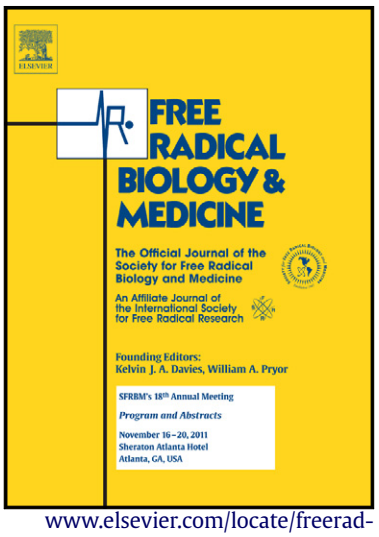

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Zinc and calcium modulate mitochondrial redox state and morphofunctional integrity

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Abstract

Zinc and calcium have highly interwoven functions that are essential for cellular homeostasis. Here we first present a novel real-time flow cytometric technique to measure mitochondrial redox state and show it is modulated by zinc and calcium, individually and combined. We then assessed the interactions of zinc and calcium on mitochondrial H_2O_2 production, membrane potential ($\Delta\Psi_m$), morphological status,