Exercise Benefits for Children with Autism Spectrum Disorder

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Key Points:

- Children with Autism Spectrum Disorder can have a difficult time exercising the way a typically developing child would.
- Exercise can help to decrease stereotyped behaviors and reduce the risk for obesity in children with ASD.
- An exercise program designed specifically for children with ASD will have the most benefits for those children and their families.

Autism Spectrum Disorder (ASD) is a neurodevelopmental disorder that is characterized by social communication problems and restrictive, repetitive behaviors¹. Along with poor social and communications skills, it is common for children with ASD to have poor motor skills when compared to their typically developing peers². These deficits, along with certain medications often used to help treat ASD, can put a child with ASD at a higher risk of becoming overweight or obese than other children their age³. Fortunately, exercise can increase overall health and fight obesity in most populations. Along with the improved fitness, exercise has even more benefits for children with ASD⁴. Exercise has been shown to reduce stereotypical behaviors in ASD, such as rocking or repetitive finger movements the person may use to self-regulate⁵.

Medications and behavioral therapy are often used to help combat specific symptoms common in ASD; unfortunately, most treatment plans do not incorporate physical activity⁶. This may be due to the need to adapt programs to the needs of children with ASD⁴. For example, typical physical education curriculums in school are taught in a gymnasium, which may be a difficult setting for children with ASD that have sensory issues^{\mathbb{Z}}. Physical education class is also normally one teacher instructing students to play a team sport, which does not account for the varying ability levels of all children, with or without ASD^{\mathbb{Z}}.

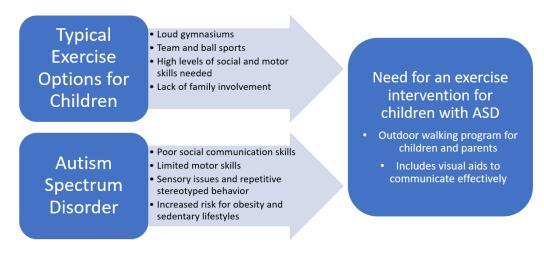


Figure 1: Typical exercise barriers and the characteristics of ASD that lead to the need for intervention.

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To give children with ASD an exercise program that will be most beneficial, it must be planned for their specific needs. Interventions should be prepared and executed by a collaborative team working in the best interest of the child; parents, educators, nurses, psychologists, and exercise professionals can all work together to plan a specific program^{2;4}. An individualized exercise has been shown to best improve behavior and fitness in children with ASD⁴. In order to best communicate what the professional is asking of the child and to help them feel comfortable, visual aids and social stories should be used within the intervention^{2;7}. Parental involvement and enthusiasm has been shown to encourage the child to participate in exercise and improve treatment⁴.

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