

Abstract Title

Nutrition and Autism Spectrum Disorder: A needs assessment and environmental scan to inform nutrition curriculum and training for non-medical diagnostic and therapeutic service providers in Northern Ontario
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Abstract

Objectives: To determine the nutrition-related knowledge, attitudes, and perceptions of non-medical practitioners working with children diagnosed with Autism Spectrum Disorder (ASD); and, to identify relevant parent and professional resources to inform an evidence-based curriculum.

Methods: A comprehensive literature review using MEDLINE and PsychInfo was conducted in spring 2017 to develop and content validate (n=3 registered dietitians (RDs) with topic expertise) a 20-item online survey. The survey was administered (December 2017) to a convenience sample of 149 Northern Ontario staff (e.g., therapists, managers, and psychologists). Results were analyzed using Qualtrics© software and pivot tables. A grey literature search, including PEN® (Practice-Based Evidence in Nutrition) and pediatric hospital websites, was also conducted; inclusion criteria included evidence-based presentations or toolkits with a nutrition component and/or discussed the RD role in ASD.

Results: Sixty-one staff (41% response rate), all female, completed the survey. The majority (78%, 47/60) agreed an RD should be involved in the nutritional assessment of children with ASD, however many respondents were unsure if these children have more gastrointestinal (GI) complaints (51%, 29/57) and whether gluten-free casein-free diets (42%, 25/60), multivitamin supplements (52%, 31/60), or prebiotics and probiotics (80%, 48/60) were recommended nutrition interventions. Respondents did not feel confident in assessing food and nutrient intake (30%, 17/57) or feeding behaviours (26%, 15/57) in children with ASD. Of the nutrition resources screened (n=232), 25 met the inclusion criteria.

Conclusions: There was an overall lack of knowledge related to common GI complaints, feeding behaviours, assessment of food/nutrient intakes and appropriate nutrition therapies for children with ASD. Numerous resources exist that can be adapted to develop nutrition curriculum to support non-medical practitioners.

Significance to the Field of Dietetics: With one in 66 Canadian children diagnosed ASD, non-medical provider training, including nutrition screening and referrals to an RD, can improve the nutritional status of these children.