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## DEPRESSION MODERATES THE INTERGENERATIONAL TRANSMISSION OF OBESITY: THE CARDIOVASCULAR RISK IN YOUNG FINNS STUDY

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**Introduction:** The association between parental BMI and offspring BMI is well established, but much less is known about which psychosocial factors influence this familial risk. Our aims were to test whether offspring depressive symptoms mediates or mitigates (moderates) the relationship between parental BMI and offspring BMI in adulthood.

**Methods:** Using a prospective design with a sample of 1208 participants (the offspring), we examined the association between parental BMI and offspring BMI in adulthood. Parental BMI was self-reported at baseline in 1980. Offspring depressive symptoms were measured in 2001 (when participants were 24-39 years old) and offspring BMI in 2012 (35-49 years old). Linear hierarchical regression and a bootstrapping technique were used to examine mediating and moderating effects of offspring depressive symptoms when predicting offspring BMI. A simple slopes analysis was used to further examine the interaction.

**Results:** We found little evidence that depressive symptoms were mediating the relationship between parental and offspring BMI. In contrast, we did find that depressive symptoms were moderating the relationship between maternal BMI and offspring BMI. The interaction between maternal BMI and offspring depressive symptoms was a significant predictor of offspring BMI ( $\beta = 0.370$ ,  $R^2$  change=0.003,  $p=0.05$ ), after adjusting for age, sex, paternal BMI, and parental occupation so that maternal BMI predicted offspring BMI more strongly at higher levels of offspring depressive symptoms.

**Conclusions:** Our results suggest that depression may exacerbate the transmission of BMI across generations, reinforcing the importance of targeting depression in obesity prevention efforts.

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