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Athletic Patients Are a Special Breed

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Dr Terry Notaras is a Doctor of Chiropractic and Doctor of Osteopathy. He is registered as a Chiropractor and Osteopath with the Chiropractic Board of Australia and is a member of the Chiropractors Association of Australia. Dr Notaras is also an Associate Member of the Australasian College of Chiropractors.

Dr Terry Notaras has lived in the local area for 39 years and has been in private practice for 28 years. He has served on the Executive Committees of the Chiropractors Association of Australia.

Dr Notaras has looked after the health of some of the world's best professional Golf Tour. He has also looked after the Olympic Cycling Squad as well as many other elite athletes. This background allows the technique used at Southern Spinal Care to be the latest and the most effective in the world.

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Athletes are often promoted as the picture of health and wellbeing but this is not always an accurate depiction. Despite being extremely fit, talented and dedicated, many athletes have limited understanding of how to best support their physiology and may consequently suffer from poor health; ultimately affecting their performance. As holistic Practitioners we are well placed to support athletes and help take them to the next performance level.

There are many different types of athletes and they all do different forms and levels of exercise; they will therefore all have slightly different nutritional requirements. Factors specific to each form of exercise, such as intensity and duration, as well as an individual training status and physiology will determine their specific metabolic and nutritive requirements. However, some general principles can be applied to all athletes. For example, the most important considerations that can have measurable effects on athletic performance is the quantity, quality and timing of nutrient intake. Understanding nutritional requirements of athletic patients is fundamental for optimal clinical outcomes.

Carbohydrates provide an immediate supply of fuel for athletes and are need for the creation of the stored energy source, glycogen. Glycogen depletion may limit performance during high volume and/or high intensity workouts or when multiple workouts are performed on a single day.

Protein requirements in athletes will vary depending on the duration

and intensity of exercise. Strength athletes, interested in gaining muscle size and function, require more protein in the early stages of intensive resistance exercise. Endurance athletes in heavy training require extra protein to cover a small proportion of the energy costs of their training and to assist in the repair and recovery process following exercise.

Much research indicates the timing of calorie intake without altering the amount consumed can hugely impact athletic performance and recovery. Specifically, research has revealed that a mixture of essential amino acids and carbohydrates taken before both endurance and resistance exercise effectively stimulates protein synthesis following exercise due to increased insulin release and availability of amino acids. Additional early intake of protein and carbohydrates in the post-exercise window (within 30-60 mins) is more effective at increasing skeletal muscle growth, supporting lean muscle mass and promoting glycogen synthesis when compared to the same combination consumed later. To replenish glycogen stores, a combination of high and low glycaemic index carbohydrates is recommended for both quick replenishment of glycogen and steady release of glucose into the blood.

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