

List of Supplements for Treating TBI taken from:

Richer, A. C. (2017). Functional Medicine Approach to Traumatic Brain Injury. Medical acupuncture, 29(4), 206-214.

- Choline: This is an anti-inflammatory & antioxidant that could support a decrease in calcium mediated cell death, which is common in TBI.
- Coenzyme: Q10 This nutrient shows a positive effect against neurodegenerative & mitochondrial disorders.
- Creatine: This nutrient could improve cognition & behavior, maintain mitochondrial function & improve cerebral vascular function, which is common during the initial, acute phase of TBI.
- Curcumin: There is some evidence of improved motor & learning performance, blood–brain barrier integrity, cognition & reduced cerebral edema in brain injured animals.
- Glutathione: There is some evidence that this nutrient reduces ROS levels & improves brain injury markers.
- Ketogenic diet: Some evidence provides an alternative energy source that reduces brain dependence on glucose metabolism that is impaired after a TBI.
- Lipoic acid: This is an antioxidant that might reduce lipid peroxidation. Animal research shows that it might reduce neuron death after TBI.
- Magnesium (Magnesium L-Threonate): This mineral is usually depleted in TBI. It could have a neuroprotective effect & decrease glutamate damage by regulating calcium entry into postsynaptic neurons.
- Melatonin: Decreased levels common after mTBI appear to affect sleep patterns. Supplementation may reduce sleep-cycle disruptions.
- N-3 fatty acids (EPA and DHA): Evidence shows an anti-inflammatory & neuroprotective benefit against brain injuries. Research is not conclusive, however.
- Polyphenols: These nutrients have anti-inflammatory properties.
- Vitamin D: This vitamin binds DNA response involved in regulation of gene transcription, differentiation & neural function in the brain.
- Vitamin E: This vitamin reduces oxidative stress & improves cognition, memory & learning in animal studies.
- Vitamin K2: This vitamin is neuroprotective.
- Zinc: This mineral is required in central nervous system enzyme functions. Zinc is released in the synaptic cleft of the brain where neuroreceptor activity is modulated. Excess release of zinc contributes to neural cell death. Zinc deficiency could exacerbate cell death in TBI. Patient trials with zinc show positive effects in severe closed-head injuries. More research is indicated.
- Progesterone: This is a steroid hormone that has neuroprotective effects on injured brain cells & potentiates the effect of vitamin D. Combined use of vitamin D with progesterone requires further study.