Both type 1 diabetes and celiac disease are considered autoimmune diseases, and thus prior studies have shown an association between the two. But just how common is it for one to occur after the other, and are there any genetic or demographic factors that would predict the co-occurrence of both in one patient? To answer these questions, Hagopian et al. (10.1542/peds.2017-1305) analyze the results of a prospective birth cohort of 8676 children with 5891 having with a median follow-up of 66 months. Laboratory markers as well as clinical signs of the disease were monitored quarterly for the first 4 years of the study and then twice yearly for the next two. While some children developed islet cell antibodies suggestive of type 1 diabetes, and others showed elevated tTGA levels consistent with celiac disease, both diseases occurred in 90 children at a higher than expected rate. In this study diabetes occurred first more often than celiac did in those who developed both. After adjusting for other confounders, the authors found that a family history of type 1 diabetes was a potential predictor for co-occurrence of diabetes and celiac disease as were several SNP genotypes but these did not fully account for co-occurrence.

So is the association causal or isn't it? Endocrinologists Drs. Christine Ferrara and Stephen Gitelman from UCSF share their thoughts on this question in an accompanying editorial (10.1542/peds.2017-2424) and raise environmental and other pathophysiologic explanations for why and when co-occurrence might be expected. Don't be immune to this study and commentary---and check both out to learn a lot more that may help you better monitor your patients with diabetes for celiac disease and your patients with celiac disease for diabetes.