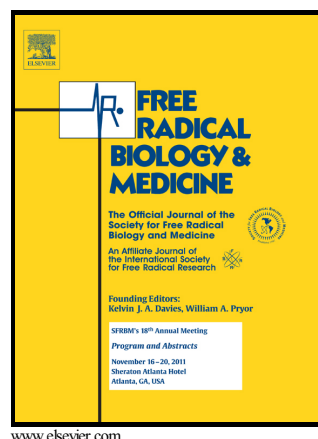


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Exercise-Induced Nrf2-signaling is Impaired in Aging

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Abstract.

Purpose. The transcription factor nuclear erythroid-2 like factor-2 (Nrf2) is the master regulator of antioxidant defense. Data from animal studies suggest exercise elicits significant increases in Nrf2 signaling, and that signaling is impaired with aging resulting in decreased induction of phase II detoxifying enzymes and greater susceptibility to oxidative damage. We have previously shown that older adults have lower resistance to an oxidative challenge as compared to young, and that this response is modified with physical fitness and phytonutrient intervention. We

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