

Gluten Free and Casein Free Diet in Autism Spectrum Disorder

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Gluten-free and casein free (GFCF) diet implementation is one of the alternative treatment for Autism Spectrum Disorder (ASD). Although it is not proven yet, some studies suggest that these individuals suffer from gut and blood brain barrier (BBB) permeability. In some studies it was shown that when they ingest gluten and/or casein containing foods, brain specific inflammation markers can be seen in their blood.

Our study is a systematic review. In our study, studies were searched in the *Medline*, *Cochrane* and *Ebscohost* databases. For the studies, *autism*, *autism spectrum disorders*, *gluten free*, *casein free*, *intervention* were used as search keywords. Studies were included in our review based on conditions of a) being conducted with children with autism spectrum disorder and including at least 1 participant, b) having implementation of diets where gluten and/or casein is reduced or removed, c) being an intervention study, d) investigating changes in behavior of children with autism. This study was prepared in line with PRISMA guidelines standardized with the aim of preparing and publishing systematic reviews. 8 case reports, 4 clinical interventions without any control groups, 5 single blind and 4 double blind randomized control trials were included in our study. According to the included studies, age and duration of the diet are the two most important determinants. On the other hand, not only gluten, but also wheat should be removed completely from the diet because gluten sensitive individuals can also be susceptible to other components in the wheat.

Still, controlled studies with longer intervention periods and more participants are needed in the literature.

Biography:

İlker PAZARBAŞI was graduated from department of Nutrition and Dietetics, Hacettepe University, Turkey. He finished his master in 2015 (Hacettepe University Nutrition Sciences Program) and since 2016 he has been doing his PhD in Nutrition and Metabolism in Exercise Program, Hacettepe University. From 2012 to 2016 he worked as research assistant in Department of Nutrition and Dietetics, Hacettepe University. Since 2016 he has been working as a researcher and lecturer in Department of Nutrition and Dietetics, Istanbul Sabahattin Zaim University. His personal interest is interaction between eating patterns and chronic diseases, especially neurological diseases.