

Winter Meeting – Joint meeting between the Nutrition Society and the Royal Society of Medicine, 11–12 December 2012,
Dietary Strategies for the Management of Cardiovascular Risk

Dietary Intakes of West African and African-Caribbean Adults Living in the UK

L Timbers, A Knight and L. M. Goff

Division of Diabetes & Nutritional Sciences, King's College London, Franklin- Wilkins Building, London, SE1 9NH, UK

Background: People of Black African and Caribbean origin account for 25% of the ethnic minority population in the UK⁽¹⁾. The burden of hypertension, stroke and type 2 diabetes in these communities is considerable, with younger morbidity and mortality than the White British population⁽²⁾. Little is known of the dietary intakes of these communities, such knowledge is essential if culturally appropriate interventions are to be developed for the prevention and management of these diseases. The aim of this study was to assess the nutritional intake of African-Caribbean (AC) and West African (WA) adults living in the UK and to assess the importance of traditional foods to intake.

Method: In a convenience sample multiple structured twenty four hour recalls were obtained and analysed using Dietplan6 (Forestfield Software Ltd) from healthy adults of AC ($n = 18$) and WA ($n = 32$) ethnicity living in the UK, and the contribution traditional foods make to dietary intake was assessed. Height and weight were also obtained, allowing body mass index (BMI) to be calculated and dietary recalls to be validated. Data was analysed using SPSS. Data are expressed as mean \pm SD when normally distributed or median and range when not of a normal distribution. Mean differences between groups were tested for significance using the unpaired t-test and Mann-Witney U-test. A p -value of ≤ 0.05 was considered significant.

Results: The BMI of the AC sample was significantly greater than the WA sample (Md 31.2, IQR 26.4, 36 vs. Md 26.5, IQR 23.5, 29.5, $p = 0.045$). The WA group had a more favourable macronutrient profile with a significantly greater percentage of energy derived from carbohydrate (51.3 ± 9.7 vs. 44.0 ± 9.2 , $p = 0.012$) and lower total fat (Md 30.8, IQR 24, 37.6 vs. Md 34.9, IQR 29.4, 40.4, $p = 0.026$), saturated fat (Md 8.6, IQR 5.9, 11.3 vs. Md 10.3, IQR 8, 12.6, $p = 0.035$) and trans-fat intakes (0.43 ± 0.25 vs. 0.63 ± 0.40 , $p = 0.028$). No significant difference was observed ($p = 0.189$) in the salt intake for the AC sample (Md 4.8, IQR 3.2, 6.4) when compared to the WA sample (Md 5.9, IQR 3.8, 8). Traditional foods were found to make a significantly greater contribution to energy ($p = 0.020$), carbohydrate ($p < 0.001$), fat ($p = 0.021$) and sodium ($p < 0.001$) intake in the diets of the WA group, who had also lived in the UK for a significantly shorter period of time ($p < 0.001$) than the AC group.

Discussion: Our data show distinct differences in dietary intakes between AC and WA communities. There appears to be greater dietary acculturation in the AC community which may contribute to the onset of non-communicable diseases. We are the first to report dietary intakes of the WA community; further work is required to better understand the effects of diet in this group.

Conclusion: This data suggests greater dietary acculturation in the AC community compared to the WA community in the UK. Differences in the dietary intakes between the two groups require the design and implementation of culturally appropriate lifestyle interventions for the prevention and management of NCD.

1. Office for National Statistics (2005) National Statistics Focus on Ethnicity and Identity.
2. NHS Health and Social Care Information Centre (2005) Health Survey for England 2004: the health of minority ethnic groups- headline tables, NHS Health and Social Care Information Centre, Public Health Statistics.