

Sodium intake in young university students from Leicester (England)

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SUMMARY

The World Health Organisation (WHO) recommends an intake of sodium chloride (salt, 40% sodium and 60% chloride by weight) of 5 g (about 2 g of sodium).

Aim: The dietary intake of sodium (Na) was assessed in young adults at De Montfort University (DMU, UK).

POPULATION & STUDY DESIGN

Nutrient intake was collected from **111 (20.45 ± 1.17 yrs-old; 78 female)** DMU students from different ethnic backgrounds (**41 Asia, 41 Africa, 27 Europe**), using a validated variant of the Nutrition Norfolk Food Frequency Questionnaire.

BMI was appropriately measured.

OUTCOMES

- The dietary intake of Na was significantly higher in male participants** (2878.48 vs. 2144.05 mg/day; p -value=0.0028), which might be explained to the **higher intake of foods that have been identified as the main sources of sodium** in comprehensive studies ([Partearroyo et al., 2019](#)), specifically **meat** (271.553 vs. 193.063; p -value=0.016), **cereals** (202.74 vs. 169.91; p -value=0.0842) and **cow's milk** (228.09 vs. 163.55; p -value=0.037; all in g/day), in males.
- The dietary intakes of Na were much lower in individuals with lower BMI [underweight (1948.22) < obese (2361.92) < overweight (2377.72) < normal weight (2417.54), p -value=0.830; all in mg/day], although not significantly, would be in line with those studies that have suggested that **sodium intake may contribute to promote weight gain**.

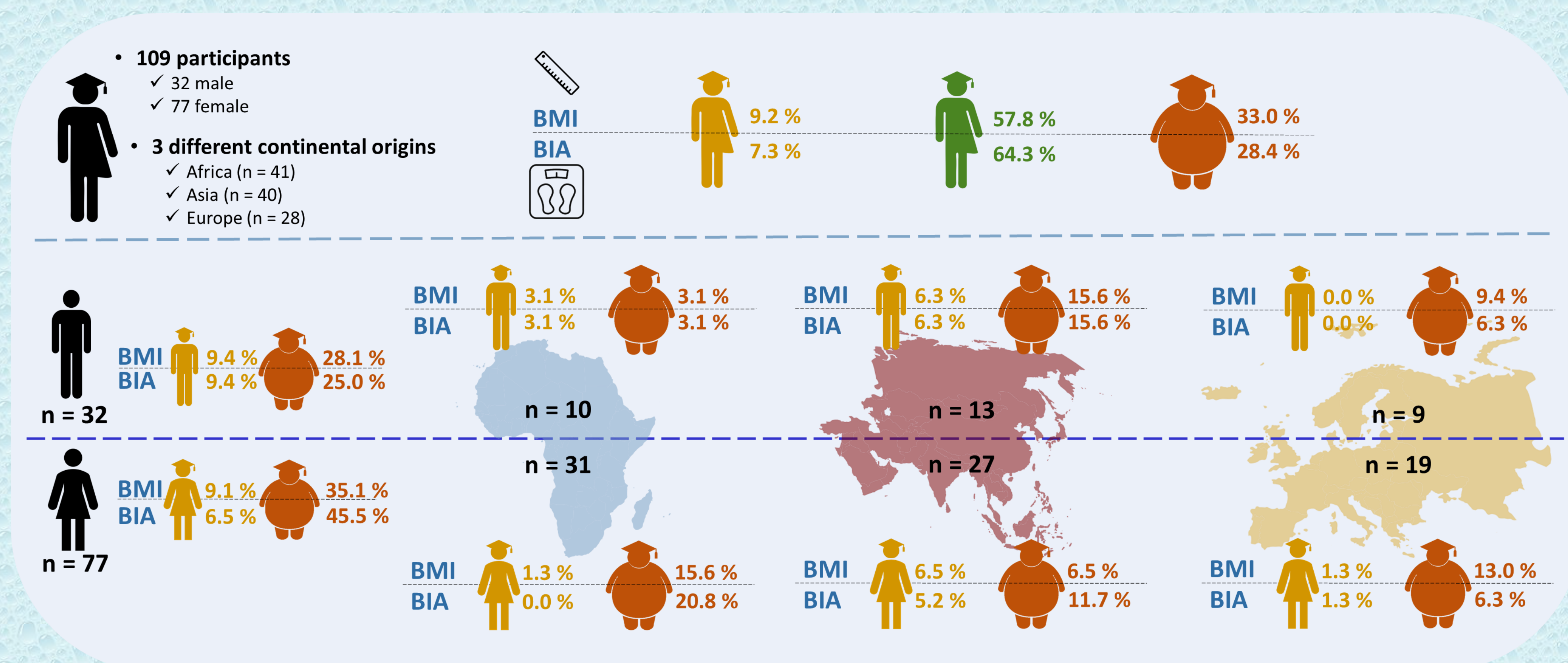


Figure 1. Underweight and overweight individuals in a sample of **young adults (18 to 22 years-old)** studying at De Montfort University (UK) based on their BMI and body fat percentage (BIA), depending on their ethnic background (continental origin)

CONCLUSIONS

The dietary intake recorded for the whole DMU group (2359.66) was much higher than those described in Spanish adult population (2026 mg/day; [Partearroyo et al., 2019](#)), which might be logical due to differences in the intake of ready-to-eat and processed meals between both countries. These authors also reported significantly higher intakes in male Spanish individuals. Our study **highlights the need of further public health policies in England to address WHO recommendations, as most students exceeded this recommendation**.