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Role of Sulforaphane on Alleviating Duchenne Muscular Dystrophy(DMD) through Activation of Nrf2

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Abstract: Sulforaphane (SFN) possesses powerful chemo-preventive effects and plays a crucial role on oxidative stress and inflammatory. In our recent study, SFN treatment could relieve muscular dystrophy in mdx mice by activating Nrf2 (NF-E2 related factor 2). Moreover, our findings indicated that SFN-activated Nrf2 alleviated muscle inflammation in dystrophin-deficient mdx mice through suppressing NF-kB signaling pathway. Collectively, SFN-induced Nrf2 molecular pathway might be a promising approach for treatment of the patients with Duchenne muscular dystrophy.

Keywords: sulforaphane, Duchenne muscular dystrophy, Nrf2, inflammation, fibrosis, oxidative stress **Conference Title:** ICBMJD 2015: International Conference on Bone, Muscle and Joint Diseases

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