Phoenix dactylifera L may have beneficial effects in diabetes mellitus

Abdelmarouf Hassan Mohieldein
Qassim University, KSA

Introduction: Diabetes Mellitus has reached epidemic proportion and has become one of the most challenging health problems of the 21st century. Many herbal formulations have been developed and are used in the treatment of diabetes. The commercial date palm, Phoenix dactylifera L, is thought to be the world’s oldest cultivated fruit tree.

Aim: This study aimed to find out the antidiabetic property of aqueous seed extract of two popular varieties of kingdom dates “Sukkary and Ajwa” in diabetes-induced rats.

Materials and Methods: Total of seven groups of Male Wistar rats, consisting of control rats and streptozotocin induced diabetic rats treated with aqueous seed extract in concentration of 100g/L in dosage of 10ml/day/rat. To evaluate the anti-diabetic property, glucose and weight was analyzed weekly and at the end of eight week all rats were sacrificed. Blood sample was collected in plain tubes. Blood glucose was tested using Bayer’s CONTOUR® blood glucose meter.

Results: Aqueous seed extract in concentration of 100 gm/L in dosage of 10ml/day/rat brings a significant reduction of blood glucose levels in diabetic rats in comparison of control rats.

Conclusion: Present study suggests that Phoenix dactylifera L may have beneficial effects in diabetes mellitus that holds the hope of new generation of antidiabetogenic drugs. However, comprehensive chemical and pharmacological researches are required to find out the exact mechanism of this extract for its antidiabetogenic effect and to identify the active constituent(s) responsible for this effect.

Biography
Abdelmarouf Hassan Mohieldein is an Associate Professor of Medical Biochemistry & Research Methodology. He was awarded Ph.D degree in Biochemistry from Institute of Molecular Medicine, I.M. Sechenov First Moscow State Medical University (formerly, Moscow Medical Academy), Russia. He has got the training in chemical pathology, Newham General Hospital, London, U.K. He has published more than 30 papers in refereed reputed journals and serving as an editorial board member and a reviewer for several international journals and research funding agencies. Currently, He works as director, Unit of quality assurance & academic accreditation, CAMS, Qassim University.

mabdelmarouf@hotmail.com

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