

Title – The Potential Role of Nutrition in Concussion/mTBI Management

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While it is well known that diet plays an essential role in maintaining neurological function, little research has focused on the role of nutrition in brain injury recovery and the alleviation of concussion symptoms. Most research advises rest and medical and physiotherapy-led interventions in acute and chronic recovery. Indeed, the most recent Concussion Consensus Statement developed by the Concussion in Sport Group (CISG) in Amsterdam in October 2022 and released in June 2023 has again highlighted the role of exercise in concussion recovery but makes no reference to the potential role of nutrition.

Treatment for persistent post-concussion syndrome (PPCS) typically involves a combination of medication, such as pain relievers or antidepressants, and cognitive and/or physical therapy to address specific symptoms and help the individual improve their ability to function in daily life. In some cases, referral to a specialist, such as a neurologist or neuropsychologist, may be necessary for more specialized care. There is some evidence to suggest that omega-3 polyunsaturated fatty acids (PUFAs) and other nutritional therapies may have a role in the management of PPCS.

To date the potential role of nutrition in the management of concussion recovery has received very little attention. Given the metabolic and physiological changes that occur post-concussion, there is a clear role for nutritional interventions to alleviate post-concussion symptoms. This presentation will explore the current evidence for nutrition in the management of acute and chronic concussion and will also discuss how nutrient sufficiency prior to sustaining a concussion may offer protection from severe symptoms.