

# Publication of the Month

June 06/09: Mass screening for celiac disease - benefits prevail.

Serological mass screening for celiac disease (CD) has been discussed controversially since many years. The reason why the scientific society has not yet come to a decision and governments are hesitant in supporting mass-screening is mainly the lack of studies which clearly show either the benefits of CD diagnosis for so far undetected cases and/or the cost-effectiveness of mass screening. The publications presented fill the first gap and show convincingly in both children and adults that screening-detected CD patients benefit a lot from diagnosis and subsequent therapy. Cost-effectiveness of mass screening for CD has already been analyzed and confirmed elsewhere (Shamir et al 2006, *Med Decis Making* 26: 282-293).

Van Koppen EJ, Schweizer JJ, Csizmadia CGDS, Krom Y, Hylkema HB, van Geel AM, Koopman HM, Verloove-Vanhorick SP, Mearin ML

**Long-term health and quality-of-life consequences of mass screening for childhood celiac disease: A 10-year follow-up study**

*Pediatrics* 2009, 123: e582-e588

32 children with CD detected by mass-screening of 12.672 children aged 2-4 years were followed-up for 10 years. The follow-up included assessments of general health status, CD-associated symptoms, CD-associated serum antibodies, and health-related quality of life. Ten years after mass screening, a high proportion of 81% of the children were adhering to a gluten-free diet, the health status improved in 66% of the treated children and the health-related quality of life of the children with CD was similar to that of the reference population. The authors propose starting limited screening programs, followed by prospective evaluation of their costs and benefits.

Mariné M, Fernández-Bañares F, Alsina M, Farré C, Cortijo M, Santaolalla R, Salas A, Tomàs A, Abugattas E, Loras C, Ordás I, Viver JM, Esteve M

**Impact of mass screening for gluten-sensitive enteropathy in working population**

*World J Gastroenterol* 2009, 15(11): 1331-1338

Out of 1868 adults 26 were positive for tTG and / or EMA. 21 individuals agreed in a biopsy of which 6 were found to be Marsh III (and thus have celiac disease), 9 had Marsh I (mild mucosal changes) and 6 had no mucosal damage. 4/6 patients with positive serology but only weak mucosal lesions agreed on keeping a gluten-free diet. Symptoms reverted in both Marsh III and Marsh I patients upon gluten-free diet while in 2 patients with Marsh 0 or Marsh I on gluten-containing diet mucosal lesions worsened to Marsh I and Marsh III, respectively. This suggests that the positive tTG antibody results are not false positive but that these individuals might have latent CD which becomes overt later and therefore merit follow-up. Interestingly, patients with intestinal Marsh I lesions were symptomatic similar to patients with villous atrophy (Marsh III). The authors conclude that gluten-sensitive enteropathy in the general population is frequent and is clinically relevant, irrespective of the severity of the histological lesion. Mass screening programs are useful for identifying these patients in order to initiate either a gluten-free diet or close follow-up monitoring.

