

Is there a connection between ADHD and celiac disease?

Recently, there has been more discussion on social media about the connection between ADHD and celiac disease, a chronic digestive and immune disorder that is triggered by foods with gluten. Perhaps you have had questions about this topic as well. So, what does the research say?

Bottom line- there is no known direct connection between ADHD and celiac disease *at this time*, meaning this is an area that needs more study.

Let's first keep in mind, when looking at research studies, we always must ask questions, such as who was the population, is it from a peer reviewed journal, etc. Further, when looking at research on ADHD, we also need to keep in mind that "there is no single risk factor that explains ADHD. Many different risks and risk pathways may all lead to the same clinical [presentation]...[b]oth inherited and noninherited..." (Tharpar, 2013, p. 12). In other words, we don't know what exactly causes ADHD, nor are there distinct biomarkers (such as blood work) to test for. This is exacerbated by the fact that there are no recommended quantitative tests for Celiac disease, making a comparison of the two difficult and multifaceted.

While previous research indicated that there was no connection, nor was testing for celiac disease recommended for individuals with ADHD, newer studies within the past five years have suggested a link (Guar, 2022), likely leading to more recent interest in the topic. We still need to keep in mind that correlation does not mean causation, and these links can be nuanced.

Some results from newer studies:

Guar (2022) addressed the controversy of this link by completing a systematic review where she examined 23 studies and found that "13 showed a positive association between ADHD and [celiac disorder]. Inconsistencies in the results remain due to the... methodology, as well as a lack of reporting on ADHD subtypes." She concluded that there is an association, but we need to focus more on subtypes of ADHD to get a better understanding. She also acknowledged other recent systematic reviews that found no correlation, therefore did not suggest testing for ADHD in those with celiac disease (Erturk et al., 2020). Honar et al. (2022) studied 60 children diagnosed with celiac disease for ADHD. They found in the population they studied with celiac, there was a higher prevalence of ADHD than would be in the general population, however there were inconsistencies again in subtypes of ADHD present, and also within age groups.

Other highlights from a literature review to consider (Honar et al., 2022):

- "In the study by Coburn et al. 2020, anxiety disorder and ADHD were more common in celiac disease than in the general population [17]."
- "In the study by Lebwohl et al. (2020), ADHD was increased among children with celiac disease [21]."

- “In a large study among adults, most of the psychiatric disorders increased among patients with celiac disease [22].”
- “In the study by Gungor et al. (2013), there was no difference between the frequency of celiac disease between children with ADHD and the control group [23]. In another study by Kumpersack et al. (2020) on 102 children and adolescents with ADHD, the prevalence of celiac disease was not higher than the general population.”

CHADD wrote an excellent article in 2017 addressing gluten free diets and ADHD that caution anyone who may suggest that gluten free diets could ‘cure’ ADHD. Individuals have to be wary of any information that makes bold claims such as this. CHADD points out that at times what appears to be ADHD was actually celiac disease or gluten intolerance, in which case this would need to be treated. However, with primary ADHD diagnosis, they suggested that diet changes don’t make much of a difference and eliminating gluten would likely not be helpful.

So, what is the takeaway?

It is complicated to study these two phenomena, and science does not yet have a clear answer on how they may be related. Gluten free diets can be costly, and it is important to still maintain a balanced diet, however there are more options than ever for engaging in a gluten free lifestyle.

At the end of the day, it is important for individuals to make the best choices for themselves and their families in conjunction with medical advice.

- Jennifer Merrick, RSW

Disclaimer – this article does not substitute for medical advice and is for informational purposes only. The viewpoints in this article are the writer’s own and do not necessarily reflect the position of the ADHD Association of Greater Edmonton. For any questions or comments, please email jennifer@adhdedmonton.com or info@adhdedmonton.com.

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