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Commentary on "Performance of a Glucose Meter with a Built-In Automated Bolus Calculator versus Manual Bolus Calculation in Insulin-Using Subjects"

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Abstract

Since the early 2000s, there has been an exponentially increasing development of new diabetes-applied technology, such as continuous glucose monitoring, bolus calculators, and "smart" pumps, with the expectation of partially overcoming clinical inertia and low patient compliance. However, its long-term efficacy in glucose control has not been unequivocally proven. In this issue of *Journal of Diabetes Science and Technology*, Sussman and colleagues evaluated a tool for the calculation of the prandial insulin dose. A total of 205 insulin-treated patients were asked to compute a bolus dose in two simulated conditions either manually or with the bolus calculator built into the FreeStyle InsuLinx meter, revealing the high frequency of wrong calculations when performed manually. Although the clinical impact of this study is limited, it highlights the potential implications of low diabetes-related numeracy in poor glycemic control. Educational programs aiming to increase patients' empowerment and caregivers' knowledge are needed in order to get full benefit of the technology.

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Abbreviations: (CGM) continuous glucose monitoring, (CSII) continuous subcutaneous insulin infusion

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