EFFECT OF WHOLE GRAINS AND UNSATURATED FATTY ACIDS DIETARY INTERVENTION ON HEALTH IN HONG KONG OVERWEIGHT POPULATION

Christopher Puig Sing Ng*, Jamie Sui Lam Kewok, Junweei Zhou, Pik Yuen Belinda Cheung, Lawrence Chi Hung Tsang, Senthil Sundaram. Prenetics Limited, Hong Kong

Background To determine the effect of different dietary interventions on health outcomes in the Hong Kong East Asian population.

Methods 38 overweight or obese (BMI ≥23 kg/m²) East Asian subjects (25 to 60 years of age, 19 males, 19 females) from Hong Kong were recruited as part of a randomised controlled clinical trial. People with major pulmonary, cardiovascular, hepatic, gastrointestinal or renal diseases, metabolic syndrome or recent antibiotic use were excluded. All subjects were randomly assigned four diet groups, 1) Diet as usual (control), 2) Unsaturated fatty acid diet (UFA), 3) Whole grain diet (WG), 4) Mixed intervention of 2nd and 3rd diets (MIX). Interventions were provided by a registered dietician. A separate dietician who was blinded monitored the compliance to the assigned diet type by visual assessment of food consumption. To determine the health outcomes, physical examination, blood pressure, blood glucose and serum cholesterol were assessed at the body check centre at week 0 (baseline), 1, 2, 3, 4 and 8. Dietary interventions were compared with controls using t-test.

Results A total of 38 subjects observed throughout the 8 weeks, 11 subjects were randomly allocated to WG group, 10 to PUFA, 8 to MIX and 7 to the control group. Across all 4 diet groups, overall compliance was 25%, with an 11% increase at week 8 compared to baseline. Compliance to dietary intervention had a favourable effect on total and LDL cholesterol levels. A negative correlation between compliance change versus total and LDL cholesterol change at week 8 compared to baseline were observed (r = −0.4, r = −0.41 respectively). Compared to controls, a significant reduction of systolic blood pressure by 8th week was observed in UFA group (p = 0.0048), unremarkable in other groups. A trend towards significant reduction of triglycerides was observed by 8th week in WG group compared to controls. Both MIX and WG groups showed a trend towards reduction of total cholesterol (p = 0.09 and p = 0.05 respectively).

Conclusions Effect of dietary intervention on health depends on the specific interventions. High unsaturated fatty acid diet has a favourable effect on reducing systolic blood pressure.

VENOUS THROMBOEMBOLISM IN PATIENTS WITH INFLAMMATORY BOWEL DISEASE IN CHINA: INVESTIGATIONS INTO INCIDENCE AND RISK FACTORS

Jing Liu*, Xiang Gao, Ye Chen, Qiao Mei, Lianguo Zhu, Jaming Qian, Pinjin Hu.

Background Studies from the western population proved inflammatory bowel disease (IBD) a risk factor for venous thromboembolism (VTE) and thromboprophylaxis has become standard care for hospitalised IBD patients with disease flares. In Asia, lack of studies on VTE among IBD patients makes practice of thromboprophylaxis far from standardised. Our aim is to explore the incidence and risk factors for VTE among Chinese IBD patients.

Methods Retrospective analysis of IBD patients from 17 Chinese tertiary referral hospitals between 2011 and 2016 was