

September 17-21, 2023



Kaohsiung, Taiwan

Connecting the
East and the West,
One Health in
One Planet

Abstract E-Book



#ISEE2023

www.ISEEconference.org

Food intake in a sample of young university students living in Leicester, England

<u>Antonio Peña-Fernández</u>¹, Manuel Higueras², Edna Segura², María de los Ángeles Peña³

BACKGROUND AND AIM:To assess the food intake in a young population of students at De Montfort University (DMU, UK).

METHOD: Comprehensive nutrient intake was collected from 111 (20.45 ± 1.16 yrs-old; 78 female) DMU students from three major ethnic backgrounds (41 Asia, 41 Africa, 27 Europe), using a validated variant of the Nutrition Norfolk Food Frequency Questionnaire. Questionnaires were processed with Nutritics dietary software. BMI values were calculated with the formula $BMI = kg/m^2$. Body total and visceral fat, water, muscle and bone mass were directly obtained by a Tanita scale. RESULTS: The total intake of protein, fat and carbohydrates was significantly higher in male counterparts, which can explain the significant intake of energy (3064.9 vs. 2310.8 kcal/day; pvalue=0.0011) in men. According to their BMI values, 25.7% and 8.3% of this population were overweight and obese, meanwhile 9.2% were underweight. Female participants support the highest percentages of individuals overweight and obese; greater incidence of overweight was shown in students from African and European background (29.3 and 33.3%), meanwhile the highest percentage of obesity was seen in European students (14.8). The highest percentages of students with normal weight (63.4) and underweight (17.1) were observed in participants from African and Asian backgrounds, respectively. Percentages of muscle and bone mass presented statistical differences due to ethnic background, being higher in students from European background (49.9 and 2.6 vs. 45.3 and 2.41, 45 and 2.39, in African and Asian students, respectively).

CONCLUSIONS: The significant differences in the total fat, cereals, vegetables, pulses, and crisps and snacks intakes might explain that at least one-third of European and African students were overweight, meanwhile almost a quarter of European and Asian were obese, which places them at increased health risk, highlighting the need of public health interventions that promote healthy diets in these groups of the population.

Keywords: Food intake, diet, university students, overweight, Leicester.

¹Leicester School of Allied Health Sciences, De Montfort University, Leicester, LE1 9BH, UK.

²Scientific Computation & Technological Innovation Center (SCoTIC), Universidad de La Rioja, Logroño, Spain.

³Departamento de Ciencias Biomédicas, Universidad de Alcalá, Crta. Madrid-Barcelona Km, 33.6, 28871 Alcalá de Henares, Madrid, Spain