Finger pricking is the conventional method used to measure glucose responses of healthy individuals to various substances and supplements, and to evaluate associated health benefits.

However, Continuous Glucose Monitoring (CGM) systems, originally designed to assist diabetics in regulating their blood glucose levels and preventing potential health risks, have become a valuable tool in research.

Nestlé’s study aimed to investigate if CGM systems could substitute traditional measurement techniques in assessing glucose responses to nutritional interventions in healthy individuals.

The Nestlé team used DiMe’s V3 framework to evaluate Abbott Freestyle Libre CGM systems’ ability to assess glucose responses of healthy adults to different nutritional interventions in clinical research.

Glucose responses to different nutritional interventions were collected using capillary blood obtained by finger pricking. The same responses were also measured using the Abbott CGM, after which the two measurement sources were compared both in terms of point-to-point differences and assessment outcome results.

DiMe’s V3 framework provided a common terminology and standard step-by-step process to evaluate Abbott’s CGM for its use in nutritional clinical studies on healthy adults.

Nestlé was able to show that the sensor was precise and sensitive enough to be able to detect significant differences across nutritional interventions.

Following the V3 framework, this digital health sensor was used in more than 9 of Nestlé’s nutritional clinical studies.

The Situation

The Resources

The Impact

— Monika Tadi, Clinical Development, Quality & Compliance Manager at Nestlé Research