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Insulin -A potential Source to Diabetes

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SUMMARY

Insulin plant (*Chamaecostus cuspidatus*) commonly known as Spiral flag and Step ladder. These Plant is a boon by Mother Nature for the treatment of Diabetes - A Menacing health condition-If left untreated, this dangerous health issue can have serious consequences for different organs of the body, including the kidneys, eyes, gastrointestinal tracts, and the heart. Diabetes is a disorder in which the blood sugar (glucose) levels in the body become excessively high. Insulin is a hormone that allows glucose into your cells to produce energy and hence contributes in disease control. Insulin Plant is a medicinal plant that is used to cure diabetes. These herbs not only cure diabetes, but they also treat a number of other health problems.

INTRODUCTION

Insulin plant botanically named as *Chamaecostus cuspidatus* and commonly known as Spiral flag and Step ladder. Thenames that have been given to *Costus Igneus Nak*. The plant originated from South and Central America belongs to family Costaceae and belongs to genus Costus which Consisting of nearly 150 species and it is the largest in the family, and mainly found in tropical region.

Even though, plant native to American region itgrows profusely under Southern Indian condition as ornamental plant, from there the plant nicknamed as “Insulin Plant.” The plant called Spiral flag and Step ladder because of the arrangement of the leaves on main stock as spiral manner. The leaves which are 4-8 inches length produce orange-red flowers which themselves good in sweet and nutritious. The leaves are in protein, iron, vitamin E and carotene as well as they have many medicinal properties like antibacterial, antifungal, antioxidant Ameliorative and diuretic. Leaves of C. igneus were one among the plants known to be effectively used for treating diabetes by the tribal people of Kolli hills of Namakkal district, Tamilnadu. (Elavarasiand Saravanan,2012)

Consumption of the leaves are believed to lower blood glucose levels, and diabetics who consumed the leaves of this plant did report a fall in their blood glucose levels. The main intension of leaves to be consumed to cure the people who suffering from type-1 and type -2 diabetes. The Phrase of this plant is " a leaf a day keeps diabetes away". Diabetes patients are advised to chew two leaves per day in the morning and evening. After one week the patient should take one leaf in the morning and evening. This dosage should be continued for a month. It is turning out to be munching dietary supplement for diabetes (Suganya et al.,2013), (Murphy,2008).

Insulin Plant for Diabetes

Costus igneus is a traditionally used medicinal plant the leaves are the most essential component that has anti-diabetic properties. Insulin plants, as the name suggests, are often used to treat diabetes by effectively reducing blood sugar levels. The fructose in the insulin plant's leaves aids in the regulation of high blood sugar levels. High blood sugar levels are particularly dangerous since they can cause organ failure and restrict the body's nourishment flow. Regular use of insulin leaves can help to avoid these health difficulties as well as chronic disorders. More than 15 clinical investigations have shown that consuming one insulin plant leaf may successfully cure diabetes. The best technique to cure diabetes is to make a decoction from insulin leaves.

How does work Insulin Plant

The leaves of the plant potential source for variety of constituents like proteins, antioxidants, flavonoids, iron, vitamin-c and b-carotene apart from that the green leaves are rich in carosolic acid. When the component consumed it works as miracle by triggering the secretion of insulin hormone from pancreatic glands. Thereby by it reduces the elevated levels of glucose in bloodstream and reduce the risk of diabetes and the chemicals that helps in cuts back the menaces of diabetes. It lowers blood glucose levels in both fasting and postprandial situations. Insulin plant lowers diabetes problems by bringing renal and hepatic parameters to a regulated level, decreasing the quantity of glycosylated haemoglobin, correcting the lipid profile, increasing body weight and insulin level, and showing substantial improvement in the histopathological examination. The whole plant acts as a hypoglycemic, lowering blood glucose levels by 50.46 percent. (V. Palanivel *et al*., 2013)

How does take insulin plant

Plant Leaf: The fresh green leaves are taken by orally and chew it which reduce the risk of blood sugar levels

The Insulin Plant Tea: if the fresh leaves unable to chew, then you can prepare a decoction by pounding few leaves and boil it in water for 10-15 minutes in water until the water level reaches to the half of the volume. Thereafter strain the water and drink it two times per day for obtaining good results. The Insulin Plant Powder: another way to consume the plant by making the leaves in powder form. It can be prepared by collecting some leaves and dry them in shade then grind the leaves in mixer to form very minute fine powder. The recommended dosage for the consuming powder is half to one table spoon per day. It provides best results. There is need to be caution do not take more than recommendation it will create other health problems

Health benefits of insulin

Reduce Cholesterol Level: The insulin plant has a high water and water-soluble content, which inhibits the absorption of glucose into the bloodstream from the digestive tract. It will improve fat absorption and assimilation, lowering blood cholesterol levels in the body.

Promote Digestion: The insulin plant leaves contain a significant amount of fructose, which aids with digestive system function. The elimination process will be sped up if you eat insulin plant leaves.

Kidney Health: The leaves and rhizomes of the insulin plant have a diuretic action, which modulates potassium and sodium clearance to regulate diuresis. You may improve your kidney health by using correct diuresis and an automated excretory balanced rate. If you have a kidney infection or stones, you can drink the insulin leaves tea every day to enhance your kidney function.

Cures Liver Illness: The leaves of the insulin plant contain various essential components that aid in the breakdown of fatty acid deposits in the liver and enhance liver function.

Boosts Immunity: Insulin plant leaves naturally contain antioxidants, which help to boost the immune system by removing free radicals from the body. You may live a healthy lifestyle if your immune system is well-maintained.

Reduce blood pressure: Consuming the leaves of this plant lowers blood pressure. Drinking the insulin leaves potion is an effective treatment for high blood pressure. Drinking insulin leaves potion is an effective treatment for high blood pressure.

CONCLUSION

Regular use of insulin plant leaves, in concert with other treatment modalities, has efficiently provided glycemic control in diabetics; the insulin dose might be lowered by half. Blood sugar levels that were previously uncontrollable with oral hypoglycemic medications or non-allopathic therapy were now under control. Diabetes issues were prevented, and no negative consequences from the ingestion of insulin plant leaves were noted. Glycemic control was seen as early as day fifteen. Regular ingestion is required to reap the advantages.

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