

# The Autism

**GAINES**

**Project**



**Building a strong foundation for every child**

# What is the Autism GAINES Project?

The Autism GAINES Project was conceived out of the need to raise awareness that children with Autism Spectrum Disorder (ASD), ADHD and other neurodevelopmental disorders, need to be given the same level of care as typically developing children.

## Gut health

Gastrointestinal (GI) disorders are among the most common medical conditions associated with autism. Compared with typically developing children, those with autism are **six to eight times** more likely to report GI symptoms.

- \* Constipation
- \* Loose stools
- \* Abdominal discomfort or pain
- \* Reflux
- \* Bloating
- \* Foul smelling stools
- \* Failure to thrive
- \* Refusal to eat or restricted eating
- \* Self-injurious behaviour
- \* Difficulty chewing or swallowing
- \* Teeth grinding

It is not surprising that the pain and discomfort caused by GI symptoms can be a trigger for worsening behaviour. This is particularly true in nonverbal children, who have difficulty in expressing their distress.

In a recent study of ASD children with chronic GI disorders (including constipation and loose stools) that were treated with Microbiota Transfer Therapy (faecal transplants), 83% of the children's GI conditions improved. Of these children in the study, 83% were severely autistic at the beginning of the study. **At two years follow up only 17% of children were severely autistic! 43% originally diagnosed with ASD were now below the cut-off for a diagnosis of autism.**

The link between autism symptoms and gastrointestinal health now can no longer be ignored.

## Anxiety and mental health

Mental illness is more common in ASD individuals. Mental health is often overlooked in ASD children. By the time these children enter adolescence, 70% will have been diagnosed with another mental disorder. While 40% will be diagnosed with two or more additional disorders!

- \* Anxiety
- \* Depression
- \* Obsessive Compulsive Disorder (OCD)
- \* Attention Deficit Hyperactivity Disorder (ADHD)
- \* Fight or Flight (Stress)
- \* Seizures (many different types)
- \* Schizophrenia
- \* Sensory processing issues
- \* Adequate brain nutrients
- \* Altered excitatory/inhibitory neurotransmitters

Although **anxiety** is not considered a core symptom of autism, a high proportion of ASD individuals have elevated levels of anxiety, including obsessive compulsive tendencies. Anxiety is under recognised in autism, yet has a huge impact on the ability of the individual to learn and cope with daily life.

ASD children are often stressed and in constant "fight or flight" mode. Just waiting for the next stressor to jump out from around the corner (new situations, strangers, foods, approaching other children, etc). It is extremely difficult for them to be able to concentrate and deal with daily life in this state.

The brain is a "biochemical factory", and it needs to have ready access to the nutrients it needs to grow and repair itself. Hence, the role of a nutritious diet for children.

# Immune regulation

There is a significant amount of research linking autism and a dysfunctional immune system.

- |                                                         |                                                                   |
|---------------------------------------------------------|-------------------------------------------------------------------|
| * Allergies                                             | * Anti-folate receptor antibodies                                 |
| * Immune - nervous system interaction                   | * Increased inflammation results in more severe autistic symptoms |
| * Immune deregulation is a recognised feature of autism | * Antibodies to brain tissue                                      |

There is a strong correlation between allergies and autoimmune disease in the mother (or a family history) and autism. Many studies have shown that ASD children have more immune related illnesses. This is particularly evident in adulthood as the prevalence of autoimmune conditions is much higher than in the general population as well as cancer.

Recent research has found evidence that active inflammation in the brain is a significant component of autism. There are increased inflammatory cells and inflammatory markers in the brain as well as a defective blood brain barrier.

Decreasing inflammation in the brain and balancing the immune system has been shown to significantly improve some of the core symptoms of ASD.

## Nutrition and optimal diet

Such a simple concept - we are what we eat (or don't eat). Especially true for children that are rapidly growing and developing. So at such an important time in children's lives, when they are laying down the foundation for their future health and wellbeing, it is important **NOT** to feed our children with highly processed foods filled with artificial chemicals, that are highly addictive and devoid of essential nutrients.

- |                                         |                                                |
|-----------------------------------------|------------------------------------------------|
| * Restricted or "picky eating"          | * Diet high in chemicals / additives           |
| * Nutrient depleted diet                | * Minimal animal protein                       |
| * Lack of essential nutrients and fats  | * Minimal vegetables or fruit                  |
| * Food allergies or intolerances        | * Problems with food textures                  |
| * Preference for highly processed foods | * Physical problems with chewing or swallowing |
| * Crave sugar, gluten or dairy          |                                                |

Let's start with "picky eating". If a child started on solid foods and there was a problem from day one with feeding, then you have a medical or other issue. Problems swallowing, reflux, tongue tie, gut inflammation, or other medical conditions, that require a comprehensive medical evaluation. If your child was started on solids and ate everything, then began restricting or refusing foods, this a different matter. It may be due to constipation, discomfort, allergy, behavioural or other issues that may have become a problem over time. Both need different strategies to get your child to eat.

No one will argue that a child that is eating minimal protein, vegetables and fruit is missing out on the vital nutrients that they need for their growth, health and their future wellbeing. Yet I am surprised how many parents (and practitioners), are reluctant to test their child for underlying nutritional deficiencies. It's like driving a car with red warning light that is flashing on the dashboard - yet refusing to do anything about it!

There is no reset button on your child - you only have one chance to ensure they lay down an optimal foundation for their future health. Those practitioners that say your child "looks healthy, and they will be fine" - don't fool yourself, no they will not be fine!

# Exercise

There are wide ranging benefits of exercise for children with autism. Vigorous activity for more than 20 minutes a day has been shown to decrease “stimming”, hyperactivity and aggression. Full-body exercises are best to increase coordination, strength, endurance, and body awareness.

- |                                           |                                            |
|-------------------------------------------|--------------------------------------------|
| * Relieves stress                         | * Helps with their body awareness in space |
| * Decreases stereotypical behaviours      | * Sunshine & fresh air                     |
| * Increase in social communication skills | * Improves sleep                           |
| * Build motor skills and co-ordination    | * Promotes weight loss                     |
| * Builds core strength                    | * Decreases screen time                    |

Physical activity programs also offer children the opportunities for practicing social and communication skills. Activities involving animals can be particularly beneficial, like horse riding.

As a parent you are the most important role model for your child. Show them the value and enjoyment you get from being physically active. Exercise is a physical therapy, so consider incorporating it into your National Disability Insurance Scheme (NDIS) plan.

Screen time interferes with a child’s ability to learn new skills and acquire the social skills necessary to play with others. There are recommendations to limit screen time in children, as it is addictive and causes aggressive and violent behaviour. Replacing screen time with physical activity is a practical alternative.

## Sound sleep

Sleep issues are particularly common in children with autism. Studies have shown that up to 80% of children may have problems with falling asleep or staying asleep.

- |                                            |                             |
|--------------------------------------------|-----------------------------|
| * Irregular sleep and waking patterns      | * Restorative to the body   |
| * Insufficient sleep                       | * Detoxifies the brain      |
| * Poor quality sleep                       | * Improves behaviour        |
| * Medications interfering with sleep       | * Improves fatigue          |
| * Anxiety or stress interfering with sleep | * Helps memory and learning |
| * Snoring or sleep apnoea                  |                             |

Lack of sleep can exacerbate behavioural problems in children, such as hyperactivity, aggression, and lack of concentration. Other sleep issues to consider:

- Night waking and wanting to play - may be a low blood sugar level issue
- Waking screaming or crying - may be a night terror or medical issue like reflux
- Snoring - may be a sign of sleep apnoea, enlarged tonsils or adenoids
- Restless sleeper - may be a nutritional deficiency, specifically iron or magnesium
- Medications - some medications like antipsychotic or stimulant drugs can cause sleep issues for some children
- Stress - may cause an imbalance of hormones like cortisol and serotonin

Parents may be advised to use melatonin for their children’s sleep issues. However, although melatonin can initiate sleep, it will not keep your child asleep through the night, unless it is a slow release formulation. The safety profile of melatonin has shown that it is safe to use long-term.

The United Nations General Assembly adopted the Convention on the Rights of the Child in November 1989. The Convention came into force on 2 September 1990. Australia is a signatory to this convention.

#### Article 23

“Children who have any kind of disability should receive special care and support so that they can live a full and independent life.”

#### Article 24

“Children have the right to good quality health care, ... nutritious food ..... so that they will stay healthy.”

**I would argue that in Australia we fail to meet the expected standard of medical care for autistic children.**

#### Latest research - Confirming very poor health in ASD children

“Our findings show that children and young people with autism of all ages are more likely to experience poorer general health compared with the rest of the population. **We report that children/young people with autism were more than 11 times more likely to have poor health than the rest of the population. This inequality was greater for females than males.** We ... note that it may be related to, their increase in co-morbidities compared with other children and young people.”

Source: Age at identification, prevalence and general health of children with autism: observational study of a whole country population. [BMJ Open](#). 2019 Jul 9;9(7)

#### We are failing our ASD children on

- moral grounds
- meeting their basic nutritional and health needs
- treating their underlying medical conditions, and
- providing them with an acceptable standard of care

Before those that should be looking after the welfare of our children bring out the “evidence based medicine” argument - i.e. there is no evidence that diet, gut issues, supplements, etc are beneficial for children on the autism spectrum. Let me make it clear that we are **NOT** talking here of “cure” or “recovery” of ASD children. We are talking of providing these vulnerable ASD children the best basic medical care that they deserve. By the way, there is plenty of “evidence based research” that diet, gut health, etc are beneficial.

### So where do we start?

-  **Raise awareness that autism is treatable, not only behaviourally but medically as well**
-  **It is NOT just a neurological condition**
-  **It is a complex disorder, requiring a comprehensive individualised treatment plan**
-  **START by meeting the child’s basic needs**

### Start with your own child!

Use my **Autism GAINES Children’s Health Checklist** to identify and prioritise where your child needs help. You only get one “window of opportunity” to prepare your child for the future. Therefore, you need to be **committed** and **persistent**, and if one approach does not work, try a different approach. Be guided by an experienced practitioner. It is easy to give up at the first hurdle, but remember you are the only one that can give your child the best start in life.