
ABSTRACT

OBJECTIVES: Investigation of a Plantago ovata seed containing supplement (Plantaginis ovatae semen and testa) to determine its effect on appetite variables, nutrient and energy intake in normal subjects. DESIGN: Triple blind (subjects, investigators and statisticians) cross-over design. Three, 3-day study periods when subjects were given the following treatments in randomised order: Plantago ovata preparation (20 g granules with 200 ml water), placebo (20 g granules with 200 ml water), or water (200 ml) 3 hs pre-meal and the same dose immediately pre-meal. A set meal was given at lunch time after the supplement o subjects who had fasted overnight. SETTING: Metabolic unit of King's College London. SUBJECTS: Seventeen female subjects, all classified as non-restrained eaters. MAIN OUTCOME MEASURES: Visual analogue scales were completely premeal, postmeal and at hourly intervals for 3 hs after the meal. All food consumed on the meal day, and the following day was weighed. RESULTS: There was a significant difference in fullness at 1 h post-meal between Plantago and placebo, and also Plantago and water. Total fat intake was significantly lower in g/d and as a percentage of energy on the day of the meal after Plantago compared with water. CONCLUSIONS: This plantago ovata containing product, which is already taken by many people world-wide to control bowel function, may be a useful supplement in weight control diets as it affects fat intake, and may have some effect on the subjective feeling of fullness.