

**Autism Spectrum Disorders (ASD)**



# Evidence Based Intervention

Practitioner Expertise | Best Available Evidence | Lived Experience Expertise

**Fast facts**

- Children and adolescents with an Autism Spectrum Disorder have had a course of development that differs from the majority of individuals, particularly in the areas of social, communication, and cognitive development.
- There is no single intervention that will address all needs of a child or adolescent with an ASD but targeted interventions can improve adaptive behaviour, communication and social abilities.
- Best practice involves early and sustained interventions, using multiple intervention modalities, almost always including behaviourally-based approaches such as Applied Behaviour Analysis.

**Interventions that work – at a glance**

*This table represents a compilation of information from several different sources (Fonagy et al. (2015), Ministries of Health and Education (2016), The Matrix (2015) and Dunnachie (2007)) and is designed to provide an overview only. Directly consulting these sources will provide considerable additional information.*

	Gold	Silver	Bronze	Not recommended
<b>Autism Spectrum Disorder</b>	Early intensive behavioural intervention	Medication to address specific needs  CBT to address specific needs in high functioning individuals	Dietary supplements and exclusion diets  Other therapies	

**The fine print**

1. Early intervention for young children with an ASD based on Applied Behaviour Analysis principles can improve cognitive skills, adaptive behaviour, and receptive and expressive language (Fonagy et al., 2015; Ministries of Health and Education, 2016; The Matrix, 2015). The New Zealand guidelines recommend that interventions based on Applied Behaviour Analysis ought to be considered for all children and adolescents with an ASD (Ministries of Health and Education, 2016).
2. Stimulant medication can reduce hyperactivity, with only a slight risk of serious side effects (Fonagy et al., 2015). Risperidone and other atypical antipsychotics can reduce aggression, self-injurious behaviour and irritability, but ought to be used cautiously due to the risk of adverse side effects and the lack of detailed information about effects of long term use (Ministries of Health and Education, 2016; Fonagy et al., 2015). Other medications may be useful for targeting specific symptoms, and the New Zealand guidelines provide detailed information in this regard (see Ministries of Health and Education, 2016).
3. Unfortunately there are insufficient numbers of robust studies for guidelines to make definitive recommendations about the usefulness of dietary supplements and exclusion diets (Fonagy et al., 2015; Ministries of Health and Education, 2016). The New Zealand guidelines recommend that if parents choose to place their child on a diet that restricts particular food groups (for example, casein or gluten), that care ought to be taken to ensure the child receives necessary vitamins and trace elements, especially if the child already self-restricts a range of foods (Ministries of Health and Education, 2016).
4. There are a number of different interventions that are not able to be endorsed or recommended, often owing to a lack of robust evidence (large, carefully constructed studies) to support them. This does not necessarily mean that the intervention is not effective – it may mean that more research is required to endorse the effectiveness of the intervention. Treatments in this category include Auditory Integration Training, Holding Therapy, Options Therapy, Sensory Integration Therapies, and Irlen

lenses (Ministries of Health and Education, 2016). Fonagy et al. (2015) also place interventions such as sibling training, social skills training, video self-modelling, music therapy and massage therapy in this category – it cannot be conclusively said that these interventions are effective, as there are no high-quality studies to date.

5. CBT has been shown to be a useful intervention for high functioning children and adolescents with ASD who also have anxiety or anger management difficulties (Volkmar et al., 2014).

## Description and demographics

Children and adolescents with an Autism Spectrum Disorder (ASD) have social, communication and cognitive development that differs from typical individuals (Volkmar et al., 2014). While ASD is commonly associated with a degree of intellectual disability, there is wide variability of expression of the syndrome (Volkmar et al., 2014), and children and adolescents with an ASD may be of average or superior intelligence. Conditions known to most commonly co-occur with an ASD include ADHD, anxiety disorders (including Obsessive Compulsive Disorder), depression, Tourette Syndrome, epilepsy, and learning difficulties or intellectual disability (Ministries of Health and Education, 2016).

There were significant changes to ASD diagnostic categories with the publication of the fifth edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-5; American Psychiatric Association, 2013). The global term Autism Spectrum Disorder now represents and replaces several previous categories (Autistic disorder, Asperger's disorder, Childhood Disintegrative Disorder, and Pervasive Developmental Disorder not otherwise specified) (Fonagy et al., 2015). The DSM-5 Autism Spectrum Disorder describes a severity spectrum which is based on the amount of support that an individual needs as a result of difficulties with social communication and social interaction (social-emotional reciprocity; nonverbal communication behaviour used for social interaction; and difficulties in developing, maintaining and understanding relationships) and restrictive interests and repetitive behaviours (American Psychiatric Association, 2013).

Internationally, there has been an increase in the number of recognised and diagnosed cases of autism (Fonagy et al., 2015). It has been suggested that the increase may represent more accurate diagnosis, as opposed to a real increase in ASD itself, and research continues into this possibility (Fonagy et al., 2015). There is no conclusive information available on the prevalence of ASD in New Zealand, but the recent New Zealand guidelines cite data suggesting the prevalence of autism in children as around 39 per 10,000, with boys affected around four times more than girls (Ministries of Health and Education, 2016).

The 2016 New Zealand ASD guidelines contains considerable information and recommendations on interventions with Māori children, adolescents and families, and ought to be consulted in the first instance. The recommendations were composed by Māori professionals and Māori family members of individuals with ASD, and national consultations with Māori confirmed their usefulness. The guideline also contains a chapter on Pacific people's perspectives. It is strongly recommended that clinicians consult this resource.

## References

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