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The antidiabetic activity of aloes: preliminary clinical and experimental observations.

[Ghannam N](#), [Kingston M](#), [Al-Meshaal IA](#), [Tariq M](#), [Parman NS](#), [Woodhouse N](#).

Abstract

The dried sap of the aloe plant (aloes) is one of several traditional remedies used for diabetes in the Arabian peninsula. Its ability to lower the blood glucose was studied in 5 patients with non-insulin-dependent diabetes and in Swiss albino mice made diabetic using alloxan. During the ingestion of aloes, half a teaspoonful daily for 4-14 weeks, the fasting serum glucose level fell in every patient from a mean of 273 \pm 25 (SE) to 151 \pm 23 mg/dl (p less than 0.05) with no change in body weight. In normal mice, both glibenclamide (10 mg/kg twice daily) and aloes (500 mg/kg twice daily) induced hypoglycaemia after 5 days, 71 \pm 6.2 and 91 \pm 7.6 mg/dl, respectively, versus 130 \pm 7 mg/dl in control animals (p less than 0.01); only glibenclamide was effective after 3 days. In the diabetic mice, fasting plasma glucose was significantly reduced by glibenclamide and aloes after 3 days. Thereafter only aloes was effective and by day 7 the plasma glucose was 394 \pm 22.0 versus 646 \pm 35.9 mg/dl, in the controls and 726 \pm 30.9 mg/dl in the glibenclamide treated group (p less than 0.01). We conclude that aloes contains a hypoglycaemic agent which lowers the blood glucose by as yet unknown mechanisms.

Effect of Aloe vera Supplements in Patients with Pre-Diabetes

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ABSTRACT

Metabolic syndrome confers an increased propensity to diabetes and cardiovascular disease. Aloe vera, a plant used for dermatological applications, exhibits effects on blood glucose in diabetic mice. However, there is a paucity of data with regards to Aloe in improving glycemia. The aim was to examine the safety and antidiabetic effects of 2 aloe products, UP780, a chromone-enriched Aloe gel fillet powder and AC952, Aloe gel fillet powder standardized to 10% polysaccharide without chromone, in a double-blind, placebo-controlled trial in patients with pre-diabetes. 45 patients were randomized to 2 tablets/day of Placebo, UP780 and AC952(500 mg bid) for 8 weeks. Fasting blood and urine were obtained at baseline and 8 weeks. There were no significant changes in weight and routine chemistries, indicating safety of both Aloe supplements. In the UP780 group, there were

significant reductions in HbA1C, fructosamine and insulin ($p < 0.05$). Urinary f2-isoprostanes were significantly decreased compared to baseline. In the AC 952 group, in addition to a decrease in fructosamine, there were significant reductions in total and LDL cholesterol levels and glucose and fructosamine values after supplementation. Thus, we report for the first time that 2 Aloe products significantly improved glycemic control in patients with pre-diabetes.