



## Longitudinal 10-year changes in dietary intake and associations with cardio-metabolic risk factors in the Northern Sweden Health and Disease Study.

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**Abstract:** Dietary risks today constitute the largest proportion of disability-adjusted life years (DALYs) globally and in Sweden. An increasing number of people today consume highly processed foods high in saturated fat, refined sugar and salt and low in dietary fiber, vitamins and minerals. It is important that dietary trends over time are monitored to predict changes in disease risk.

In total, 15,995 individuals with two visits 10 (±1) years apart in the population-based Västerbotten Intervention Programme 1996-2014 were included. Dietary intake was captured with a 64-item food frequency questionnaire. Percent changes in intake of dietary components, Healthy Diet Score and Dietary Inflammatory Index were calculated and related to body mass index (BMI), serum cholesterol and triglyceride levels and blood pressure at the second visit in multivariable regression analyses.

For both sexes, on group level, proportion of energy intake (E%) from carbohydrates and sucrose decreased (largest carbohydrate decrease among 40-year-olds) and E% protein and total fat as well as saturated and polyunsaturated fatty acids (PUFA) increased (highest protein increase among 30-year-olds and highest fat increase among 60-year-olds) over the 10-year period. Also, E% trans-fatty acids decreased. On individual basis, for both sexes decreases in intake of cholesterol and trans-fatty acids were associated with lower BMI and serum cholesterol at second visit (all P?

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