

## Emergence of TCF7L2 as a Most Promising Gene in Predisposition of Diabetes Type II

Vipin Gupta<sup>#</sup>, Rajesh Khadgawat<sup>\*\*</sup>, K. N. Saraswathy<sup>###</sup>, M. P. Sachdeva<sup>\*+</sup> and A. K. Kalla<sup>\*\*\*</sup>

*\*Biochemical and Molecular Anthropology Laboratory, Department of Anthropology,  
University of Delhi, Delhi 110 007, India*

*#Telephone: 9899346222, E-mail: #<udaiig@gmail.com>, <knsaraswathy@yahoo.com>##,  
+<mpsachdeva@rediffmail.com>, ++<alokekalla@rediffmail.com>*

*\*\*Department of Endocrinology & Metabolism, All India Institute of Medical Sciences,  
Ansari Nagar, New Delhi 110 029, India*

*Telephone: +91 11 26588641 ext. 3237 (O), 4760 (W), Fax: +91 11 26589386,  
E-mail: rajeshkhadgawat@hotmail.com*

*“Subject never gives you anything, you have to extract from it, and thus making it alive again.” Uday G*

**KEYWORDS** T2D (type 2 diabetes); BMI (body mass index); LD (linkage disequilibrium); SNP (single nucleotide polymorphism); WNT pathway

**ABSTRACT** The genetics of the complex disorder like Diabetes Type II, which is clinically diagnosed as disease of insulin resistance and impaired insulin secretion leading to impaired glucose homeostasis in body, remains a nightmare for geneticists. But the recent progress in identification of a most promising marker in predisposition of diabetes Type II, namely, TCF7L2 with its large effect size and its global presence in various ethnically and geographically different populations offers some hope as the robust genetic approach like genome-wide association studies seem to corroborate the evidence in favour of association of this gene with predisposition to the disease. This paper presents a comprehensive review of studies on the association of this gene with type II diabetes.