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### The impact of Morus alba leaves extract on diabetes-induced complications in rats

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**D**iabetes mellitus is one of the most common endocrine diseases. Researchers all over the world are exploring herbal supplements to control diabetes and its complications. This study evaluated the antidiabetic action of Morus alba leaves extract through its effect on hyperglycaemia, DNA damage and apoptosis of brain cells due to oxidative stress in diabetes. Moreover, evaluate the effect of diabetes on neurotransmitters levels of streptozotocin-induced diabetic rats. Application of crude water extract of Morus alba resulted in amelioration of the alterations

of serum glucose as well as neurotransmitters including acetylcholine (ACE), nor-adrenaline (NAD), serotonin (S-HT), histamine (HS), dopamine (DA) and gamma amino butyric acid (GABA). Furthermore, Morus alba leaves leaf extract display hypoglycemic effect, diminish DNA damage and apoptosis of brain cells of diabetic rats. In conclusion our results suggest that the protective effect of Morus alba leaves extract could be attributed to the hypoglycaemic, and antioxidative potential of flavonoids, the major components of the plant extract.

#### Biography

Hanan A Soliman Did PH. D. in Breast Cancer and Tumor Markers, from Faculty of Science, Cairo University, Beni-Suef ,branch.2002, Assistant prof, Biochemistry Division, Chemistry Department, Faculty of Science, Beni-Suef University, from 9/2010 and Attended post doctoral search for 3 months at university of Birmingham and she published so many article like "Detection of Sperm DNA Alterations and Heat Shock Protein -70 Levels in Albino Rats Exposed Methoxychlor", Global journal of Biotechnology & Biochemistry"

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