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**Isoquercetin ameliorates hyperglycemia and regulates key enzymes of glucose metabolism via insulin signaling pathway in streptozotocin-induced diabetic rats**

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**ABSTRACT**

Among the foremost common flavonoids within the human diet, quercetin glycosides possess neuroprotective, cardioprotective, anti-oxidative, chemopreventive, and anti-allergic properties. Isoquercetin is one such promising candidate with anti-diabetic potential. However, complete studies of its molecular action on insulin signaling pathway and carbohydrate metabolizing enzymes remain unclear. Hence, we have designed this study to accumulate the experimental evidence in support of anti-diabetic effects of isoquercetin. Male albino Wistar rats were divided into seven groups. Rats (Groups 3 to 7) were administered a single intraperitoneal injection of streptozotocin (STZ; 40 mg/kg b.w) to induce diabetes mellitus. As an extension, STZ rats

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