

**INSULIN SENSITIZER IN PATIENTS WITH IGT :
CLINICAL REVIEW AND EXPERIENCES**

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ABSTRACT

Type 2 diabetes mellitus is a progressive disease characterised by declining pancreatic β cell function and insulin action. These processes begin years before diabetes is diagnosed, and accelerated by environmental factors leading to excess exposure to hyperglycemia. The component of insulin resistant is found in more than 90% of T2DM patients. Thus, early improvement of insulin action will be much more important and effective in reducing blood glucose levels.

Hyperglycemia is a terminology used for abnormal increasing of blood glucose level either fasting or after meal. Glucotoxicity is responsible to the progressive nature of T2DM caused by decline in pancreatic β cells function, decreasing insulin sensitivity, and tissue damages.

Glucotoxicity is usually found in uncontrolled diabetes mellitus, since acute postprandial hyperglycemia (APH), a rapid increasing of blood glucose early after meal or food consumption caused by decreasing of first phase of insulin secretion, is another component of glucotoxicity. The role of APH is considered in conversion of prediabetes to diabetes state.

A more effective prediabetes treatment approach is required to prevent patients from being exposed to excessive increasing blood glucose levels.

So, early improvement of insulin action will be the most effective strategy in primary prevention of diabetes and cardiovascular complication.

Keywords. *Insulin resistance, acute postprandial hyperglycemia, glucotoxicity, progression of disease, cardiovascular complication*