

Weight gain in two adult cohorts in East and West Germany after reunification

Wimmer K.¹, Laubereau B.¹, Wölke G.¹, Döring A.¹, Heinrich J.^{1,2}

¹ GSF - National Research Centre for Environment and Health, Institute of Epidemiology, Neuherberg

² Ludwig-Maximilians-University of Munich, Institute of Epidemiology, Neuherberg, Germany

SUMMARY

Background: Several epidemiological studies have shown consistently higher prevalence rates of obesity and overweight in East German adults compared to West German adults before German reunification in 1990. If different lifestyle factors after German division contribute to these differences, one might speculate that trends of obesity and overweight in the East and West after German reunification in 1990 would be similar.

Objective: To examine weight gain in East and West German adult cohorts in the decade after German reunification.

Methods: The study population includes 554 individuals with complete data aged 20 - 47 years in 1990-92 participating in the ten year follow-up of the European Community Respiratory Health Survey (ECRHS) in the German centres Hamburg (West) and Erfurt (East). Age and occupation-adjusted prevalence and incidence rates, stratified for gender and centre, were calculated for the Erfurt and Hamburg cohorts.

Results: The prevalence of overweight increased in males and females in both cities, and was statistically significant for Hamburg males (32.7 % to 44.9 %), Hamburg females (12.3 % to 25.4 %) and Erfurt females (18.5 % to 31.2 %). The increase in the prevalence of obesity was statistically significant for males (Hamburg: 3.7 % to 7.9 %; Erfurt: 5.2 % to 10.8 %) and for females only in Hamburg (6.4 % to 14.2 %). The increase in the prevalence of overweight and obesity were larger in Hamburg than in Erfurt. Moreover, the incidence rates of obesity were higher in Hamburg for both sexes, but were not statistically significant.

Conclusion: Our findings indicate different patterns of weight gain in 2 study sites in East- and West-Germany. These results might reflect a convergence of initially higher prevalences of overweight and obesity in the East with initially lower prevalences in the West.

Key words: body mass index, overweight, obesity, adult, cohort study

Address for correspondence: J. Heinrich, GSF - National Research Centre for Environment and Health, Institute of Epidemiology, Ingolstaedter Landstrasse 1, D-85 758 Neuherberg, Germany. E-mail: Joachim.Heinrich@gsf.de