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Titel des Beitrags: Procolipase gene: no association with early-onset obesity or fat intake.

Abstract:
BACKGROUND: Several lines of evidence implicating procolipase (CLPS) or its derivative enterostatin in dietary fat absorption, regulation of fat intake, and body weight in rodents. We explored the relationship between genetic variation in CLPS, early-onset obesity and fat intake in humans.

METHODS: We screened the CLPS in 93 extremely obese children and adolescents and 96 underweight young adults for sequence variations and genotyped single nucleotide polymorphisms (SNPs) in extremely obese children and adolescents, healthy normal-and underweight young adults and obesity trios.

Case-control and family-based association analyses were performed.

RESULTS: Five sequence variations were identified: two non-synonymous SNPs: rs2766597 (Leu8Pro), rs41270082 (Arg109Cys); one SNP in the 5'UTR: rs3748050; one intronic SNP: rs3748051; and one infrequent novel non-synonymous variant: Arg55His. For rs2766597, rs3748050, and rs3748051 we obtained no evidence for an association with obesity in the case-control comparison. For rs41270082 there was a trend for association which could not be substantiated in the family-based association analysis. Additionally, we found no association in subgroup analyses pertaining to the extremely obese children and adolescents in the lowest and highest quartile of the percentage of energy.
consumed as fat. CONCLUSIONS: We found no evidence for an association of CLPS SNPs rs2766597, rs41270082, rs3748050, and rs3748051 with obesity or percentage of dietary fat intake.