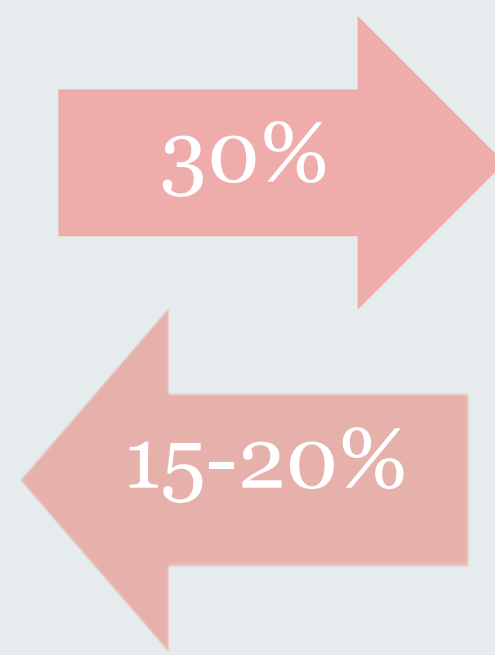# The Association between Depressive Symptoms and Diet in People at High risk of Cardiovascular Diseases

Waad Alfawaz, Khalida Ismail, Nicola Guess

Institute of Psychiatry, Psychology and Neurosciences, King's College London, London, UK

KING'S College LONDON

Figure 1: The prevalence of of depression in people with cardiovascular diseases and vice versa.

Figure 2: Burden of disease attributable to 20 leading risk factors for both sexes in 2010, expressed as percentage of UK disability-adjusted life-years.

Introduction

Depression is associated with an increased risk of cardiovascular diseases (CVD). Although maintenance of a healthy diet and healthy weight are probably the most crucial ways to prevent CVD but the relationship between depression and diet in people at high risk of CVD has not been fully explored.

Aim

This study aimed to examine the relationship between depression and diet in a sample of people at high risk of CVD by comparing the differences in nutrient intake between depressed and non-depressed participants.

Method

A cross-sectional study using baseline data of 1704 participants from the MOVE-IT trial, a randomised controlled trial assessing the effectiveness of a healthy lifestyle intervention for people at high risk of cardiovascular disease. The participants were aged between 40-74 years and were recruited from primary care in south London. A 24-hour dietary recall was coded and analysed using DietPlan 7 software. CHO, saturated fatty acids and fibres, total sugar and all types of sugars were selected as nutrients of interest. Depression was measured using the Patient Health Questionnaire-9, a 9 item self-report measure of depressive symptoms, and participants were categorised as depressed or non-depressed.

Statistical analysis

Statistical analysis using SPSS software was used to evaluate the relationship between depression and dietary patterns taking into account the potentially confounding variables including age, gender, ethnicity, socioeconomic status and pre-diabetes status. LSD test was used to adjust for multiple comparison groups.
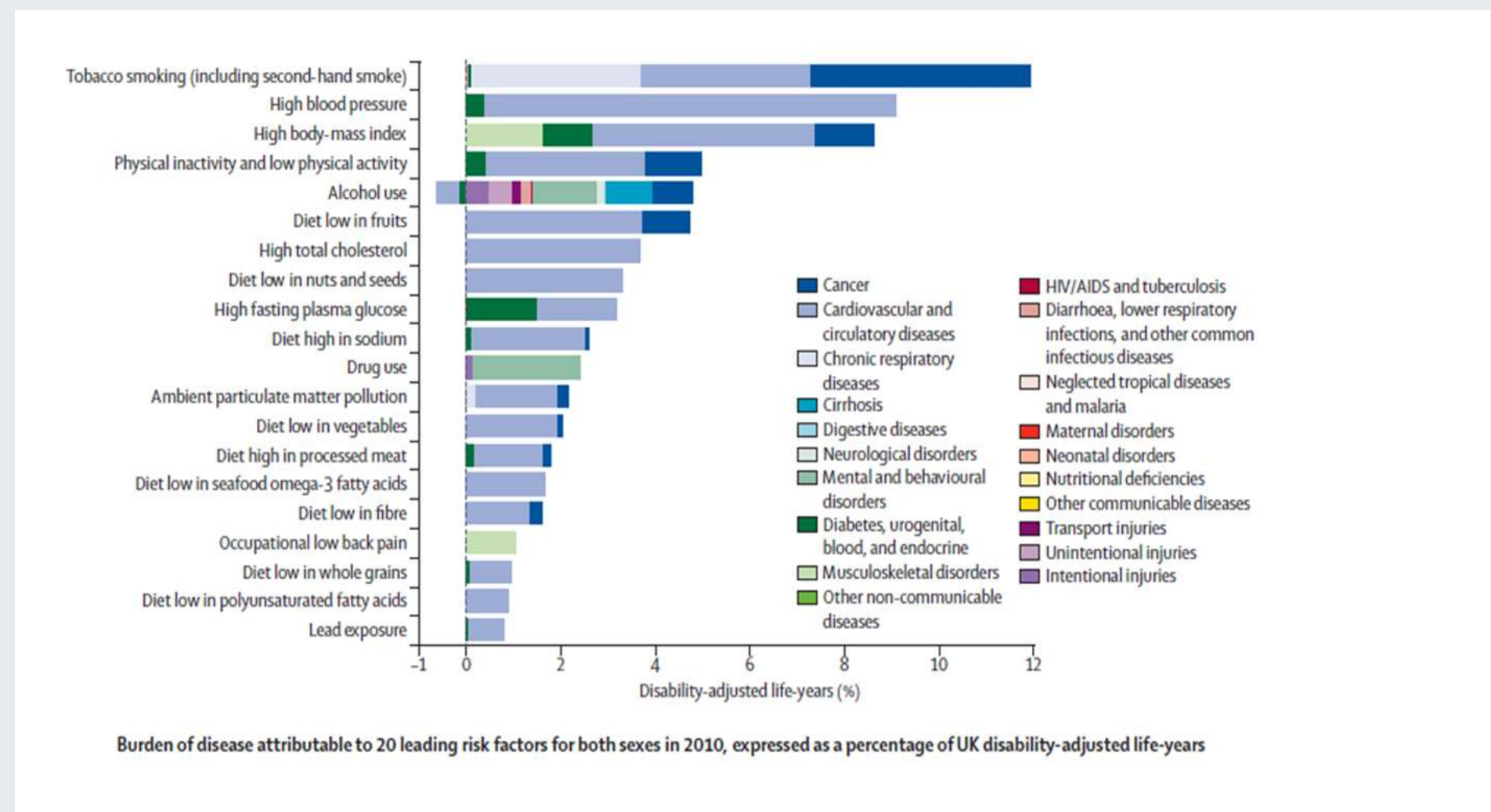
Results

There were no significant differences in the intake of saturated fatty acids (p=.197), fibres (p=.296) and all types of sugars between those categorised as depressed or non-depressed. A significant difference was found in the intake of CHO (p=.027). People with depressive symptoms consume 2.74 mg more CHO than those without depressive symptoms.

Conclusions

- We found an inverse association between the intake of CHO and depressive symptoms.
- Underreporting of other nutrients may account for their negative effect.

Funding acknowledgement

Tests of Between-Subjects Effects

Dependent Variable: CHO g

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Age	71.082	1	71.082	.011	.917
Gender	175334.401	1	175334.401	26.745	.000
Education	3.637	1	3.637	.001	.981
Ethnicity	12533.290	1	12533.290	1.912	.167
Depression Categories	71970.611	4	17992.653	2.745	.027

a. R Squared = .023 (Adjusted R Squared = .018)

Table 1: The Dietary intake of CHO (g) among study participants.
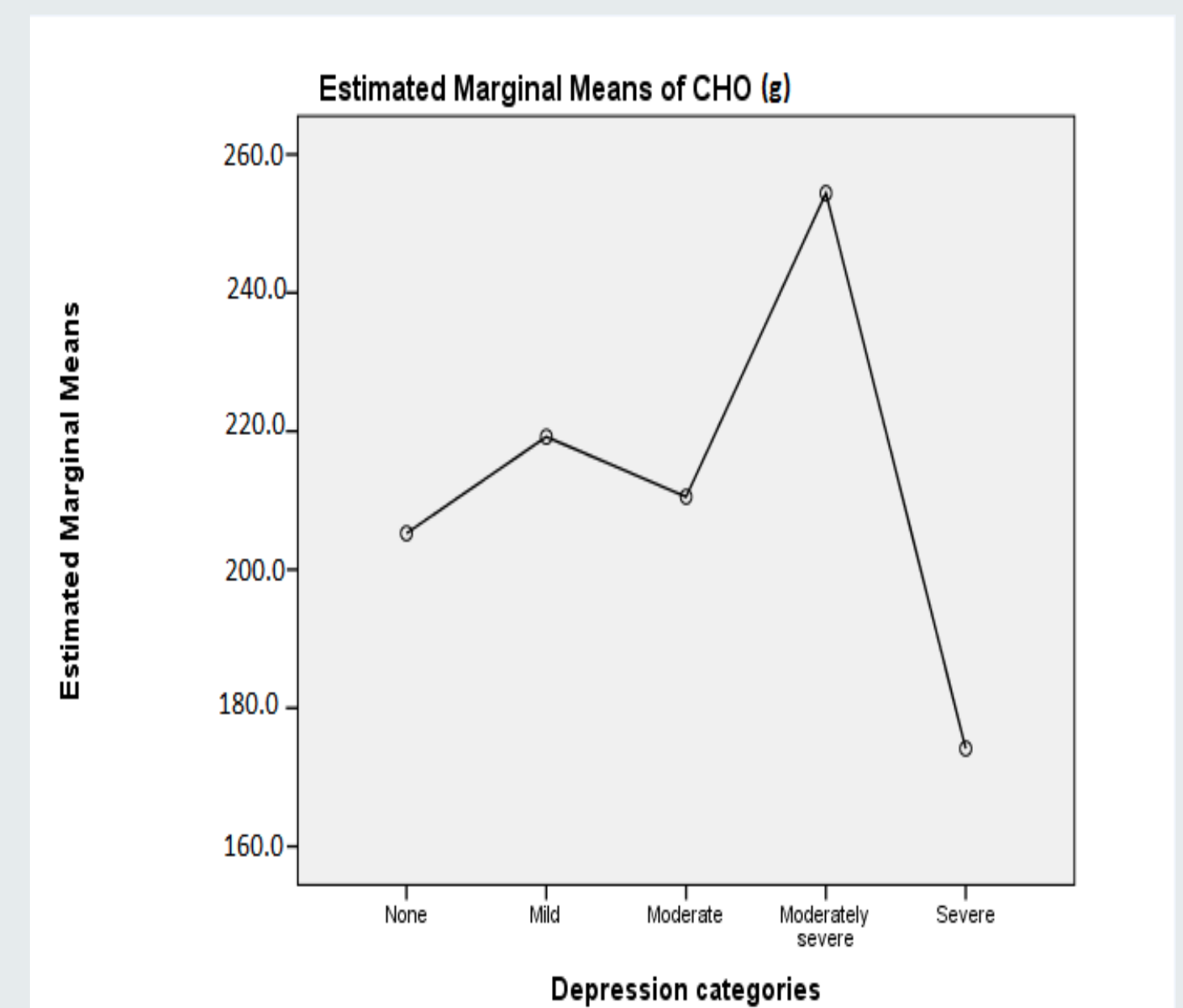
Figure 3: The average intake of CHO (g) among depression groups.

Department of Health disclaimer

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