

Consumption of soft drinks and hyperactivity, mental distress, and conduct problems among adolescents in Oslo, Norway.

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OBJECTIVES: We examined whether high levels of consumption of sugar-containing soft drinks were associated with mental distress, hyperactivity, and conduct problems among adolescents. METHODS: A cross-sectional population-based survey was conducted with 10th-grade students in Oslo, Norway (n = 5498). We used the Hopkins Symptom Checklist and the Strengths and Difficulties Questionnaire to assess mental health outcomes. RESULTS: There was a J-shaped dose-response relationship between soft drink consumption and mental distress, conduct problems, and total mental health difficulties score; that is, adolescents who did not consume soft drinks had higher scores (indicating worse symptoms) than those who consumed soft drinks at moderate levels but lower scores than those with high consumption levels. The relationship was linear for hyperactivity. In a logistic regression model, the association between soft drink consumption and mental health problems remained significant after adjustment for behavioral, social, and food-related variables. The highest adjusted odds ratios were observed for conduct problems among boys and girls who consumed 4 or more glasses of sugar-containing soft drinks per day. CONCLUSIONS: High consumption levels of sugar-containing soft drinks were associated with mental health problems among adolescents even after adjustment for possible confounders.

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