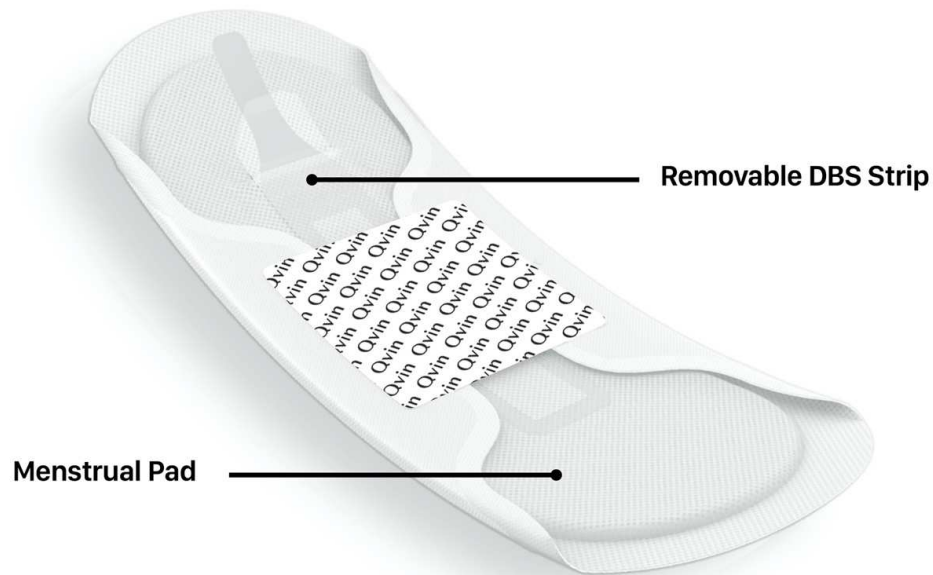


## SUPPLEMENTAL ONLINE CONTENT

**Supplementary Figure 1.** Composition of the QPad. The QPad is a modified menstrual pad made from 100% organic cotton with an embedded, removable dried blood spot (DBS) strip.

**Supplementary Table 1.** Mean menstrual and systemic blood levels of HbA1c

**Supplementary Table 2.** Correlation and regression analysis for HbA1c levels in menstrual and systemic blood, by diabetes status



**Supplementary Figure 1.** Self-collection of menstrual blood specimens was achieved with the QPad<sup>®</sup> (Qurasense, Palo Alto CA), a modified conventional organic-cotton menstrual pad containing a removable, dried blood spot (DBS) strip. The device enables non-invasive acquisition and stabilization of menstrual blood specimens and was developed with medical grade materials that are commonly used for *in vitro* medical devices and that are FDA, CE or WHO-prequalified.

**Supplementary Table 1.** Mean menstrual and systemic blood levels of HbA1c

|                                       | <b>OVERALL</b> | <b>DIABETIC</b> |
|---------------------------------------|----------------|-----------------|
| Systemic Blood, %                     | 6.50 (1.89)    | 8.02 (2.06)     |
| Menstrual Blood, %                    | 6.53 (2.05)    | 8.14 (2.29)     |
| Mean Difference, %                    | 0.036          | 0.121           |
| 95% Confidence Interval of Difference | -0.133 – 0.061 | -0.336-0.096    |
| P-value                               | 0.471          | 0.272           |

**Supplementary Table 2.** Correlation and regression analysis for HbA1c levels in menstrual and systemic blood, by diabetes status

|                         | HEALTHY          | TYPE 1 DM        | TYPE II DM       |
|-------------------------|------------------|------------------|------------------|
| Pearson Correlation     |                  |                  |                  |
| Correlation Coefficient | 0.65             | 0.94             | 0.91             |
| 95% Confidence Interval | 0.52-0.75        | 0.86-0.97        | 0.84-0.95        |
| P-value                 | <b>&lt;0.001</b> | <b>&lt;0.001</b> | <b>&lt;0.001</b> |
| Linear Regression       |                  |                  |                  |
| Coefficient             | 0.54             | 0.72             | 0.86             |
| Standard Error          | 0.06             | 0.06             | 0.06             |
| P-value                 | <b>&lt;0.001</b> | <b>&lt;0.001</b> | <b>&lt;0.001</b> |