

## Nutrition for Health and Performance: Considerations for the Para athlete

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We are beginning to see some high-performance organisational structures sharing the provision of coaching and support services at the front-line. While this integration is important, it may have some unintended negative consequences for Para sport, particularly if there is a failure to recognise some of the key differences within Para sport. Indeed, some Para athletes with impairments are physiologically similar to their non-disabled counterparts, whereby the application of sports nutrition principles is straightforward. However, Para athletes with certain impairments (e.g., athletes with a spinal cord injury (SCI) or cerebral palsy), require a very individualized approach when applying these principles in a practical way. This presentation will reflect and explore some of the nuances that come with this territory and highlight the *subtle yet significant* modifications that may be required with the delivery/testing methods, interpretation of data or feeding back to the Para athlete. For example, gastric emptying can be slowed in persons with a SCI compared to non-disabled persons, so careful pre-training and pre-competition meal planning is essential. Energy expenditure, and thus energy intake for athletes with a SCI are less than non-disabled athletes, making it more challenging to meet some of the recommended micronutrient intakes or with weight management. Moreover, since some athletes (i.e., those with quadriplegia) generally have an absent or much reduced ability to sweat then hydration strategies differ within Para athletes and between non-disabled athletes. Nutritional issues related to body mass/composition management including portion control, hydration and sodium intake are important considerations for athletes with a lower limb amputation. For example, it is important to maintain weight to ensure proper fit of the residual limb into the socket of prosthetics. In addition, increased sodium intake, heat or travel can cause the athletes' limbs and/or thighs to swell, making their prosthetic fit extremely uncomfortable. These are just some of examples that will be highlighted within this presentation were 'integration of physiological and nutritional support' must not come at the expense of the specific needs of Para athletes.