



Milk supplementation facilitates appetite control in obese women during weight loss a randomized single-blind controlled trial

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at different dosages (8 g/d, 14 g/d, 18 g/d, 24 g/d). Satiety (satiety and hunger feeling, food and caloric intakes) and anthropometric parameters (bodyweight, BMI, body fat, waist circumference) were followed.

Results: A significant impact of NUTRIOSE® on satiety was observed over the study, appearing from day 5 for the group 8 g/d. The hunger feeling status decreased over the study, becoming significantly different from the Placebo group from day 5 for the group 24 g/d and from day 7 for the groups 14 and 18 g/d. Correlated with this, a significant decrease of the food and caloric intakes was observed as soon as from week 2 to the end of the study for many groups. Consecutive significant, dose-correlated decreases in body weight, BMI, body fat and waist circumference were observed from baseline until the end, significant for the groups 14 g, 18 g and 24 g/d.

Conclusion: NUTRIOSE® is therefore effective in the modulation of satiety from 8–14 g/d, and in weight management from 14 g/d. As a soluble fiber, it may be a useful tool in the context of epidemic obesity.

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Milk supplementation facilitates appetite control in obese women during weight loss: a randomized single-blind controlled trial

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Introduction: Dairy products provide calcium and protein which may facilitate appetite control. Conversely, weight loss increases the motivation to eat. This randomized single blind controlled trial verified the impact of milk supplementation on appetite markers during a weight-reduction program.

Methods: Low-calcium consumer women participated in a 6-month energy-restricted program (-2508 kJ/day) and received either a milk supplementation (1000 mg calcium/day) or an isoenergetic placebo ($n = 13$ and 12 , respectively). Fasting desire to eat, hunger, fullness, and prospective food consumption were assessed by visual analogue scales. Fasting plasma concentrations of glucose, insulin, leptin, ghrelin, and cortisol were measured as well as anthropometric parameters.

Results: The milk supplemented group showed a slightly, but not statistically significant, greater weight loss (between-group difference = 2.2 kg). In that group, a time by treatment interaction effect showed that weight loss with milk supplementation induced a smaller increase in desire to eat and hunger ($P < 0.05$). Unlike the placebo group, the milk supplemented group showed a lower than predicted decrease in fullness (-17.1 vs. -8.8; -12.7 vs. 3.3 mm, $P < 0.05$, respectively). No significant mean change was observed in blood variables, but substantial individual variations in the response to weight loss were noted. Significant positive correlations were found between changes in plasma ghrelin concentrations and those in fasting hunger and desire to eat whereas a negative association was observed between changes in ghrelin concentrations and those in fullness.

Conclusion: These results show that milk supplementation attenuates the orexigenic effects of body weight loss and that ghrelin might be involved in the manifestation of this benefit. Trial registration code: ClinicalTrials.gov NCT00729170.

Conflict of interest: None disclosed.

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Sociodemographic, health and lifestyle predictors of poor diets

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Poor diet, regarded as an important contributor to health inequalities, is linked to adverse health outcomes. We investigated socioeconomic and lifestyle predictors of poor diet in a population sample. A cross sectional survey, 10,364 adults aged from 18 years were interviewed (62% response rate). Participants completed a questionnaire addressing health related behaviours, health status and sociodemographic attributes including measures of social support, self perceived area deprivation and food poverty. Diet was assessed using a food frequency questionnaire (FFQ) ($n = 9223$, response rate 89%), from which a composite dietary score (DASH) was constructed. Adjusting for age and gender, a number of sociodemographic, lifestyle and health related variables were associated with poor diet: social class, education, marital status, social support, food poverty, smoking status, alcohol consumption, underweight, and self perceived general health. These associations persisted when adjusted for age, gender and social class. They were not significantly altered in the multivariate analysis although the association with social support was attenuated and with food poverty was borderline significant [OR 1.2 95% CI (1.03–1.45)]. A classical U-shaped relationship between alcohol consumption and dietary quality was observed. Dietary quality is determined by social class, educational attainment, food poverty and related core determinants of health. The extent to which social inequalities in health can be explained by socially determined differences in dietary intake is probably under estimated. The use of composite dietary quality scores such as the DASH scores to address the issue of confounding by diet in the alcohol consumption-health relationship, merits further work.

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Prevalence of obesity among school going adolescent girls in Punjab (India)

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Introduction: About 25% of adolescents are over weight or obese, according to the newly established national criteria. These teens are at significant risk for becoming obese adults and adolescent obesity predisposes to a range of medical and psychosocial problems. Despite the enormous medical and economic implication of obesity, effective prevention and treatment strategies are lacking.

Methods: A random sample of 1000 female subjects, age ranging from 15–16 years from 10 public schools was selected. Their heights and weights were taken and BMI was calculated. Further a sub sample of 50 obese (BMI > 85th percentile of age) and 50 non-obese (BMI < 5th to 85th percentile of age) was selected. General information, anthropometric measurements, life style pattern, dietary intake and food habits were recorded.

Results: The prevalence of obesity was found to be 14.8% and heredity played no role. The heights and weights of obese and non obese subjects were compared with ICMR and NCHS standards. A significant difference ($P < 0.01$) between all the anthropometric parameters of obese and non-obese subjects was found.

Conclusion: Faulty dietary habits were found to be a major cause of weight gain among the adolescents. Energy and protein were found to be more than adequate, minerals and vitamins except iron were adequate in case of obese subjects whereas non-obese subjects were deficient in energy, proteins, B-complex vitamins and iron as compared to RDAs. A significant difference ($P < 0.01$) was found in the mean time spent by obese and non-obese subjects on walking and playing computer games.

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