Title: **General Health and Long-Term Outcomes in Celiac Disease Patients Identified Through Screening in a Population-Representative Cohort: Findings from a Prospective Study.**

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Keywords:
celiac disease, screening

Abstract
While wide-scale screening for celiac disease (CeD) is increasingly considered, its overall benefits are not well established. We investigated general health factors at diagnosis and long-term outcomes in CeD patients identified through screening in a national-representative cohort.

CeD screening was performed with antibody testing in 6,308 individuals. Comprehensive health data were collected at diagnosis and after 11-year follow-up. Mortality was evaluated after 17 years using national statistics registry.

We identified 92 new CeD patients. At diagnosis, patients more often had pre-eclampsia (13% vs. 5%, p=0.016), lower levels of hemoglobin (median 140 vs 143 g/L, p=0.013) and ferritin (29 vs 68 ng/mL, p=0.004), higher total cholesterol/high-density lipoprotein cholesterol ratio (4.91 vs 4.54, p=0.019), and less often smoked (11% vs 22%, p=0.014) compared to seronegative population (n=6216). The groups did not differ in age (48 vs 51 years, p=0.159), sex (females 62% vs 56%, p=0.205), or the presence of gastrointestinal, cardiovascular and psychiatric diseases, osteoporosis, or malignancies. After 11 years, no significant changes in mental health or health care utilization were observed among 52 followed-up CeD patients while on a gluten-free diet. There was no significant difference in mortality rate after 17 years compared to non-CeD individuals (14.1% vs. 25.6%, p=0.350, HR 0.77 (CI 95% 0.45-1.33).

Nationally representative screen-detected CeD patients had lower hemoglobin and iron levels and a higher prevalence of pre-eclampsia at diagnosis. Gluten-free diet does not appear to have adverse effects. Screen-detected patients do not seem to be at risk for increased long-term mortality, although further research is needed.