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ASSOCIATION BETWEEN LACK OF EXCLUSIVE BREASTFEEDING AND DIARRHOEAL MORBIDITY: AN ANALYSIS OF NATIONAL DATA SETS FROM SOUTH ASIA

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Background and objectives: Exclusive breastfeeding (EBF) for the first six months and continued breastfeeding for the first two years of life are among the most effective interventions for reducing childhood mortality and morbidity. Although the prevalence of breastfeeding in South Asia is high, the low prevalence of EBF remains a significant factor that threatens the health and survival of infants. This analysis aims to investigate the association between EBF and diarrhoea in infants aged 0-6 months in the South Asian region.

Methods: Public domain data sets from 2005-2007 including Demographic and Health Survey data from Bangladesh, Nepal, Pakistan and National Family Health Survey data from India were used for this analysis. EBF was defined using the WHO definition. The primary outcome variable was the two week prevalence of diarrhoea. Logistic regression was used and factors such as gender, education and age of mother, birth order, urban/rural location, sanitation variables and poverty quintile were included in the final multivariable model. Analysis was performed using STATA 11.0.

Results: A total of 5660 subjects across the four countries were used for this analysis. The overall prevalence of EBF was

45.4%, ranging from 37.1% in Pakistan to 53.1% in Nepal. The overall prevalence of diarrhoea was 12.3%, ranging from 4.6% in Bangladesh to 26.5% in Pakistan. The odds ratio OR (95% CI) for the protective effect of EBF on diarrhoea was 0.66 (0.54-0.82) $p < 0.0001$. Low maternal education and male gender were also associated with diarrhoea. Factors associated with lack of EBF varied across countries.

Conclusions: Improving rates of EBF is likely to reduce diarrhoeal morbidity substantially in South Asia. Because the prevalence and other factors associated with lack of EBF vary across countries in the South Asian region, promotion efforts should be tailored according to the context.

Key words: exclusive breastfeeding, diarrhoea.

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FREQUENCY OF NUT CONSUMPTION AND PREVALENCE OF METABOLIC SYNDROME, OBESITY AND DIABETES IN THE PREDIMED RANDOMIZED TRIAL.

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Background and objectives: Prospective studies have consistently suggested that nut consumption is inversely related

to fatal and non-fatal coronary heart disease. Limited data are available on the epidemiological associations between nut intake and cardiometabolic risk factors. The aim of our study was to evaluate associations between frequency of nut consumption and prevalence of cardiometabolic risk factors [obesity, metabolic syndrome (MetS), type-2 diabetes, hypertension, and dyslipidemia] in a Mediterranean population at high cardiovascular risk.

Methods: Cross-sectional study of 7, 210 men and women (mean age, 67 y) recruited into the PREDIMED study. MetS was defined by the harmonized ATP III and IDF criteria. Diabetes and hypertension were assessed by clinical diagnosis and dyslipidemia (high triglycerides, low HDL-cholesterol, and hypercholesterolemia) by lipid analyses. Nut consumption was assessed using a validated food frequency questionnaire and categorized as <1, 1-3, and >3 servings/wk. Control of confounding was done with multivariate logistic regression.

Results: Compared to participants consuming <1 serving/wk of nuts, those consuming >3 servings/wk had lower adjusted odds ratios (OR) for obesity (0.61, 95% confidence interval 0.54 to 0.68; P-trend <0.001), MetS (0.74, 0.65 to 0.85; P-trend<0.001), and diabetes (0.87, 0.78 to 0.99; P-trend=0.043). Higher nut consumption was also associated with lower risk of the abdominal obesity MetS criterion (OR 0.68, 0.60 to 0.79; P-trend<0.001). No significant associations were observed for the MetS components high blood pressure, dyslipidemia, or elevated fasting glucose.

Conclusions: Nut consumption was inversely associated with the prevalence of general obesity, central obesity, MetS, and diabetes in subjects at high cardiovascular risk.

Key words: Nut consumption, cardiometabolic risk, obesity, metabolic syndrome. Acknowledgments: We thank all the participants of the PREDIMED study.

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THE EXTENT AND NATURE OF TELEVISION FOOD ADVERTISING TO CHILDREN IN XI'AN CITY, CHINA

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Background and objectives: Childhood obesity is a growing global epidemic while wide sales of energy dense low nutrient food are a gradually prominent factor for it. Television advertising as a public media plays an important role in food propaganda and sales, and children who are without independent judgment will be affected in food cognition and choice. This study aims to explore the extent and nature of food advertising that children are exposed to on television in Xi'an, China.

Methods: Television data for 2 weekdays and 2 weekend days between 6:00 and 22:00 during May and June in 2012 from three television channels which children like most were recorded. Food advertisements were classified as healthy food (nutrient dense, low in energy), unhealthy food (high in undesirable nutrients or energy), or miscellaneous. The persuasive marketing skills were divided into promotional characters and premium offers. The time children watching TV were categorized as peak viewing times and non-peak viewing times.

Results: Of the 5527 advertisements transcribed, 25.49% were for food, among which 58.27% were considered to be unhealthy. More than 50% unhealthy food advertising used persuasive marketing skills. The frequency of advertising was 22 per hour per channel, including six food advertisements and three unhealthy food advertisements. The rate of unhealthy food advertising was higher during children's peak viewing times. Significantly more unhealthy food advertisements were screened on weekends compared with weekdays, children's television channel compared with other television channels, CCTV compared with local television stations.

Conclusions: Children were exposed high levels of television advertising for unhealthy food, with children oriented persuasive marketing skills. The study provided a baseline to this field in Xan and more research need to be done in order to improve children health in future.

Key words: television food advertising; children; obesity.

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THE IMPACT OF SMOKING ON DIET IN ISRAEL

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Background and objectives: Israel, a multi-cultural society, offered the opportunity to study the co-occurrence of unhealthy diet and smoking - both modifiable risk factors for chronic disease.

Methods: The study, a cross-sectional secondary analysis of Israel's national health and nutrition MABAT (1999-2001) adults (25-64 years) survey, compared dietary patterns, diet quality index (DQI) and BMI in relation to smoking status - never smoked, current and past smoking. Chi-squared test tested differences between proportions, ANOVA, differences