


report any secondary effects. The study in 2016₂ concluded that the specialized gluten-free/casein-free diet is safe as long as the diet is being supervised by a dietician. The Academy of Nutrition and Dietetics caution that going on this specialized diet can lead to deficiencies with certain nutrients and minerals (particularly Vitamin D and iron). They also highlight that anyone on this specialized diet, as those with coeliac disease, should always be supervised by a dietician. Also, a child with autism may already be a “picky eater” therefore further changes to their diet may be difficult.

CONCLUSION

There is no scientific evidence to support that the gluten-free/casein-free diet is effective in treating autism symptoms or its related behaviours. If an individual with autism believes they have Coeliac Disease, they should consult with a doctor. A doctor will be able to confirm the diagnosis and determine whether a specialized diet is necessary to aid in alleviating the symptoms of Coeliac Disease and not for treating autism symptomatology or its related behaviours. 

References

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LATERAL GLANCES IN AUTISM SPECTRUM DISORDERS

By Janie Degré-Pelletier, undergraduate student in psychology at Université du Québec à Montréal (UQAM)

One of the two characteristics that are required to diagnose Autism Spectrum Disorders (ASD) is the presence of repetitive behaviors. Atypical visual exploratory behaviors for inanimate objects (AVEBIOs) are among the repetitive behaviors frequently found in autism. These atypical behaviors include *lateral glance* (the child looks at an object out of the corner of his eyes while turning his head or moving the object), *close gaze* (inspects an object within a 3-inch range to his eyes) or *obstructed gaze* (looks at an object

by closing one eye or by placing another object between his eyes and the object of interest). Few studies have focused on AVEBIOs. The only empirical studies explored AVEBIOs within the broader set of repetitive behaviors.

Researchers from Rivière-des-Prairies Hospital developed a tool to identify, describe and assess AVEBIOs. First, they developed a list of all AVEBIOs in order to code 40 videos of ADOS-G assessments (*Autism Diagnostic Observation Schedule – Generic*; a clinical diagnostic

tool). They identified AVEBIOs and determined their frequency and duration. They analysed the context surrounding AVEBIOs to determine the conditions under which these behaviors occur. Finally, they compared the AVEBIOs evident in autistic children to those exhibited by non-autistic children.

RESULTS

Lateral glances were the most common AVEBIO, and were five times more prevalent in autistic compared to typical children. In a significant number of

sequences, lateral glance was accompanied by a head tilt. Furthermore, lateral glance was often associated with the presence of an element in movement in the environment. Although lateral glances were also found in some typical children, they took a unique form in autistic children. Autistic children use them to inspect moving objects, or place objects at the edge of their visual field, while typical children use lateral glance to follow a coveted object.



(a)



(b)

CLINICALLY

No link was found between frequency of lateral glance and verbal mental age or chronological age. This challenges the notion that repetitive behaviors, such as lateral glances, are linked to developmental delay. Furthermore, the absence of correlation between communication skills and lateral glances confirms that these two areas of symptoms are independent of one another. This result had also been confirmed by other researchers.

NEUROCOGNITIVE IMPLICATIONS

The association between lateral glances and moving objects suggests that AVEBIOs have a purpose. It has been shown that it is more difficult for autistic children to perform perceptual tasks that include movement. A possible explanation is that lateral glance is used to filter visual information. The resolution on the periphery of the visual field is lower and it is therefore possible that looking at an object laterally allows autistics to obtain visual information in a simpler form, making it easier to process and analyse.

In conclusion, these results suggest that some repetitive behaviors have an adaptive function, they could be helpful for autistic individuals and allow them to better adapt to their environment. Therefore, this brings into question the relevance of interventions aiming to eliminate these behaviors. Moreover, it seems that the AVEBIOs identified in this study are specific to autism and appear hastily in development. These results could qualify AVEBIOs as precursors, to and hence having an impact on the diagnosis of autism spectrum disorders. 🌈

Original study: Motttron, L., Mineau, S., Martel, G., St-Charles Bernier, C., Berthiaume, C., Dawson, M., Lemay, M., Palaridy, S., Charman, T., & Faubert, J. (2007). Lateral glances toward moving stimuli among young children with autism: Early regulation of locally oriented perception? *Development and Psychopathology*, 19(01), 23-36. doi: 10.1017/S0954579407070022

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INTELLIGENCE IN AUTISM: THE ROLE OF PERCEPTION AS A UNIQUE "P" FACTOR?

By Dominique Girard, Ph.D. student in psychology at UQAM
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Young autistic children present particular behaviours associated with the sensory aspects of their environment (e.g. react strongly to

certain textures, sensitive to noise, interested in objects in repetitive movement, etc.). In the most recent version of the DSM, the diag-

nostic criteria of the Autistic Spectrum Disorder (ASD) have been modified such that perceptual behaviours now hold a greater im-