

Are obese becoming idiots?

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ABSTRACT

Aim of the study

Obesity's prevalence is increasing in an alarming rate worldwide. A decline in intelligence had been observed in morbidly obese children/ adults before the detailed study of neuropeptides made a revolution in the area of cognition.

Methods

This is a review based on the publications of the 2 past years (2008-2010) on the issue of the intelligence of obese people. The search machine used for the selection of articles was Pubmed, and the keywords were obesity, intelligence, IQ and brain.

Results

According to the studies selected, the cognitive skills of obese people are getting limited in comparison to healthy weight people and the IQ is getting lower. This problem makes their condition more serious because the treatments fail if the obese patients cannot participate with full awareness of their treatment process. If the obese patient is a child, the future prospect of a long standing obesity problem is heavier for cognitive skills as well as the possibility of developing mood disorders is larger.

Conclusions

In conclusion, obesity seems to make us "less strong to fight", by causing a gradual decline in our intelligence and our will power; intelligence and will power are directly connected with success in everything we do in our lives. Will power is harmed due to the lower IQ and the concomitant with obesity mood disorders. A vicious circle like this could only be stopped by treatments focusing on cognition except the metabolic route of obesity.

Keywords: obesity, intelligence, IQ, brain, body mass index, mental disorders, mood disorders, cognitive skills.

INTRODUCTION

Obesity has many times been connected to an addiction for eating. Addictions have been confirmed as serious and difficult or impossible to treat neurological conditions, with massive influence to the intelligence and emotional status of the patients. Although obesity is officially a disease, which is spreading rapidly and takes the form of an epidemic in the Western World, it has not really been categorized in addictions. And it has not

been treated as a genuine neurological problem, but classically as a metabolic disease. Of course, the psychological aspects of obesity have been studied in depth, and the cognitive methods for obesity treatment have been presented in detail in research studies, but the intelligence problem has not been considered a neurological consequence so far.

This is a review, which uses the studies that were published from 2008-2010 focusing on intelligence and obesity.

METHODS

With the use of the words obesity and intelligence, and chronological limits of search 2008-2010 (March), a number of 172 studies were found by the Pubmed search machine. For the same period, with the keywords obesity and mental disorders, a number of 227 articles were found, and with the keywords obesity and IQ 16 articles appeared after the search. From those articles, a number of 27 articles were selected for this review.

A base to start with obesity and intelligence

Yu et al¹ performed a systematic review describing obesity/intelligent quotient (IQ) association, particularly childhood IQ in relation to adulthood obesity. After screening 883 citations from five electronic databases, they reviewed 26 studies. The weighted mean difference (WMD) of the full IQ (FIQ)/obesity association in the pre-school children was -15.1 ($P > 0.05$). Compared with controls, the WMD of FIQ and performance IQ of obese children were -2.8 and -10.0, respectively ($P < 0.05$), and the WMD of verbal IQ was -7.01 ($P > 0.05$). With increasing obesity, the full IQ in pre-school children declined, with a significant difference for severely obese children and FIQ. In pubertal children, a slightly different effect of FIQ and obesity emerged. Two studies reported an inverse FIQ/obesity association in adults, but it was non-significant after adjusting for educational attainment. Four papers found that childhood FIQ was inversely associated with adult body mass index, but after adjusting for education, became null. Overall, there was an inverse FIQ/obesity association, except in pre-school children. However, after adjusting for educational attainment, FIQ/obesity association was not significantly different. A lower FIQ in childhood was associated with obesity in later adulthood perhaps with educational level mediating the persistence of obesity in later life.

Cognitive performance and non cognitive personality variables - the basis for the pathology of eating²

Experimental analyses have shown systematic although complex relationships between non-cognitive personality variables

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