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Is there a role of Inulin in the management of Type 2 Diabetes mellitus ?!

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Abstract Background: Type 2 Diabetes mellitus is a serious disease; its prevalence is rising to pandemic levels worldwide. Hypertriglyceridemia is a feature of the disease. It is a main culprit behind the cascade of the biochemical disorders of type 2 diabetes mellitus. Inulin fructose is an edible oligosaccharide. It exerts a prebiotic effect on colonic microbiota, enhancing the bifido bacteria strains; their products stimulate the gut endocrine L-cells to secrete glucagon like peptide-1 which improves insulin resistance.
Methods: Twenty eight obese type 2 diabetic female patients, each of them was given four grams inulin fructose daily as an add on therapy to their conventional antidiabetic treatment for three weeks. Their fasting serum triglycerides, insulin resistance, fasting insulin level and fasting glucose level were estimated before and after three weeks of inulin intake.
Results: There was a significant decrease in the serum level of the aforementioned four parameters.
Conclusion: Inulin can be given as an add on treatment to conventional antidiabetic therapy. It effectively reduced serum triglycerides and insulin resistance which is the core problem in the management of type 2 diabetes mellitus.
Keywords: Inulin, Type 2 diabetes, Triglycerides. Insulin resistance, Insulin.

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