Type 2 diabetes as a redox disease

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Physical exercise has long been widely regarded as essential to human health. Yet, we do not know how exercise-stressed skeletal muscle cells that generate reactive oxygen species such as hydrogen peroxide (H₂O₂) delay—if not prevent—the occurrence and severity of diseases such as type 2 diabetes (as well as dementias, cardiovascular disease, and some cancers). Also unexplained is the recent finding that metformin—the most commonly used drug to treat type 2 diabetes—and physical exercise seem ...