

## **Veyetals Partners with Queen's University to Revolutionize Contactless Blood Glucose Monitoring for Diabetics**

Toronto, Canada | October 18, 2024 – [Veyetals](#), a leader in smartphone-based wellness checks, today announced an enhanced partnership with **Queen's University**, a leading, research-intense university in Canada, to transform blood glucose monitoring for diabetics. This project uses cutting-edge technology including smartphones, machine learning, and photoplethysmography (PPG) signals to provide a non-invasive alternative to traditional methods.

### **Diabetes: A Largely Preventable Crisis**

- 1 in 7 people globally has diabetes.
- Diabetes is a leading cause of blindness, kidney failure, heart attack, stroke, and limb amputation.
- Global healthcare costs for diabetes exceed \$1 trillion USD—a 316% increase over the past 15 years.
- An estimated 6.7 million deaths worldwide are attributed to diabetes—equivalent to one death every 5 seconds.
- 50% of individuals with diabetes remain undiagnosed.
- Most diabetes cases are preventable and treatable.

Diabetes affects the body's ability to convert food into energy. When carbohydrates are consumed, they break down into glucose, which enters the bloodstream. In healthy individuals, the pancreas releases insulin, allowing glucose to enter cells for energy. In diabetics, this process is disrupted, leading to high blood sugar (hyperglycemia) and severe health complications over time.

Currently, diabetics must monitor their blood glucose levels multiple times a day, often through invasive finger-pricking, which only provides single-point measurements. While continuous glucose monitors (CGMs) offer comprehensive monitoring, they are costly and invasive. A more affordable, non-invasive solution could revolutionize diabetic care—especially for the 50% of people who remain undiagnosed.

### **Veyetals: Innovating Preventative Health Solutions**

At Veyetals, our mission is to enhance lives through innovative, preventative health solutions by leveraging the world's most ubiquitous device—the smartphone. While many traditional healthcare solutions are costly and complex, there are 7 billion smartphone users globally, representing 84% of the world's population.

Led by **Dr. Farhana Zulkernine** and her team at Queen's University, the project harnesses PPG signals and advanced machine learning algorithms to estimate blood glucose levels. This approach is not only non-invasive but also cost-effective, making it accessible through smartphones, smart mirrors and wearable devices.

In close collaboration with Dr. Zulkernine's team, Veyetals will refine and improve the accuracy of this groundbreaking technology. The new application will be integrated into our growing portfolio of wellness check applications for both Android and Apple devices. Veyetals will contribute signal processing expertise and machine learning model insights, with future plans to expand data collection through partnerships in Canada and beyond.

For more information about this revolutionary project or [Veyetals](#), please contact us at: **support@veyetals.com**.