**NAD+ (nicotinamide adenine dinucleotide) supplementation has been studied for its potential benefits in mitigating the effects of traumatic brain injury (TBI) and stroke. Here are five benefits supported by research:**

**Neuroprotection**: NAD+ supplementation has shown neuroprotective effects, preserving neuronal function and integrity after brain injury. Studies suggest that NAD+ can reduce neuronal death and inflammation in the brain, promoting recovery. (Journal Article: Liu et al., 2019)

**Enhanced Mitochondrial Function**: NAD+ plays a crucial role in mitochondrial function and energy production. Supplementing NAD+ can support mitochondrial health, improving cellular energy metabolism and reducing oxidative stress, which are critical factors in TBI and stroke recovery. (Journal Article: Hou et al., 2018)

**Improved Cognitive Function**: NAD+ supplementation has been linked to improvements in cognitive function following brain injury. By supporting neuronal survival and synaptic plasticity, NAD+ may help mitigate cognitive deficits associated with TBI and stroke. (Journal Article: Wang et al., 2020)

**Reduced Neuroinflammation**: NAD+ has anti-inflammatory properties that can modulate neuroinflammatory responses after brain injury. By attenuating the inflammatory cascade, NAD+ supplementation may help reduce secondary damage and promote tissue repair in the injured brain. (Journal Article: Zhang et al., 2021)

**Promotion of Neurogenesis and Synaptogenesis**: NAD+ supplementation has been shown to stimulate neurogenesis (the formation of new neurons) and synaptogenesis (the formation of new synapses) in the brain. These processes are crucial for recovery after TBI and stroke, facilitating neural repair and functional recovery. (Journal Article: Liu et al., 2020)

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Wang X, Hu X, Yang Y, Takata T, Sakurai T. Nicotinamide mononucleotide protects against β-amyloid oligomer-induced cognitive impairment and neuronal death. Brain Res. 2016 Dec 1;1643:1-9.

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**Options for supplementation**

IV infusion (high dose 250-1000mg per infusion)

-Loading phase infusion series includes 1000mg divided up into 3 separate infusions $755

Intramuscular injection in the office or at home administration (50-100mg per injection)

-50mg IM injection in office $55, package of 4 injections $155

-100mg IM injection in office $75, package of 4 injections $275

-2000mg vial(20-40 injections), injection supplies, and home injection teaching appointment $800

Nasal Spray (60mg per dose, one spray each nostril) $150

-75 day supply of 60mg dosing per day

**Notes:**