

UKPDS 5 Characteristics of Newly presenting Type 2 Diabetic Patients: Estimated Insulin Sensitivity and Islet B-cell Function

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In 713 newly diagnosed Caucasian diabetic patients aged 25-65 inclusive, insulin sensitivity and islet B-cell function were estimated from fasting plasma glucose and insulin concentrations by Homeostasis Model Assessment. Insulin sensitivity was reduced in obese subjects. It was also slightly lower in male than in female diabetic patients, in those who were sedentary and in those with high fasting plasma glucose concentrations. The estimated B-cell function was particularly impaired in patients with a high fasting plasma glucose and in those with normal rather than excess body weight. Whilst diabetes can present in normal weight patients with marked deficiency of B-cell function, presenting patients often have only a moderate impairment of B-cell function with markedly impaired insulin sensitivity secondary to obesity, physical inactivity, or being male.