INTELLECTUAL AND DEVELOPMENTAL DISABILITIES

Intellectual disabilities (ID) and developmental disabilities (DD) are characterised by limitations in both intellectual functioning and adaptive behaviours. They include Autism Spectrum Disorder (ASD), Attention Deficit Hyperactivity Disorder (ADHD), specific learning disorders and genetic disorders (including Down Syndrome and Fragile X). ASD is the most commonly reported behavioural disorder among children with disability, with 13% of Australians diagnosed with an ID or DD. Children with ASD often find it difficult to interact and/or communicate in social contexts, and often experience repetitive patterns of behaviours and interests, sometimes making it difficult to engage in healthy lifestyle interventions.

Children (and particularly adolescents) with ID/DD have increased risk for the development of secondary health conditions which are directly related to sedentary lifestyles, including; cardiovascular disease, insulin resistance and obesity. There are a number of ID specific mechanisms associated with these risk factors, including:

- Reduced physical activity due to reduced inclusion in team sports, poor motor coordination (and fundamental movement skill development) and/or social isolation.
- Increased sedentary behaviours (particularly screen-time) due to behaviour management and restrictive patterns of behaviour.
- Energy imbalance through food selectivity and aversion, the use of food as a behavioural reinforcer, and the increased support required to manage mealtime behaviours.
- Negative side effects of commonly prescribed psychotropic medications to manage behaviours and underlying mental illnesses.
- If you have any concerns about your child and exercise please get in touch with an Accredited Exercise Physiologist who can develop a suitable exercise program.

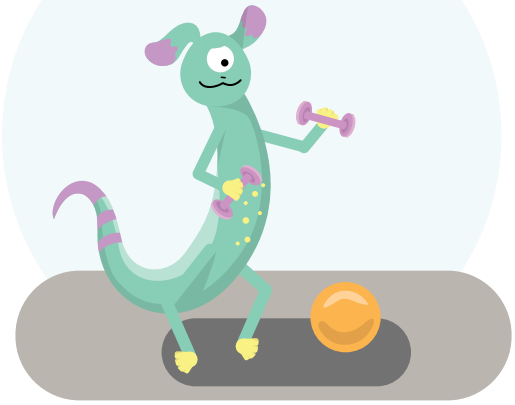
Before exercising always check with an accredited exercise physiologist.

Why it's important to exercise

Improved physical health, intellectual functioning, behaviour, affect and personality of children and adolescents with ID have all been associated with physical activity participation. Currently very few (36%) children with ID meet the physical activity recommendations of 60 minutes of vigorous physical activity per day or organised sport. The American Association on Intellectual and Developmental Disabilities (AAIDD) supports the need for increased engagement in physical activity by children and adolescents with ID to not only reduced obesity, but to increase muscle mass and endurance in order to reduce their risk of secondary health outcomes.
For children with ADHD, staying active allows them to burn off steam and helps with issues such as lack of focus, impulsivity, and poor social skills. The type of exercise doesn't always matter, as long as the child is getting regular exercise. When children exercise, movement stimulates the brain and improves what is called the neurotransmitters that work on brain activity. Neurotransmitters include a hormone called dopamine, which is involved with attention. It is important that children with ADHD get constant movement and exercise throughout the day to help them improve their focus and ability to concentrate.

For example, exercise can:

- Reduce the risk of developing conditions such as heart disease, type 2 diabetes, osteoporosis, depression, and obesity.
- Help them gain self-confidence and improve mental health.
- Support the development of bones, improves movement, and encourages balance and coordination skills.
- Promote the development of social skills, encourage independence, and help maintain a healthy body weight.
- Increase bone mineral density.
- Improve sleep, concentration, academic performance, and self-esteem.



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Things to remember:

- It is important to be aware of the physical characteristics related with some disabilities (particularly Down Syndrome). These could include muscle limitations, joint issues, breathing difficulties and poor balance hence the importance of seeking professional advice.
- Children with ID often respond well to routine and structure. Try to follow a consistent routine of engaging in exercise (E.g. swimming every Tuesday after school).
- Utilise communication methods that work best with your child (E.g. routine boards, visuals, verbal encouragement). School teachers can also provide insightful communication strategies to engage 'unwilling' participants.
- Give your child plenty of time to adapt and accept the new changes asked.
- Provide a 'non-food' reward for positive engage-ment.
- Many children with ID (particularly ASD) experience hypersensitivities. Ensure these needs are met as best as possible. E.g. Try to use equipment with different textures (spikey balls, soft mats etc.)

Types of exercise recommended:

- Cardiovascular exercise and strength/resistance training (under supervision) every day for a total of 60 minutes (remember this can be broken up across the day).
- Start at 5-10 minutes of continuous activity 1-2 days a week. Slowly increase the duration of activity to 10-30 minutes 3-4 days a week. You can later increase it to 15-60 minutes for 5-7 days a week.
- Swimming and water play work well for children with large sensory needs.
- Focus on encouraging fundamental movement skills – running, catching, kicking, leaping, throwing, kicking, jumping. Whilst this may seem like big steps for some, break each skill into little parts and focus on exaggerating movements.

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