

Title: Meal and snacking patterns of adolescents and young adults with gluten-free diet, other special diet, or no food restrictions

Authors:

Heli Pihlajamäki^{1,2}, Nissinen³, Linnea Aitokari^{1,2}, Laura Kivelä², Sanna Arnala^{2,4}, Pilvi Laurikka², Hannu Tuuri³, Kalle Kurppa^{1,2,5}

¹ Tampere Center for Child, Adolescent and Maternal Health Research, Tampere University and Tampere University Hospital, Tampere, Finland

² Celiac Disease Research Center, Tampere University, Tampere, Finland

³ Seinäjoki University of Applied Sciences, Seinäjoki, Finland

⁴ The Finnish Coeliac Society, Tampere, Finland

⁵ The University Consortium of Seinäjoki, Seinäjoki, Finland

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Abstract

People with celiac disease (CeD) may experience challenges in maintaining healthy eating habits alongside with a gluten-free diet (GFD), but data are scarce. We compared meal and snacking patterns between young individuals 1) with CeD and GFD, 2) with other special diet than GFD and 3) no food restrictions.

A survey about demographic and health-related issues and diet was distributed to 16-30-year-old members of Finnish Celiac Society and students of Seinäjoki university of applied sciences and vocational school.

Mean age of the respondents (n=422) was 24.8 years, 80% were women and 67% students. Altogether 210 had CeD with GFD, 69 had other special diet and 143 had no food restrictions. Respondents with CeD had more frequent meal patterns (3.4 vs 3.0 meals/day, p=0.008) and consumed lunch at work or school cafeteria less often than those without food restrictions (18% vs 38%, p=0.002). They also consumed more frequently ice cream (0.9 vs 0.3 times/week, p<0.001), low-fiber bread (1.6 vs 0.8 times/week, p<0.001) and plant oil-based margarine/fat spreads (2.4 vs 1.2 times/week, p=0.004) than those without restrictions, but less frequently sugar-sweetened beverages (0.6 vs 1.2 times/week, p<0.001), pizza (0.2 vs 0.4 times/week, p=0.01) as a snack. Respondents with other special diet used more frequently non-dairy milk substitutes than those without restrictions or GFD (2.7 vs 0.4 and 0.8 times/week, respectively, p≤0.001).

Respondents with CeD had more frequent meal patterns and lower consumption of nutritionally unfavorable food products than those without food restrictions.