



THE CENTRE FOR
INTEGRATIVE SPORTS NUTRITION
WHERE HEALTH FEEDS PERFORMANCE



THE CENTRE FOR INTEGRATIVE SPORTS NUTRITION

SHORT COURSE IN INTEGRATIVE SPORT AND EXERCISE NUTRITION

2025 COURSE HANDBOOK

Course leader: Ian Craig

Course Handbook version: 10/01/2025

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Welcome from the course leader

Welcome to the Centre for Integrative Sports Nutrition, home to a large array of educational offering, starting with the 10 hour Short Course in Integrative Sport and Exercise Nutrition, progressing through our 120 hour Certificate of Integrative Sport and Exercise Nutrition, and culminating in the Level 7 (postgraduate equivalent) 120 Credit Diploma course. By studying with us, you have agreed to bring an integrative nutrition perspective into the way that you think about, and manage, your sporting clients. Within our philosophies, we aim to bridge the gap between the practical, quantitative approach of classical sports nutrition and the integrative, qualitative, body-systems approach of functional and integrative nutrition and medicine.

Additionally, we believe that if an athlete is to achieve their highest levels of performance, they firstly need to aspire towards optimal health: our company philosophy is *health feeds performance*.

An athlete (whether elite or recreational), when contrasted to a lay person, has many extra nutritional requirements to achieve peak condition, and as such, we consider the integrative physiology of their body systems, alongside the macro and micronutrient requirements for competitive gain, plus the unique requirements of individual athletes and their sports.

The Short Course in Integrative Sport and Exercise Nutrition progresses through a consideration of integrative body system health in a sport and exercise context, performance nutrition with a strong integrative slant to it, some specialty sports nutrition topics, and finishes with a 30-minute 1-on-1 session with your tutor.

We really look forward to meeting you on the course.

To your wholesome health and nutrition,

A handwritten signature in blue ink, appearing to read 'Ian Craig'.

Ian Craig
CISN Founder

Key professionals involved in the courses



Ian Craig BSc MSc DipCNE INLPTA FBANT is the founder of the Centre for Integrative Sports Nutrition (CISN) and course leader of their online postgraduate level courses.

With his joint academic backgrounds in exercise physiology and nutritional therapy, and a long career as a British middle-distance athlete and coach, he has been developing the concept of integrative sports nutrition for the past twenty years; a fast-evolving discipline that considers both the health and performance of an athlete from an integrative health perspective.

He is the coauthor of *Wholesome Nutrition* with his natural chef wife Rachel Jesson, and has recently co-written the *Textbook of Integrative Sport and Exercise Nutrition* with Professor Justin Roberts of Anglia Ruskin University, to be published by Routledge in 2025.

Additionally, as co-founder of the Nutritional Institute, Ian is a clinical practitioner, based in his native Scotland. His client base ranges from chronic health cases, such as autoimmunity, through recreational and elite athletes, to sports and lifestyle induced low-grade chronic fatigue syndrome.

He gained his BSc in Physiology & Sports Science from the University of Glasgow, MSc in Exercise Physiology from the University of North Carolina at Greensboro, and BSc in Nutritional Therapy at the Centre for Nutrition Education and Lifestyle Management, validated by Middlesex University in London. Ian is a fellow and professional member of the British Association for Applied Nutrition and Nutritional Therapy (BANT).

LinkedIn: [ian-craig-nutrition/](https://www.linkedin.com/in/ian-craig-nutrition/); Twitter: [@ian_nutrition](https://twitter.com/ian_nutrition)



Simone do Carmo MSci, Grad.SENr is a sports nutritionist, exercise physiologist, and personal trainer. Simone owns Personal Best Fitness & Nutrition and is based at the Stevenson Building of the University of Glasgow, where she works with both recreational and competitive clients, and delivers a variety of nutrition workshops.

Simone is a graduate registrant on the UK Sport and Exercise Nutrition Register (SENr) and she is the course coordinator at the Centre for Integrative Sports Nutrition coordinates the Certificate of Integrative Sports Nutrition course. She is a EREPS-registered personal trainer, a

Clean Sport Advisor, and holds Level 1 ISAK accreditation from the International Society for the Advancement of Kinanthropometry.

Simone graduated with a first class, five-year MSci in Physiology, Sports Science and Nutrition from the University of Glasgow in 2016. As an advocate for whole foods and an individualised approach to nutrition, she is interested in nutritional strategies to optimise performance, recovery and injury prevention, from an integrative health standpoint. With a sporting background in athletics and powerlifting, Simone now enjoys lifting weights and functional training.

LinkedIn: <https://www.linkedin.com/in/simone-do-carmo/>; Twitter: [@Sport_Bokkie](https://twitter.com/Sport_Bokkie); www.pb-nutrition.com



Rachel Jesson B.Phys.Ed (Hons), M.Phil. is a certified natural food chef and an ex-South African triathlete, with a contagious and passionate enthusiasm for nourishing foods and optimal health. She is a teacher at the School of Natural Cookery and is the first natural chef to extend these cooking methods out into the demanding field of athletic performance; hence being the host of the CISN Natural Sports Cookery course. Rachel insists that for health, we need to keep things simple; she takes inspiration from previous generations with regard to the preparation of wholesome food. Her latest projects include two-day bone broths, convenient but highly nutritious slow cooking recipes, fermented foods, sports

granola bars, and homemade ice cream!

Rachel is the co-author of *Wholesome Nutrition*, within which she focused on the food sourcing information and the beautiful recipe section, and she contributed regularly to the *Functional Sports Nutrition* publication. Therapeutically, within the Nutritional Institute, which she co-founded with Ian Craig, she works as a health food coach, helping individuals to put nutritional interventions into a practical, food-focussed form.

Rachel's educational achievements include an honours degree in physical education (B.Phys.Ed) and a masters degree in sport science and sport psychology (M.Phil). She is also NLP trained, and has spent the past 20 years immersing herself in the study of whole, traditional and living foods.

LinkedIn: [rachel-jesson-419404167/](https://www.linkedin.com/in/rachel-jesson-419404167/); Twitter: [@RachelJesson](https://twitter.com/RachelJesson); <https://thenutritionalinstitute.com>

Course description

Title: **Short Course in Integrative Sport and Exercise Nutrition**
Start Date: **9 Jan 2025; 22 April 2025 and 18 Sept 2025 (online study)**
Course leaders: **Ian Craig and Simone do Carmo**

The Short Course in Integrative Sport and Exercise Nutrition is an invitation to explore a different approach. We don't just teach you the science of nutrition. We also guide you to understand the art of nourishing your body and mind. This course isn't about generic solutions but, rather, the tailored understanding of what it means to excel in the sporting landscape. Picture this: as you embark on this journey, you'll delve into a holistic perspective of sport and exercise nutrition, a perspective that takes into account the distinctive demands of the sporting world. You'll learn to help your clients to embrace their bodies unique physiological responses, manage stress effectively, and align their lifestyle with their ambitions.

What to expect

- Fresh insights into the emerging paradigm of integrative and functional thinking within a sporting context.
- Continuing professional development (CPD) and continuing education unit (CEU) opportunities.
- Interaction with, and access to, your course leaders and peers for the duration of the course – giving you the reassurance that you will always get your questions answered.
- Free access to the CISN alumni private group for case discussions and general sports nutrition Q & A.
- A springboard to our Certificate or Diploma courses if you wish to continue studying with us (assuming qualification needs are met).

Who's it for?

This course is open to individuals who share a passion for sports, nutrition, and excellence. Whether you're an athlete, coach, student, new practitioner, or an experienced professional, the course welcomes you without any prior experience requirements. Your desire to excel in the sports and nutrition arena is what truly matters. Join us on this transformative journey, where success isn't a sales pitch but a narrative of personal and professional growth that begins right here.

Syllabus of the Short Course in Integrative Sport and Exercise Nutrition

The short course, consisting of four sessions, progresses through integrative body systems in sport and exercise, applied performance nutrition, specialty sports nutrition, and finishes with a 30-minute 1-on-1 tutorial session. Within the process, you'll receive a wealth of educational materials, interaction with tutors and peers online, and reflective self-development exercises.

Session 1 - Integrative body systems in sport

We begin the course with an introduction to integrative sport and exercise nutrition, looking at the personalised health of an athlete's physiological body systems within a sporting context.

Lecture content

Session 1 presentations focus on the following body systems: gastrointestinal, detoxification, immune, neuroendocrine, musculoskeletal, cardiovascular, and bioenergetics. In particular, it is

demonstrated how all our physiological systems interact, and are interdependent upon one another: when one system is unduly pressured by exercise training, the entire health of an athlete can be impeded.

In addition to a tour of the integrative body systems, lectures will focus specifically on:

- Gastrointestinal (GI) health for athletes, including an understanding of the digestive cascade, the gut-axes throughout the body, the microbiome, GI challenges for athletes, and useful nutrition GI strategies.
- Musculoskeletal (MS) health for athletes, including an understanding of structure and function of MS tissues, inflammatory and recovery dynamics after training, and useful nutrition MS strategies.
- Polyphenols, an important group of antioxidant-rich nutrients, are used to illustrate an incredible interconnectivity of body systems; this one nutrient can positively nourish all body systems mentioned above, supporting the importance of a nature-made, whole-food diet.

Workshop case study

Live course participants will be engaged in a discussion that asks how we apply these integrative health considerations to an athlete. In particular, you'll be introduced to William:

- A 23-year old runner who's aiming for an upcoming half marathon race.
- He's attempting a vegan diet, but has been struggling with gastrointestinal and fatigue issues for the past few months.
- After discussion with your peers, you'll take part in supporting William with appropriate dietary and lifestyle advice.

Reflection exercise

- Your personal reflection exercise for session 1 involves filling in a nutrition-focussed health questionnaire, and presenting your own signs and symptoms, along with lifestyle observations, in a neatly organised note sheet.
- You will then reflect on potentially interrelated health imbalances, and beneficial changes you could make in your nutrition, exercise, stress management, and sleep patterns.

Session 2 - Applied performance nutrition

Physical performance is the focus of session 2, which encompasses a presentation of performance-oriented nutrition practices, still through a 'personalised health' lens.

Lecture content

Session 2 begins with a presentation of the use of calories within sports nutrition, in particular emphasising the many limitations involved in this quantitative way of assessing an athlete's nutritional needs. We then offer alternative, and more personalised, body system health strategies for supporting an athlete's body composition.

In addition to calories in sport, and body composition, lectures focus specifically on:

- Macronutrients, including the prominent carb-fat debate in sports nutrition, along with protein needs for hypertrophy.
- Nutrient timing can make the difference between a podium finish and a '*bonk'. This topic is discussed from a perspective of the original research and how this might be alternatively done with healthy ingredients.
- DIY sports and recovery drinks are discussed, with practical suggestions so you can make healthy versions of store-bought products, and teach your clients to do the same.

Workshop case study

Live course participants will be engaged in a discussion that asks the question: how do we maximise training returns and performance outcomes in endurance-oriented athletic individuals? In particular, you'll be introduced to Tessie:

- A 34-year old Olympic distance triathlete who's aiming to finish her professional career off strongly.
- She's currently experiencing imbalanced female hormones, post-viral fatigue, and an upward drift in her body fat.
- After discussion with your peers, you'll take part in supporting Tessie with appropriate dietary and lifestyle advice.

Reflection exercise

- Your personal reflection exercise for session 2 involves, in a performance nutrition context, considering how you supported yourself nutritionally when you undertook a recent high-intensity and/or high-volume training session.
- In this exercise, with learnings from the week's lectures, you need to consider the nutrient needs of the particular training session; what you did well, what you could improve on, and what you learned about nutritionally supporting yourself during training.

*'bonk' – a cycling term for running low in glycogen, consequently with poor performance

Session 3 - Specialty sports nutrition

Specialty topics are the focus of session 3; in particular research contextualisation, hypertrophy in sport, including the gut-muscle axis, and overtraining in sport.

Lecture content

Session 3 focusses firmly on applied sporting practice, and begins with a lecture on the contextualisation of research in an active setting. Just because a research study concludes particular findings doesn't mean that it is applicable to the individual person sitting in front of us; to be good practitioners, we must combine research evidence with clinical experience, and the client's personal story.

In addition, the other presentations focus on these specialist topics:

- Hypertrophy in sport, including a discussion of protein amounts and timing, mTOR signalling, and the gut-muscle axis.
- Overtraining, including an explanation of the HPA-axis, hormone dysregulation, and monitoring strategies to decrease its occurrence.

Workshop case study

Live course participants will be engaged in a discussion that asks the question: how do we support athletes who are pursuing strength and power gains, but who also have a lot of life demands? In particular, you'll be introduced to Barbara:

- A 53-year old oral hygienist, who competes in masters power lifting competitions; she has the goal of qualifying for the British Championships.
- She's currently experiencing perimenopause, raised cholesterol, sluggish weight loss, and compromised recovery between sessions.
- After discussion with your peers, you'll take part in supporting Barbara with appropriate dietary and lifestyle advice.

Reflection exercise

- Your personal reflection exercise for session 3 involves, in a professional context, asking yourself: what more do you need to learn and practice to be the best sports nutrition practitioner that you can be?
- This is an open-ended question, one that we hope all sports nutrition practitioners will continue to ask themselves over time, resulting in an ever-evolving nutrition practice.

Session 4 - A one-on-one session with your tutor

The final session is a 30-minute one-on-one session with your tutor, giving you the opportunity to discuss any topic that you'd like to explore further.

Away now from the group session environment, you have the opportunity to ask whatever you like of your allocated tutor; a highly experienced professional within the field of sports nutrition.

For example:

- You may have a particular topic that you'd like to discuss, and obtain further resources on.
- You may wish to talk through your ongoing interests within the sports nutrition field, including options for continuing education.
- You may have a challenging case that you'd like some help with.
- Or, you may wish to obtain input on setting up a new client business and increase your exposure to potential clients.

Whatever your interest at the time, this is a fantastic opportunity to receive personalised support of your professional sports nutrition needs; it is a feature that greatly boosts the value of this short course.

Learning outcomes and objectives of the Short Course in Integrative Sport and Exercise Nutrition

Session 1 - Integrative body systems in sport

1. Acquire a confident understanding of the integrative and personalised way of working within the context of sports nutrition, with a focus on the concept of 'health feeds performance'.
2. Recognise the importance of the gastrointestinal (GI) tract as a key mediator of whole body integrative health, especially in a sporting context.
3. Explore integrative physiology through the lens of inflammation, considering, in particular, how this impacts an athlete's musculoskeletal systems.
4. Understand the vital role that phytonutrient-rich colourful food plays in supporting our antioxidant systems, which especially helps GI, detoxification, and musculoskeletal function.

Session 2 - Applied performance nutrition

1. Recognise how calories are commonly tracked, but with awareness of limitations and errors within these processes, including large variables in the efficiency of human metabolism.
2. Understand the macronutrient energetic requirements for an athlete in a genetically individual way, including nuances of the carb-fat debate.

3. Understand the basics of nutrition for hypertrophy, including theories of caloric excess, protein requirements, and principles of nutrient timing.
4. Consider the importance of sports and recovery drinks from a performance perspective, including the ability to make your own healthy 'DIY' sports drinks.

Session 3 - Specialty sports nutrition

1. Acquire an awareness of how we might contextualise research information into the scenario of an individual athlete ($n = 1$), adding in practitioner experience and the athlete's story.
2. Explore the new concept of the gut-muscle axis, recognising the importance of good GI health for the purposes of macro and micronutrient absorption, controlling inflammation, and supporting recovery.
3. Understand the basics of overtraining in sport, viewed through a lens of physiological imbalances that can occur, including hormonal and nervous system dysregulation.
4. Be able to think adaptively about a complex sports case study, offering suggestions to support the health-based performance of the individual.

Learning materials

Because everybody's preferred path of study is highly unique, plus there is no textbook that is aligned with this way of thinking and working (yet), we do not have any required texts. However, below is a list of texts that may be beneficial to you as you study with us. More importantly, though, we provide downloadable recommended articles with each session.

- McArdle WD, Katch FI and Katch VL (2015). *Exercise Physiology: Nutrition, Energy, and Human Performance*. 8th edition. Wolters Kluwer Health - Lippincott, Williams and Wilkins.
- Jeukendrup & Gleeson (2019). *Sport Nutrition*. 3rd edition. Human Kinetics.
- Borer, KT (2013). *Advanced Exercise Endocrinology (Advanced Exercise Physiology)*. Human Kinetics.
- Nicole L and Woodriff Beirne A (2010). *Biochemical Imbalances in Disease*. Singing Dragon.
- Schoenfeld BJ (2016). *Science and Development of Muscle Hypertrophy*. Human Kinetics Australia.
- Antonio J et al (2008). *Essentials of Sports Nutrition and Supplements*. ISSN. Humana Press Inc.

Course duration and mode of delivery

This course is delivered exclusively online, meaning that you can join us from anywhere in the world. All workshops are run at 1pm UK time, meaning that we often have students online from North and South America at the same time as participants from Asia and Australasia.

As outlined in the syllabus above, the short course consists of four weeks, or sessions, of immersive study and discussion. Each week consists of:

- Pre-recorded video lectures for you to view before the workshop.
- Two or three articles to read, relevant to that week's subject matter.

- A 90-minute live workshop on Zoom: this includes a presentation, interaction with your peers to solve a case study challenge, and a Q & A section. Each workshop is recorded in case you're unable to attend. On session 4, you'll receive a 30-minute individual and bespoke meeting with your tutor.
- The opportunity to interact with your tutors and peers on our online educational platform.
- A reflective exercise for your own professional development

Tutor support availability

During the time that you are enrolled on this course, you will have full contact with your tutors: course coordinator Simone do Carmo and course leader Ian Craig. If you have logistical questions, you can send an email to Simone and if you have questions about course content, you can send an email to Ian.

Contact details

Course leader: Ian Craig

+44 (0)1292 440284

ian@intsportsnutrition.com

Course coordinator: Simone do Carmo

+44 (0)74 7112 4096

simone@intsportsnutrition.com