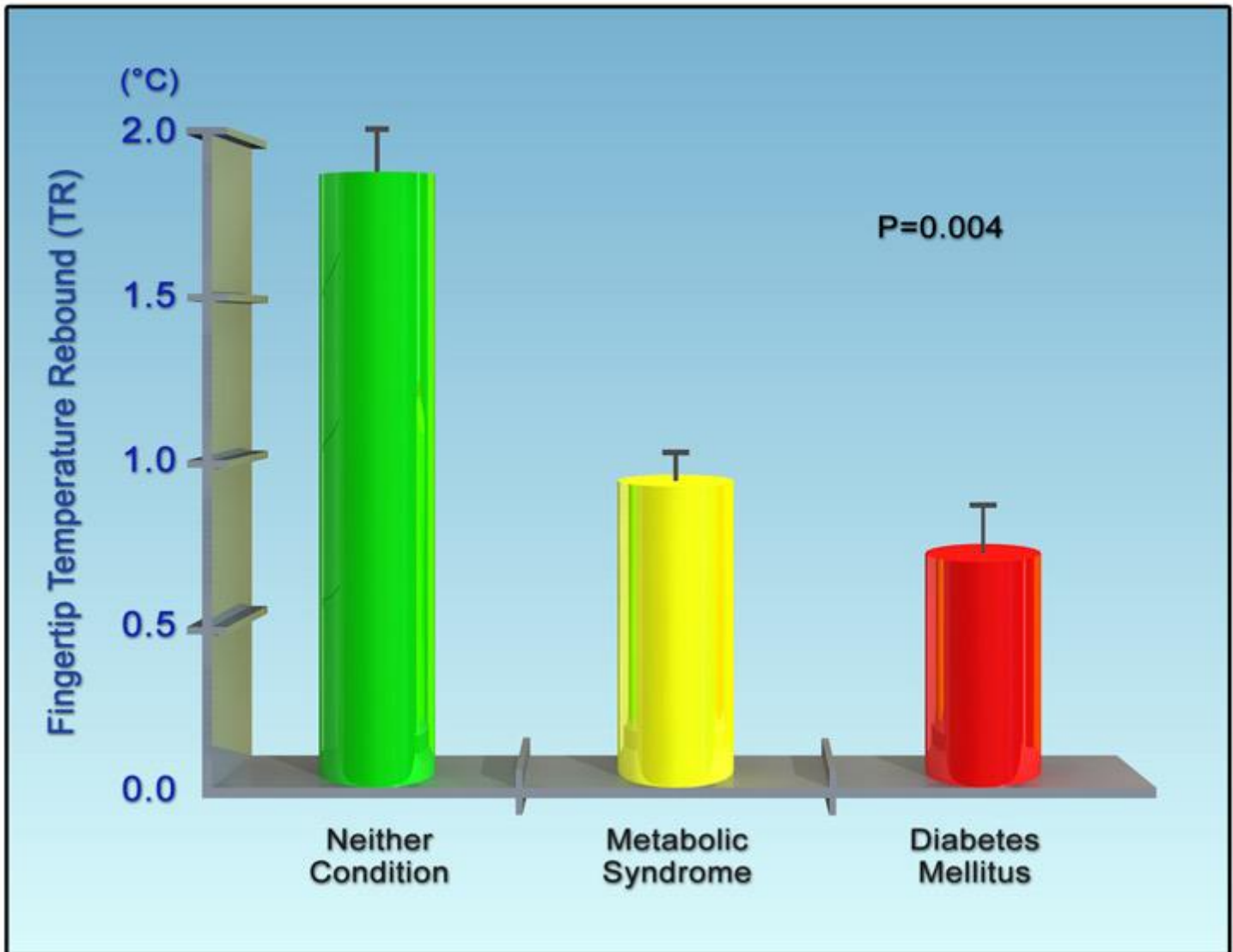


VENDYS for Asymptomatic Patients

Lower Fingertip Temperature Rebound is Associated with the Presence of Cardiometabolic Disorders



Vascular Function Measured by Fingertip Thermal Reactivity is Impaired in Patients with Metabolic Syndrome and Diabetes Mellitus

Digital Thermal Monitoring (DTM) of vascular function has already been shown to correlate well with coronary calcium (CAC) score and coronary artery disease (CAD). To determine its utility in the metabolic syndrome (MetS) and diabetes mellitus (DM), 233 asymptomatic patients with DM/MetS but without CAD underwent DTM during and after 5 minutes of supra-systolic arm cuff inflation, as well as CAC. TR (post-cuff deflation adjusted temperature rebound) was lower in MetS and DM compared to the normal group. The OR of lowest vs. upper 2 tertiles of TR was 2.3 for MetS and 3.5 for DM compared to the normal group, independent of age, gender and risk factors. The area under the ROC-curve to predict $CAC \geq 100$ was 0.70 for metabolic status (DM/MetS), 0.79 for TR and 0.91 for both. This study demonstrates that vascular dysfunction measured by DTM is associated with DM/MetS and could potentially be used to detect asymptomatic individuals with increased subclinical atherosclerosis.