Management of Nutritional Strategies in Controlling of Autism in Children

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Abstract: Objectives: The prevalence of Autism in the world has taken on a growing trend. Autism is a neuro-developmental disorder that is identified at the age of three. Studies have been shown that nutritional management can control nutritional deficiencies in Autism. This review study aimed to assess the role of nutritional management strategies for Autism in children has been made. Methods: This review study was accomplished by using the keywords related to the topic, 68 articles were found (2000-2015) and finally 15 articles with criteria such as including dietary pattern, nutritional deficiencies and Autism controlling were selected. Results: The studies showed that intake of vitamins D, E, and calcium because of restricted diet (casein and gluten free) in autistic children is less than typically developing children (TYP) (p value ≤ 0.001) and as a result of restrictions on the consumption of fresh fruits and vegetables, vitamin C and magnesium intake is less than TYP children (p value ≤ 0.001). Autistic children also get omega-3 less than TYP children. Studies have shown that food sources rich in omega-3 can improve behavioral indicators, especially in reducing hyperactivity (95% CI = -2.2 - 5.2). Zinc deficiency in these children leads to a high serum level of mercury, lead and cadmium. As a result of the repetitive dietary pattern, Sodium intake in autistic children is more than TYP children (p value < 0.001). Because of low food variety in autistic children, healthy eating index (HEI) is less than TYP children (p value = 0.008). Food selectivity in Autism due to repetitive and restricted dietary pattern and nutritional deficiencies. Conclusion: Because of restricted (casein and gluten free) and repetitive dietary pattern, the intake of some micronutrients are denied in autistic children. The nutritional strategy programs appear to help controlling of Autism.

Keywords: autism, food selectivity, nutrient intake, nutritional strategies **Conference Title:** ICA 2015: International Conference on Autism

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