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ACCEPTED MANUSCRIPT

Oral supplementation with melatonin reduces oxidative damage and concentrations of inducible nitric oxide synthase, VEGF and matrix metalloproteinase 9 in the retina of rats with streptozotocin/nicotinamide induced pre-diabetes

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Abstract

Hyperglycemia mediated oxidative stress and pro-angiogenic molecules such as vascular endothelial growth factor (VEGF) and matrix metalloproteinase 9 (MMP9) are considered important for diabetic retinopathy onset and progression. Melatonin is a pineal hormone that regulates circadian and seasonal rhythms and most likely is involved in regulating glucose metabolism. We aimed to evaluate the potential benefit of melatonin supplementation to the pre-diabetic retina by assessing melatonin effects

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