Conclusions: People who consistently participated in all phases have improved their eating habits, in relation to persons who participated occasionally in the study, which appeared to have worse eating habits. Also individuals with partial participation in the study showed greater weight gain rates. Finally, there was evidence that the constant participation in the study is associated with an increase in healthy daily habits.

Short Oral Abstract 7 - Low-Carbohydrate Diets in the Management of Type 2 Diabetes – A Systematic Review and Meta-Analysis (Henny-Kristine Korsmo-Haugen, Norway)

Henny-Kristine Korsmo-Haugen[1]*
Anne-Marie Aas[2]
[1]*Department of Health, Nutrition and Management, Faculty of Health Sciences, Oslo and Akershus University College of Applied Sciences, Kjeller, Norway;*[2]*Oslo University Hospital, Aker, Division of Medicine, Section of Nutrition and Dietetics / University of Oslo, Faculty of medicine, Oslo, Norway.*
E-mail: henny-kristine.haugen@griffithuni.edu.au

Objective: Controversy still remains about the safety and efficacy of a low-carbohydrate diet (LCD) in the longer term management of type 2 diabetes. We conducted a systematic review and meta-analysis of randomised controlled trials (RCTs) to investigate the effect of a LCD, containing ≤40 energy percent (E%) from carbohydrates, compared with a higher carbohydrate diet (>40 E%), on weight management, metabolic control and compliance in adults with type 2 diabetes.
Methods: We searched MEDLINE, EMBASE, CENRTRAL, CINAHL, Food Science Source and SweMed+ (through November, 2013) for relevant trials of ≥3 months duration. Two independent reviewers assessed the validity of studies using Cochrane Collaborations Risk of Bias Tool. The GRADE approach was utilised to assess the quality of evidence for primary outcomes. Pooled effects were calculated by random effects meta-analyses and expressed as mean differences (MD) for continues outcomes, and risk ratio (RR) for dichotomous outcomes. Statistical heterogeneity was quantified by I^2.
Results: Eighteen RCTs, with a total of 1832 participants, met the inclusion criteria. Compared to the control diet, no significant effect was found in favour of the LCD on weight management (weight loss: MD -0.29 kg; 95% CI -1.17, 0.58) or HbA1c (MD -0.04%; 95% CI -0.14, 0.06). Furthermore, no significant difference was observed for blood concentrations of total-, LDL- and HDL-cholesterol, triacylglycerol, or blood pressure. Compliance, as measured by attrition rates, showed a small but non-significant effect in favour of the control diet (RR 1.03; 95% CI 0.87, 1.21).
Conclusions: The findings from this meta-analysis suggest that LCDs may be an option in the long term management of type 2 diabetes but they are not superior to diets with a higher carbohydrate content regarding the effect on HbA1c, blood lipids, body weight and blood pressure.
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