

SUMMER COURSE

SPORTS NUTRITION

HOW NUTRITION CAN IMPROVE SPORTS
PERFORMANCE

16 - 20 JUNE 2025

DESCRIPTION

The aim of this course is to create a personalized, practical and actionable sports nutrition plan to improve your health and performance. You analyze your food intake according to current sports nutrition guidelines and perform a physiological analysis of your sport. You visit SENECA, our test lab, where we demonstrate body composition measurements using DXA and resting metabolic rate using indirect calorimetry. You also create a supplementation plan based on your physiological analysis.

The course is a combination of theoretical and practical classes given by sports nutritionists who work with elite athletes. You also visit the National Sports Centre Papendal, where elite Dutch athletes eat, train and sleep.

LEARNING OUTCOMES

After completing this course, you will be able to:

Learning outcome 1

Create a practical, personalized sports nutrition plan that meets sports nutrition guidelines and a supplementation plan based on your

- Analysis and estimation of the physiological demands of physical exercise

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OF APPLIED SCIENCES

- Assessment of your food intake, assessment and estimation of your daily energy and macronutrient intake, alongside a comparison of these intakes to relevant guidelines

Criteria

- The plan meets sports nutrition guidelines
- The plan is based on the analysis and estimation of the physiological demands of physical exercise
- The plan incorporates the assessment of food intake, total daily energy and macronutrient intake, and a comparison of these intakes to relevant guidelines
- A right formula was used to calculate the total energy expenditure and the student is aware of the errors
- The needs analysis (physiological analysis) is accurate, and you correctly determine which energy systems used in your sports are correctly identified along with their respective ratios
- The food guidelines in your country are correctly analyzed and applied





Activities

- Theory on sports nutritional products and supplements
- Fundamentals of sports nutrition
- Physiological and food analysis
- Step-by-step guided application of theory to personal situations (assignment)
- Theory on body composition
- Theory on physiology
- Measuring physical activity and recovery at the KNVB campus
- Food diary (preparation assignment)
- Intercultural perspective on food
- Theory on nutritional analysis

Learning outcome 2

Explain how to calculate body composition (DXA) and resting metabolic rate (energy expenditure in rest), based on a demonstration. You can list the advantages and disadvantages of using these scans.

Criteria

An accurate explanation of the role of body composition in the sport, including the different methods for measuring and monitoring it.

Activities

- Theory on ventilated hood and DXA
- Measuring DXA and Ventilated Hood and RMR at Seneca

EXAM FORMAT

Presentation of the sports nutrition plan and a quiz.

STUDY LOAD

6 hours: Preparation
20 hours: Classes
20 hours: Self-study/working on plan
10 hours: Field trips

PREPARATION

Keep a food diary for 3 days.

FIELD TRIPS

- Visit the Olympic Training Centre Papendal in Arnhem
- Visit to SENECA, our test lab, where we will demonstrate measurements on body composition by DXA and resting metabolic rate by indirect calorimetry

CREDITS

If you successfully complete this course, including preparation and assignments, you earn 2 ECTS credits.

ADMISSION REQUIREMENTS

- You're an undergraduate student from a partner university. We also accept master students.
- Your study is related to nutrition, health, physical education or sport. Or you are a student with a special interest in sports nutrition.
- If you are not a native speaker, your English proficiency level is at least B2 (CEFR), IELTS 6.0 or TOEFL iBT 80.

OPEN UP NEW HORIZONS.

HAN CAMPUS NIJMEGEN

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MORE INFORMATION?

Check our website
www.hanuniversity.com

QUESTIONS?

Send an email to:
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