

HLTH 2025 EXERCISE NUTRITION

Credit Points 10

Legacy Code 401436

Coordinator Ed Gray ([https://directory.westernsydney.edu.au/search/name/Ed Gray/](https://directory.westernsydney.edu.au/search/name/Ed%20Gray/))

Description This subject provides students with an understanding of the interdependent areas of nutrition within the context of sport, physical activity, and exercise. Nutritional needs and recommendations for all levels and types of physical activity are covered along with the links between nutrition and health, sport performance, body composition and control of body weight. Students will develop skills in nutritional analysis and program development, measurement of energy expenditure and body composition assessment. Students will use these skills and knowledge in the individualisation of advice on exercise nutrition for health and sport performance.

School Health Sciences

Discipline Nutrition and Dietetics

Student Contribution Band HECS Band 2 10cp

Check your HECS Band contribution amount via the Fees (https://www.westernsydney.edu.au/currentstudents/current_students/fees/) page.

Level Undergraduate Level 2 subject

Pre-requisite(s) NATS 1009 AND SPRT 1001

Equivalent Subjects BIOS 2010 - Exercise Nutrition BIOS 2011 - Exercise Nutrition Body Composition and Weight Control

Restrictions

Students must be enrolled in 4658 Bachelor of Health Science (Sport and Exercise Science).

Learning Outcomes

On successful completion of this subject, students should be able to:

1. Describe the dietary guidelines and the recommended servings of the core food groups recommended by the National Health and Medical Research Council and other internationally recognized governing bodies.
2. Describe the physiological functions of the macronutrients (carbohydrates, fats and protein) and micronutrients (vitamins, minerals and water).
3. Explain the digestive system and underpinning physiological mechanisms behind the breakdown and absorption of various food sources.
4. Analyse a diet for its energy, macronutrient and micronutrient content, as well as describe the strengths, weaknesses and limitations of the commonly used methods for measuring and analysing dietary intake.
5. Describe the assumptions and limitations of common methods body composition assessment including BMI, waist hip ratio, skinfolds, body composition estimates (from regression equations) and other indices, and demonstrate the knowledge and ability to

use these measures to service athletes, apparently healthy and obese individuals.

6. Explain the relationship between energy balance and control of body composition.
7. Provide general nutrition advice to promote, achieve and maintain a healthy lifestyle and/or improve sport performance.
8. Explain the importance of behavioural modification and other strategies to help individuals to incorporate and adhere to appropriate dietary strategies that support achieving and maintaining a healthy body mass.
9. Explain the nutritional, health and psychological risks of common fad and popular diets.
10. Describe and discuss the role of nutrition and ergogenic supplements in optimising exercise performance.

Subject Content

1. Exercise Nutrition
 - general dietary guidelines and recommendations for health and physical performance
 - dietary analysis: methods, applications and limitations of methods
 - Digestive processes and Nutrient absorption kinetics
 - physiological function of macronutrients and micronutrients with An emphasis on their Roles related to energy metabolism and Exercise
 - methods of Measuring, Estimating and interpreting body composition
 - Estimating individual energy requirements and energy Expenditure
 - sport-specific nutrition and hydration for optimising performance, recovery & physiologic adaptation
 - Nutritional supplements and Ergogenic AIDS
 - Nutritional disorders: Prevalence, signs, Symptoms and key physiological effects
2. Other
 - discipline specific WHS ? related to practical tasks of The unit

Assessment

The following table summarises the standard assessment tasks for this subject. Please note this is a guide only. Assessment tasks are regularly updated, where there is a difference your Learning Guide takes precedence.

Type	Length	Percent	Threshold	Individual/Group Task
Portfolio	500 words	25	N	Individual
Quiz	30 minutes each	25	N	Individual
Final Exam	2 hours	50	Y	Individual

Teaching Periods

Spring (2022)

Campbelltown

Day

Subject Contact Drew Keys ([https://directory.westernsydney.edu.au/search/name/Drew Keys/](https://directory.westernsydney.edu.au/search/name/Drew%20Keys/))

View timetable (https://classregistration.westernsydney.edu.au/even/timetable/?subject_code=HLTH2025_22-SPR_CA_D#subjects)

Spring (2023)

Campbelltown

On-site

Subject Contact Drew Keys ([https://directory.westernsydney.edu.au/search/name/Drew Keys/](https://directory.westernsydney.edu.au/search/name/Drew%20Keys/))

View timetable (https://classregistration.westernsydney.edu.au/odd/timetable/?subject_code=HLTH2025_23-SPR_CA_1#subjects)