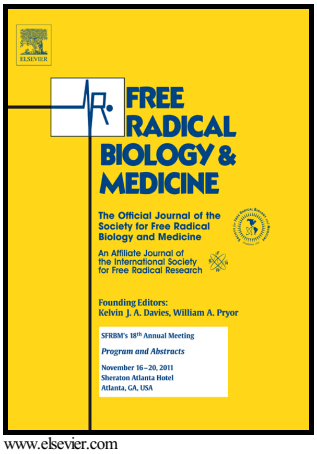



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# Diabetes-induced hepatic oxidative stress: a new pathogenic role for glycated albumin

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## Abstract

Increased oxidative stress and advanced glycation end-product (AGE) formation are major contributors to the development of type 2 diabetes. Here plasma proteins e.g. albumin can undergo glycoxidation and play a key role in diabetes onset and related pathologies. However, despite recent progress linking albumin-AGE to increased oxidative stress and downstream effects, its action in metabolic organs such as the liver remains to be elucidated. The current study therefore investigated links between oxidative perturbations and biochemical/structural modifications of plasma albumin, and subsequent downstream effects in transgenic db/db mouse livers and HepG2 cells, respectively. Our data reveal increased oxidative stress biomarkers and lipid accumulation in plasma and livers of diabetic mice, together with albumin glycoxidation. Purified mouse albumin

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