ANIMAL PRODUCTS TEND TO INCREASE HEMOGLOBIN A1C AMONG DEPRESSED INDIVIDUALS

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BACKGROUND

Development of a diabetic state has been correlated with the use of energy-rich foods. Depressed individuals are prone to have erroneous diet habits.

HYPOTHESIS

Animal products are energy-rich products. Intake of these products could affect glucose levels in depressed individuals.

METHODS

The study analyzed participants in a 10-day in-patient residential depression recovery program. A total of 309 participants that completed the program where studied: 106 men and 203 women. On day one, all participants completed a depression and anxiety assessment test, a validated 75-item self-report screening tool that determines (1) depression based on DSM-5 (Diagnostic and Statistical Manual of Mental Disorders) criteria, (2) anxiety level, (3) mini EQ (Emotional Quotient), (4) demographic data, and (5) dietary intakes. The fact that meat, cheese and fish were part of each participant's diet was determined dichotomously using their answers on the assessment test. A potential diabetic state was screened in each participant by analyzing hemoglobin A1c level in day one of the program. The participants' dietary habits were correlated to the hemoglobin A1c level. SPSS software was used to process the data. An independent-samples t-Test was conducted to compare the intake of various energy rich foods with hemoglobin A1c level.

CORRELATION WITH HEMOGLOBIN A1C		
Meat	$t(286)=-2$	$p=0.041$
Cheese	$t(286)=0.45$	$p=0.65$
Fish	$t(286)=0.9$	$p=0.368$

RESULTS

At baseline participants had a mean Beck Depression index II of 27.4 (SD = 10.1, min = 7, max = 53), corresponding with high moderate depression. Results exposed that consumption of meat at least twice a day (M=5.5, SD=.68, SEM=.4) compared to no meat intake (M=5.7, SD=1.15, SEM=.17), was related with higher levels of hemoglobin A1c, $t(286)=-2$, $p = 0.041$. This association was not found for cheese $t(286)=0.45$, $p = 0.65$ or fish $t(286)=0.9$, $p = 0.368$ intake.

CONCLUSION

It seems meat intake, excluding fish, has a negative effect in the level of hemoglobin A1c in a clinically depressed population. To further confirm these results, prospective studies are encouraged.

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