Predicting Glucoregulatory Dysfunction

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Technology description

The term glucoregulatory dysfunction covers a spectrum of disorders from insulin resistance to prediabetes and diabetes. Problems associated with glucoregulatory dysfunction and obesity dominate health care costs in the U.S. today.

The test used to identify glucoregulatory dysfunction (based on high blood glucose levels or glycosylated hemoglobin) works after the fact, i.e., it confirms the problem rather than initially detecting it. A better test, one that could be used to screen at-risk patients before they progress to a more serious condition, would enable earlier intervention and improved patient outcomes. UW–Madison researchers have developed a method based on blood lipid chemistry to identify a subject at risk for glucoregulatory dysfunction. The method involves obtaining a biosample from the subject, separating the diacylglycerol fatty acids and determining if the concentration is above or below a control range.
The Wisconsin Alumni Research Foundation (WARF) is seeking commercial partners interested in developing a method for identifying individuals at risk for glucoregulatory dysfunction associated with metabolic syndrome, prediabetes or Type II (adult onset) diabetes.

Application area

Diagnostic test to screen individuals at risk for glucoregulatory dysfunction
Identifying those eligible for treatment and insurance reimbursement

Advantages

Predicts a problem in advance of more serious conditions (e.g., prediabetes)
Can be easily and routinely administered
Opportunity for early intervention

Institution

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