

Theme: Gastroenterology

 **Does gluten free diet promote junk eating?**
(*Eur J Pediatr.* 2018 doi: 10.1007/s00431-018-3128-8.

Introduction of gluten-free diet in index case influences the diet constituents as well as the eating behavior of the whole family. In this study involving 40 children with celiac disease and 15 controls, it was demonstrated that after introduction of gluten-free diet, the family ate significantly more junk food, including snacks and candies ($P=0.05$). All family members in control group had significantly less snacks while significant increase in junk consumption were shown by index cases ($P=0.001$) and their fathers ($P=0.03$). Significant increase in obesogenic life style like eating while cooking or while doing other activities was observed in mothers and children too. Therefore, patient education after diagnosing celiac disease should not be restricted to suggesting gluten-free recipes, and should include sensitization towards healthy living and lifestyles.

 **Is allergic proctocolitis a risk factor for later development of functional gastrointestinal disorders?**
(*J Pediatr.* 2018;195:128-33)

In this study, 80 consecutive children with allergic proctocolitis and similar number of age-matched controls were followed till age of 4 years for development of symptoms suggestive of functional gastrointestinal disorders (FGID), as per Rome III criteria. Fifteen percent of children in proctocolitis group demonstrated symptoms of FGID as compared to 5% in control group ($P=0.035$). After adjustment for age and sex, the odd's ratio (95% CI) for FGIDs in allergic proctocolitis group was 4.39 (1.03, 18.68). FGIDs were significantly associated with iron deficiency anemia, duration of hematochezia, and younger age at presentation. The data suggest that not only infection, but also a transient early-life allergic inflammatory trigger may induce persistent digestive symptoms, supporting the existence of 'post inflammatory' FGIDs.

 **Does celiac disease affect a child's school performance?** (*Arch Dis Child.* 2018;103:143-8).

It is feared that celiac disease might adversely affect school performance due to its effect on cognitive performance and related health consequences that might increase school absenteeism. Analysis was performed on a population of 445669 Swedish children of whom 1767 were diagnosed with celiac disease. No association was found between celiac disease and school performance at ninth grade (adjusted coefficient -2.4 , 95% CI -5.1 to 0.4). A weak association was established between late celiac diagnosis and higher grades, but this disappeared after adjusting for parents' socioeconomic conditions. This study thus negates the fear that celiac disease diagnosis during childhood may be associated with poor school performance.

 **Safety of oral PEG 3350 as laxative in children.**
(*J Pediatr.* 2018;195:148-53).

There have been some reports of neuropsychiatric events such as seizures, tremors, tics, anxiety, lethargy, aggression, paranoia, mood swings, and obsessive-compulsive behaviors in patients receiving PEG 3350 for treatment of constipation. On the other hand, behavioral problems are also otherwise common in children with constipation, and also some studies in animals indicate that constipation may itself lower seizure threshold. It has been postulated that PEG 3350 might contain trace amounts of potentially neurotoxic ethylene glycol (EG), diethylene glycol (DEG), and triethylene glycol (TEG). This study compared levels of these three compounds at baseline and for up to 3 hours of ingestion of PEG 3350 in test and control groups. Finding EG, DEG, and TEG in the blood of control participants indicated that all children are exposed routinely, and have measureable amounts in the blood. It also emerged that though EG and TEG levels increased after a standard dose of PEG 3350, their peak values remained well below toxic levels. The results from this preliminary study indicate that daily PEG 3350 therapy in children is not associated with sustained elevation of EG, DEG, or TEG blood levels over levels in matched controls.

 **Are oats safe for children with celiac disease?**
(*J Pediatr.* 2018;194:116-22).

The consumption of pure oats is generally considered safe in the vast majority of patients with celiac disease, but some concerns still persist regarding the tolerance and the safety of oats for all patients with celiac disease. The purity of oat products cannot always be guaranteed, and the contamination of oats with other gluten-containing cereals during harvesting and milling is known to occur. Therefore, these are largely avoided in celiac diet plans in absence of strong evidence supporting their safety. Oats are a good source of fiber, especially beta-glucan, which is important in human nutrition for its functional properties such as the attenuation of postprandial plasma glucose and insulin responses as also of lowering serum cholesterol levels. Oats are also a good source of B-complex vitamins, iron, and thiamine. In this 15 months noninferiority clinical trial on 177 biopsy-proven celiac cases, using a double-blind, placebo-controlled, crossover design, it was established that long-term introduction of pure nonreactive oat-based products in children with celiac disease on a GFD had no deleterious effect at the clinical, serologic, or mucosal levels. This strong evidence supporting free use of oats in the diets of children with celiac disease may well provide the much desired variety, flexibility, palatability and nutritional value to the conventional therapeutic dietary regimens.

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