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(54) **Title**: A FORMULA AND METHOD FOR MONITORING INDIVIDUAL METABOLIC RESPONSE AND FOR GENERATING PREDICTIVE MEDICAL METRICS

(57) **Abstract**: Provided is a formula and method for monitoring individual metabolic response that involve calculation of the lag/latency time (LT) for the peak levels of measured a variety of glucose values by HATR-FTIR (horizontally attenuated total reflection Fourier transform infrared) spectroscopy and the LT for the peak level of capillary blood glucose (CBG), with subsequent calculation of the LT changes between them. Obtained meaningful time-dependent and dose-dependent glucose values and their LT changes characterize glycemic variability (GV) in a qualified subject, that can be used to predict the patient's risk of hyperglycemia, to stage Type II diabetes and, in general, to be considered as a new metrics of assessing the quality of metabolic control.