

An Official Journal of

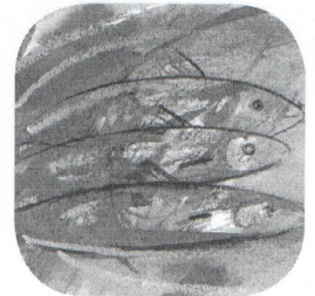


International Union of
Nutritional Sciences (IUNS)



Federation of European
Nutrition Societies (FENS)

Annals of Nutrition & Metabolism



20th International Congress of Nutrition

Granada, Spain, September 15–20, 2013



Abstracts

Guest Editors

A. Gil, Granada

J.A. Martínez, Pamplona



S. Karger

Medical and Scientific Publishers
Basel · Freiburg · Paris ·
London · New York ·
New Delhi · Bangkok · Beijing ·
Tokyo · Kuala Lumpur ·
Singapore · Sydney

KARGER

red eating was higher among males (33.4%; 95% CI: 32.5, 34.3) than females (28.7%; 95% CI: 27.8, 29.6) at $\pm 2 = 25.033$, $p < 0.001$. About one-third of the adolescents aged 12 to 14 years old (34.9%; 95% CI: 34.0, 35.9) were having disordered eating, followed by 24.1% of adolescents aged 15 to 17 (95% CI: 23.3, 25.0) and 19.5% of adolescents aged 18 to 19 years old (95% CI: 18.7, 20.3; $\pm 2 = 130.289$, $p < 0.001$). The prevalence of disordered eating was higher among adolescents lived in rural area (32.7%; 95% CI: 31.8, 33.6) than adolescents who lived in urban area (29.2%; 95% CI: 28.3, 30.1) at $\pm 2 = 13.929$, $p < 0.001$.

Conclusions: The findings found that a high prevalence of disordered eating among Malaysian adolescents, particularly adolescents who were males, at younger age group and lived in rural area. Further studies are needed to determine factors associated with disordered eating in Malaysian adolescents.

Key words: Disordered eating, adolescents, Malaysia, eating disorders, secondary schools.

PO1440

RELATIONSHIP BETWEEN HABITUAL GRAINS CONSUMPTION AND THE PRESENCE OF NON-ALCOHOLIC FATTY LIVER DISEASE (NAFLD)

M. Kontogianni¹, N. Tileli¹, M. Georgoulis¹, A. Margariti², E. Fragopoulou¹, M. Deutsch², D. Tiniakos³, R. Zafropoulou², Y. Manios¹, G. Papatheodoridis²

¹Department of Nutrition & Dietetics, Harokopio University, Greece

²2nd Department of Internal Medicine, Medical School, National Kapodistrian University of Athens, Greece

³Laboratory of Histology & Embryology, Medical School, National Kapodistrian University of Athens, Greece

Background and objectives: Long term dietary habits have been suggested to contribute to the development of NAFLD. The aim of this study was to investigate associations between habitual food groups' consumption and the presence of NAFLD in a case-control study.

Methods: Fifty-eight NAFLD patients (inclusion criteria: steatosis on liver ultrasound and/or biopsy, elevated ALT and/or GGT, exclusion of other causes of liver injury) and 58 controls, adjusted for age, sex and BMI participated in the study. Food groups' consumption was estimated through a semi-quantitative food frequency questionnaire, while daily energy intake was estimated through three non-consecutive 24hour dietary recalls. Medical history, anthropometric indices, body composition analysis, physical activity data, biochemical parameters and inflammatory markers were available for all participants.

Results: Among all the food groups only grains (62.2 ± 31.9 vs. 49.2 ± 23.6 servings/ week, $p=0.028$) and refined grains (55.4 ± 32.1 vs. 40.8 ± 23.3 servings/ week, $p=0.022$) differed significantly between patients and controls. Consumption of grains was associated with higher likelihood of having NAFLD (OR=1.021, 95%CI=1.001-1.041, $p=0.045$), after adjusting for age, sex, daily energy intake, visceral fat, insulin resistance and LDL levels. A similar trend was also observed for refined grains' intake ($p=0.1$). Those with weekly grains' intake > 61 servings/ week had 4.2 higher odds of having NAFLD ($p=0.034$), compared to those with lower intakes.

Conclusions: Among several food groups higher grains' intake was associated with higher likelihood of having NAFLD, after controlling for several potential confounders.

Key words: non-alcoholic fatty liver disease, dietary habits, grains, case-control

PO1441

CLASSROOM TRAINING OF SCHOOLCHILDREN IN OBESITY PREVENTION: IMPLEMENTATION AND MONITORING OF THE PESOEH PROJECT

M. Galván¹, V. Granados², R. Balderrama³, I. Gerardo¹, A. Nájera¹, G. López-Rodriguez¹, T. Fernández-Cortés¹, A. Atilán¹

¹Institute of Health Sciences, Universidad Autónoma del Estado de Hidalgo, Mexico

²Ministry of Public Education of Hidalgo, Mexico

³System for the Integral Development of the Family of Hidalgo, Mexico

Background and objectives: It has been suggested that school-based interventions to prevent obesity may be more effective if introduced as part of the educational system. Our objective was to include in the 2011 curriculum of primary school children contents related to improvement of dietary and physical activity practices of school children from Hidalgo, Mexico (PESOEH project).

Methods: Childhood obesity was included as crosscutting topics of social relevance in official 2011 curriculum. Blocks and topics on healthy foods and physical activity were included in the curriculum. We applied methodology of training projects (TPs) based on the socio-educational model. The TPs were planned by a multidisciplinary group and learning activities by teachers ($n = 33$). The tracking of TPs was performed by observation in the classroom and interviewing teachers by trained professionals.

Results: We performed 5 TPs of healthy food and physical activity. The TPs were implemented (2012-2013) in two public and one private schools (800 students). During the first visit (1st) we found that 60% of teachers implemented the TPs and