Stochastic Sensors – New Tools for the Screening for Obesity

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Stochastic sensors based on dextrins were able to perform qualitative and/or quantitative analyses of two genes used in the assessment of obesity: plasminogen activator inhibitor 1 (PAI-1) and leptin. The sensors can be used to determine the two genes at very low concentrations, making possible the assessment of obesity at a very early stage. The two genes were determined from whole blood samples and saliva of children and adults.

The advantage of using stochastic sensors for such analysis is their possibility to perform a reliable qualitative analysis – when the analytes of interest are assigned using their ”signature”; as well as a reliable quantitative analysis – when their concentration is determined.

The method is fast and highly reliable and very simple, the whole blood samples and saliva samples being used as taken from the patients.