Researchers at the University of South Florida have investigated the association of salivary inflammation with glycemic control and oral health in Diabetics. They have demonstrated that increased salivary inflammation burden is associated with decreased glycemic control and oral health.

Saliva is a promising diagnostic fluid that is easily obtainable and can indicate certain health conditions. The use of saliva as a diagnostic, also known as salivary diagnostics, is a rapidly emerging field that is dependent on the development of sensitive and specific biomarkers that can be easily employed in large-scale clinical setting. Due to other health conditions arising from diabetes, a major area of research has focused on facilitating the proper medical management of either type I or type II Diabetes.

Our inventors have demonstrated a relationship between inflammation, glucose marker HbA1c, and gum health when the saliva of patients with type I Diabetes was analyzed. There is an increase in the presence of molecules of inflammation in the saliva which is significantly associated with the impaired ability to control glucose levels and oral health. The association made could potentially be utilized to develop novel screening methods to evaluate glucose control and onset of type I Diabetes. This could reduce the amount of blood testing that patients currently undergo and make visits to the dentist an important part of routine systemic care. The applications from these findings are of great potential to patients and healthcare providers.

ADVANTAGES:

- Obtained from saliva
- Could be developed as a method to evaluate glucose control
- Potential to be a diagnostic for oral health

Molecules Readily Detectable in Saliva

The Association Made from this Study Supports the Potential Utility of Salivary Diagnostics

Tech ID # 13B141

US Patent # 9,753,041