

## ABSTRACT

Autism is a lifelong developmental disorder for which there is presently no cure. Treatments for autism that are offered by mainstream medicine are scant and unpromising. As a corollary, many families seek complementary and alternative medicines (CAMs) and dietary interventions to treat their child with autism. Parents (n=40) of children with autism enrolled in the Early Intervention Research Program (EIRP) at Flinders University and Autism SA were surveyed using a semi-structured questionnaire to determine the extent such therapies are used as well as identify factors influencing decisions to implement and maintain particular interventions. Specifically, the following interventions were investigated: olive leaf extract, vitamins A, C and E, calcium, iron, essential fatty acids, secretin, probiotics and digestive enzymes as well as the gluten- and casein-free diets. A systematic review to examine the rationale, safety and efficacy regarding the use of these interventions was also conducted. Of the 40 parents surveyed it was reported that current/past usage of the interventions studied was as follows: olive leaf extract (10%), vitamins A (2.5%), C (15%) and E (7.5%), calcium (15%), iron (5%), essential fatty acids (63%), secretin (2.5%), probiotics (53%), digestive enzymes (20%) and the gluten- and/or casein-free diet(s) (70%). Despite high usage of CAMs and dietary interventions in the autistic population, there is a dearth of evidence to support the wide range of interventions used. The systematic review gleaned the investigation of secretin as a potential treatment for autism has been extensive with 17 randomised controlled trials conducted to examine its efficacy. In contrast, other popular but unproven interventions that are used in autism such as the gluten- and casein-free diets, EFAs, probiotics and digestive enzymes are largely unresearched and should be subjected to the same level of scientific scrutiny. The literature search also revealed potential adverse effects associated with most of the CAMs investigated. In many cases these side effects were mild, but indicate the need to highlight to caregivers of children with autism that implementation of CAMs is not risk-free. Information reporting the potential risks and benefits involved in implementing CAMs and dietary interventions in children with autism will be incorporated into guidelines for caregivers and health care professionals to enable informed decisions to be made prior to implementation.