated and supplemented to enhance performance and recovery. Lastly, the module will develop your understanding of nutritional ergogenic aids and the role of 'superfoods' and their proposed benefits for performance enhancement. In addition, you will develop skills in a range of nutritional analysis software and in presenting nutritional assessment data.

MODULE **CONTENT**

Content will typically include but not limited to:

Nutritional consultation with athletes.: assessment of diet, physical activity, energy expenditure and body composition.

Nutrient requirements for the athlete. Dietary reference values How general requirements may be changed by exercise. Comparison of nutrient requirements for the endurance/ultraendurance, the power/strength athlete and the team sport athlete.. Weight management.

Dietary periodization for training, performance and recovery: carbohydrate, fat, protein, water, minerals and vitamins.

Ergogenic aids. Food and nutrient supplements and their possible effects on health and performance, e.g, creatine, amino acids, carnitine, caffeine and beetroot juice. Evaluation of manufacturers claims vs research evidence.

INTENDED LEARNING OUTCOMES

On successful completion of this module a student will be able to:

1. Explain the utility of methods for measuring nutrient intakes, body composition and energy expenditure.



- 2. Explain the concepts of dietary reference values and how general requirements may be changed by exercise and different types of athletic performance..
- 3. Explain the rationale behind dietary manipulation strategies used to enhance training, performance and recovery.
- 4. Evaluate evidence for the effects of dietary manipulations and ergogenic aids.

TEACHING METHODS

The module will be delivered as a combination of lectures and practical sessions. The lecture slots will generally be used to introduce ideas about the various syllabus topics, to develop these by presenting and discussing data supporting these ideas, and to undertake some problems. You will normally be given lecture notes and/or be directed to specific material. A reading list is attached after the syllabus, but you may also be given other references relating to specific topics. Generally the practical sessions will be used for laboratory work, data analysis, study design, case studies and oral presentations.

ASSESSMENT METHODS

This module is assessed through a case study (50%) and a Group poster presentation & Defence (50%).