

Table of included study characteristics

| Study | Country | Setting/context | Participant characteristics | Groups | Outcomes measured | Description of main results |
|----------------------------|-------------|--|---|--|---|---|
| Stracke 2008 ³⁴ | Germany | Double-blind, randomised, placebo-controlled phase-III study was performed in 10 study centres in Germany. | 165 patients with type 1 or type 2 diabetes mellitus Mean age 60 years Males 56% vs females 44 % Mean duration of diabetes mellitus 12 years | Group 1: benfotiamine 200mg Group: 2 benfotiamine 100mg Group 3: placebo | HbA1c, FBG, BP at six weeks | The mean HbA1c was 7.7 %. |
| Rabbani 2008 ²⁵ | Pakistan | Patients attending the Diabetes Clinic, Sheikh Zayed Hospital, Lahore, Pakistan | 40 patients with type 2 diabetes Age range age 35–65 years Diabetes duration ≥5 years BMI 19–40 kg/m ² . | Group 1: High-dose thiamine therapy (300 mg/day) Group 2: placebo | HbA1c, FBG, BMI, BP, HDL, Triglycerides at 3 months | There was no effect of thiamine treatment on glycaemic control, dyslipidaemia or BP. |
| Alkhalaf. 2010. | Netherlands | Participants attending the Isala Clinics (Zwolle, the Netherlands). | 82 patients with type 2 diabetes Age range 40–75 years | Group 1: Benfotiamine (900 mg/day) Group 2: placebo | HbA1c, FBG, BMI, BP, HDL, Triglycerides at 12 weeks | Compared with placebo, benfotiamine treatment did not demonstrate a significant improvement in HbA1c. |

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| Shahmiri 2013 ⁴⁸ | Australia | Subjects who attended the out-patient clinic, School of Public Health, Curtin University. | 17 hyperglycemic subjects (14 IGT, 3 T2DM) Age range 18-75 years BMI 19-40 kg/m ² | Group 1: 100 mg thiamine (as thiamine hydrochloride) Group 2: placebo | FBG, and BMI at 3 weeks | Thiamine supplementation resulted in significant decreases in 2-h plasma glucose relative to baseline (8.78±2.20 mmol/l vs. 9.89±2.50, p = 0.004), with no significant change in the placebo arm. Fasting plasma glucose increased significantly from baseline after 6 weeks in the placebo arm (p = 0.003, p = 0.04 and p = 0.02, respectively). |
| Gonzalez-Ortiz 2010 ¹⁵ | Mexico/USA | Community | 24 patients with T2DM or overweight or obesity Age range 30 – 65 years BMI 25–40 kg/m ² | Group 1: Thiamine orally (150 mg), once daily for one month (n=12) Group 2: placebo (n=12) | HbA1c, FBG, HDL-c, LDL-c, Triglycerides, BP, BMI at 1 month | Significant decreases in glucose (6.7 ± 1.0 mmol/l vs. 6.0 ± 1.0 mmol/l, p = 0.024) before and after the intervention, with thiamine administration. There were no changes with the rest of the measurements. |
| Winkler 1999 ²⁴ | Hungary | Unclear | 36 patients with T2DM and IDDM Age range 40-70 years. | Group A: 4 x 2 capsules of a complex B-vitamin preparation, (320mg/day benfotiamine) (n=12) | HbA1c, FBG, Triglycerides at 6 weeks. | No differences in metabolic outcomes between the three groups. |

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| | | | | Group B: daily doses of only 3 x 1 capsules of the complex B-vitamin preparation (120mg/day benfotiamine)(n=12) Group C: pure benfotiamine (150mg/day benfotiamine)(n=12) | | |
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