5. The Effect of Highly Viscous Fibre-Gel on Appetite and Glycemic Response in Healthy Individuals
(Fei Au-yueng)

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Objective: Konjac-glucomannan (KGM) is a viscous dietary fibre that has been indicated in the treatment of body weight and diabetes. Pre-hydration of KGM greatly changes its physicochemical properties but little is known about its health benefits. Thus, we aim to assess the acute effects of KGM administered in the form of a powder or a pre-hydrated gel on appetite and glycemic response.
Methods: Following a randomized, double-blinded, cross-over design, participants were administered 1 of 5 test meals on 5 separate occasions with >2 day washout period. Each meal consisted of 50g carbohydrates (CHO) in the form of bread, margarine, and a gel dessert. The test conditions were: 50g CHO in bread with 5g KGM as a powder (50PK) or pre-hydrated into the gel KGM (50GK) or a fibre free control (50C), and 25g CHO in bread with 25g CHO in gel dessert with 5g KGM pre-hydrated into the gel (25GK) or fibre free control (25C). All test meals were identical except for the form of fibre. A standardized lunch was consumed 180min later. Satiety was recorded using visual analogue scales.
Results: Eighteen healthy individuals (M: 7/F: 11; Age: 28.6 ± 3yrs; BMI: 23.3 ± 0.7kg/m^2) were enrolled and 15 provided blood samples. The iAUC after 120 min for blood glucose was lower after 50PK (MD: -40%, $p<0.001$) and 50GK (MD: -23%, $p=0.049$) vs. 50C. No differences were observed between 50PK and 50GK ($p=0.16$). Additionally, 50GK increased satiety after 120 min vs. 50PK (MD: +26%, $p=0.035$) and 50C (MD: +28%, $p=0.025$). The iAUC after 120 min for blood glucose was lower in 25GK vs. 25C (MD: -28%, $p=0.006$), but no significant differences were observed in satiety.
Conclusions: These findings suggest that KGM may improve glycemic control irrespective of administration mode, but consumption in a pre-hydrated gel may confer additional benefits from improved satiety and should be further explored.
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6. A Randomized Crossover Trial Of Walking After Eating And Standard Physical Activity Advice In T2DM: Participant Acceptability And Compliance
(Bernard Venn)

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Objective: To compare participant acceptability and compliance to two approaches of increasing physical activity in people with T2DM.
Methods: Forty-one T2DM adults ($HbA1_c$ 58.9 mmol/mol) completed two 2-week interventions in randomized order of a 30-minute walk per day and walking for 10-minutes after each main meal with a four-week washout. Compliance with walking regimens was captured by tri-axial accelerometers (GT3X, ActiGraph). Walking preference and measures of motivation for physical activity were recorded pre- and post-intervention measured on a five-point Likert scale.