

## Self-Monitoring of Blood Glucose: One STeP Forward?

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### Abstract

#### **Introduction:**

In times of short health care budgets, reimbursement for self-monitoring of blood glucose (SMBG) in diabetes patients without insulin treatment is subject to debate. The Structured Testing Program (STeP) trial found a positive correlation of test frequency and improved hemoglobin A1c (HbA1c) levels in poorly controlled type 2 diabetes patients not treated with insulin.

#### **Methods:**

A structured literature search for other clinical studies reporting on SMBG frequency was performed.

#### **Results:**

There is scarce evidence: three trials, including STeP, noted a significant and relevant correlation between testing frequency and improved HbA1c levels (FA effect), whereas two studies did not. The comparability between the identified studies is problematic.

#### **Conclusion:**

Future research should consider correlations between testing frequency and level of glycemic control. More emphasis should be placed on a structured approach to use SMBG and to address adherence to testing and therapy.

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**Abbreviations:** (ACG) active controlled group, (HbA1c) hemoglobin A1c, (NITDM) non-insulin-treated diabetes mellitus, (SMBG) self-monitoring of blood glucose, (STeP) Structured Testing Program, (STG) structured testing group

**Keywords:** glycosylated hemoglobin A, NCT00674986, self-monitoring of blood glucose, type 2 diabetes mellitus

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