

Isolation of active compound from medicinal plant and evaluation of its antidiabetic activity in stz induced diabetic rats

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The aim of the study was to assess the antidiabetic activity of the active compound isolated from hexane extract of medicinal plant from Costaceae family against streptozotocin induced diabetic albino rats. The active compounds were characterized using gas chromatography, nuclear magnetic resonance and fourier transform infrared spectroscopy. The active compounds of medicinal plant at a dose of 5, 10 mg/kg were orally administered as a single dose per day to diabetes induced rats for a period of 30 days. The results showed that fasting blood glucose level was significantly ($p < 0.05$) decreased compared to that of diabetic control. The dosage of 10 mg/kg is more effective than that of 5 mg/kg. Histopathological observations revealed that it is non-toxic and regenerates the toxic effect of streptozotocin. Our investigation thus showed that active compound from hexane extract of medicinal plant from Costaceae family has potent antidiabetic effect in streptozotocin induced diabetic rats and this effect was much comparable to that of the standard reference drug glibenclamide.

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Methods to reduce some of the health problems with the selection of specific medicinal foods which contain good amounts of nutrients

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Kidney and gall stones seems to be major problem among populations through there are different treatments available in lithotripsy seems to be commonly adopted treatment then whether it is treatment with drugs or surgery side effects in a patient seem to be a common problem. Many plants and herbs are have been tested for their efficacy in Ayurveda and were recorded. There is enough literature on medicinal foods with their potential. The collected stones were allowed to melt in respective food extracts for about 50 days by constant stirring on a rotary shaker. The food extracts include papaya, barley, drumstick leaves, flax seeds, coconut flowers, radish which act as litholytic agents. A gradual reduction in size of the stones was observed in all the samples. Out of which a significant reduction is observed in the samples with gall stones in papaya and barley extracts and kidney stones in papaya in which sodium citrate acts as buffer.

Thus we can reduce some of the health problems with selecting specific medicinal foods which contain good amounts of nutrients.

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