Module 1 – Integrative Sports Nutrition and Health

1. Acquire a confident understanding of the functional way of working within the context of sports nutrition.
2. Firmly appreciate the importance of focusing on an athlete's health, which will then underpin their performance.
3. Obtain a thorough physiological knowledge of the gastrointestinal tract, digestive challenges faced by athletes, and strategies to help their GI function.
4. Obtain a thorough physiological knowledge of detoxification and biotransformation, the increased challenges faced by athletes, and strategies to help increase liver/detoxification support.
5. Understand the acute and chronic effects of various exercise workloads on the athlete's immune system, the health implications for resistance to bacterial and viral diseases, and strategies to support athlete immunity.
6. Understand musculoskeletal adaptations to various exercise workloads, the importance of musculoskeletal health for optimal performance, and strategies to manage exercise-induced muscle damage, soreness and inflammation.
7. Obtain a thorough physiological knowledge of the endocrine system, how various excessive exercise workloads can disrupt the endocrine system and induce endocrine fatigue, and strategies to support a balanced endocrine system.
8. Obtain a thorough physiological understanding of the cardiovascular and pulmonary responses to exercise, human energy systems, their interactions and relevance to different sports. Appreciate a holistic and integrative approach to the concept of fatigue.
9. Understand the role of both the sympathetic and parasympathetic nervous systems in an athlete's health and performance, and strategies to support a balanced nervous system.
10. Apply integrative sports nutrition learnings in a consultation.

Module 2 – Applied Performance Nutrition

1. Recognise ACSM guidelines, calculate energy requirements for an athlete and critique the limitations of assessing energy requirements.
2. Understand macronutrient requirements for an athlete in a genetically individual way, and provide strategies to periodise macronutrient intake in certain sporting scenarios.
3. Understand micronutrient requirements for an athlete, the importance of nutrient-dense nutrition, measurements of micronutrient status and strategies for micronutrient nourishment.
4. Develop strategies to manipulate an athlete's body composition taking into account beyond-calorie considerations such as blood sugar regulation, stress hormones, female hormones and more.
5. Develop pre-, during and post-exercise nutrition guidelines, viewing historical and current research information.

6. Appreciate the evolution of sports drinks and gels for performance and recovery, and delve into the wonderful world of making them yourself.
7. Understand the importance of hydration for an athlete's health and performance, use hydration guidelines and devise strategies to meet an athlete's hydration requirements.
8. Assess the evidence behind nutrient timing as a dietary strategy and individualise the information to a particular athlete.
9. Obtain a thorough physiological understanding of overtraining (and other physiological imbalances), learn how to assess and monitor overtraining, and strategies for prevention and recovery.
10. Demonstrate applied performance nutrition learnings in a consultation.

Module 3 – Specialised Sports Nutrition (this module will have more guest speakers, so prior to the speakers being finalised, this is a working template of learning outcomes)

1. Identify nutritional strategies to help manage prevention and recovery from sports injuries.
2. Recognise the role of psychoneuroimmunology with regards to immune compromise/imbalance and chronic fatigue in an athletic setting.
3. Understand the biochemistry of exercise-induced metabolic acidosis and strategies for efficient buffering, including nutrition and breathing.
4. Recognise the associated health risks of performance-enhancing drugs, identify anti-doping regulations and values, and use guidelines to evaluate supplement safety and efficiency for an athlete.
5. Obtain a thorough physiological understanding of ergogenic aids that can directly assist athletic performance.
6. Obtain a thorough physiological understanding of nutrients that may be termed 'conditionally essential ergogenic aids' - i.e. in certain instances these nutrients are supportive to health/performance.
7. Develop monitoring, nutrition and lifestyle strategies for recovery.
8. Obtain a good physiological understanding of exercise in extreme conditions, and strategies to minimise adverse effects on health and performance.
9. Via the experiences and strategies of specialised practitioners, recognise sport-specific nutritional considerations.