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Topic: Community health and nutrition programs

Title: The Analysis of Intake and Effects of Trans fats in relation to the risk of Cardiovascular Disease

Presentation Type: Poster

Introduction

A pilot study was conducted to identify the association of trans fat intake with number of deaths from cardiovascular disease in the UK using dietary assessment. This is to understand the regional, socio-economic and ethnic variations in death numbers.

Questions asked covered:

What was eaten?

How much was eaten?

How often is this?

Methods

Six participants (age range 19-64 years) from Northumbria University's School of Life Sciences (now Faculty of Health and Life Sciences) who are either Staff or Post-graduate Students took part in the study. Participants were recruited via mass email. The dietary assessments methods used are; (i) 3 Day Food Diary (ii) 24 Hour Recall (24HR) and (iii) Weighed Food Intake (WFI). All participants completed the three different dietary assessment methods.

Results

Trans fatty acid isomers (18:1, 18:2 and 18:3) were analysed in all assessments. No statistical significance (at 95% CI) was obtained for all the three dietary assessment methods when compared with each other. P-values obtained were; 0.6337, 0.8986 and 0.05464 for WFI v 24HR, WFI v 3 Day Food Dairy and 24HR v 3Day Food Dairy respectively. The comparison was to establish the appropriate dietary method.

Conclusion

3 Day Food Dairy was determined to be appropriate dietary method of analysing dietary trans-fat intake. The recorded intakes for 3 Day Food Dairy show the potential to provide quantitative information and are useful for dietary behaviour modification. Also,

this study confirmed that it is essential to consolidate the use of dietary assessment by analysis via biomarkers.