



AUTISM SWIM

DYSPRAXIA

What is it?

Dyspraxia is a developmental disorder, which can cause a swimmer to have difficulty organising and directing their body to perform movement (motor skills).

There is a four-step process our swimmers undergo in order to perform motor tasks:

1. Their brain needs to receive and register sensory information from their body and the environment. This includes: vestibular (balance), visual, tactile (touch), proprioceptive (body positioning) and audio information.
2. Their brain needs to process and interpret the sensory information to produce a response that correctly interacts with the environment (planning the movement).
3. The swimmer then needs to execute the movement.
4. Finally, the swimmer needs to evaluate the success of their movement for possible refinement for future use.



Dyspraxia can lead to difficulties in a number of areas for our swimmers:

- Gross motor difficulties – taking longer to initiate movement or seeming accident prone around the pool area.
- Fine motor difficulties – difficulty holding their swimming cap or putting on goggles.
- Language difficulties – slow or laboured speech or poor expressive language.
- Emotional/social difficulties – becoming overwhelmed in group settings due to frustration or anxiety.
- Perceptual difficulties – difficulty climbing the ladder or difficulty following multi step verbal instructions.
- Organisational difficulties – difficulty learning routines or forgetting things.

How common is the condition?

Dyspraxia affects around 6-10% of children; however, it often goes undiagnosed.

Why are some children affected?

The cause of Dyspraxia is unknown. Some scientists believe it could be tied to genetics and others think it's caused by nerve cells in the brain being damaged at some point in life, however neither theory has a definitive explanation.



How to tell if your children have dyspraxia?

Dyspraxia is diagnosed by specific health professionals: clinical psychologist, educational psychologist, paediatrician, or occupational therapist.

As an instructor, it is important to speak to the carers of our swimmers for details about their condition before beginning sessions, in order to modify activities accordingly.

Some common signs of dyspraxia

- Trouble playing with toys
- Has trouble with zippers, buttons or moving small items
- Heavily favours using either left or right side for activities
- Struggles to interact with other children
- Has trouble learning to jump, skip or run
- Often drops items

How it can affect swimmers in the water?

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Strategies to support swimmers with dyspraxia

- Incorporate more encouragement and positive reinforcement for swimmers in your sessions.
- Set realistic and achievable goals for each session. The swimmer needs to have a mix of doable and challenging activities in each session however, the challenging activities need to be attainable for the swimmer.
- Shape tasks into smaller achievable steps.
- Use a mixture of both visual and simple language instructions for your swimmer to understand and attend to the tasks.
- Additional practice and time. Recognise that additional practice will often be required to recall movements and activities for these swimmers.

Activities that can be done in the water for overall improvement

Any activity that encourages the four steps of movement is fantastic! This can include, but isn't limited to:

- Blowing bubbles (note some swimmers with oral dyspraxia have trouble controlling muscles in the mouth and therefore may accidentally swallow water. Watch out for this!).
- Throwing and retrieving floating balls.
- Holding a kickboard.
- Retrieving an item from the bottom of the pool.
- Holding and moving along the wall.
- Counting down the tasks with instructor (encouraging speech wherever possible in the session).
- Walking through the water.
- Making waves/splashing.
- Controlling items and equipment. If a swimmer repeatedly drops items, encourage them to control it and practice the releasing process! This will improve the swimmer's confidence in their own ability. An activity could include dropping items into the water and compare splash sizes.

What can be done at home to improve motor skills?

Encouragement of movement and success! Ball throwing, drawing, puzzles, skipping, spinning, bouncing, craft, and any other activity that gets the swimmer repeatedly moving their muscles. Increasing the use of muscles increases the ability to complete tasks and develop more skills in the future.



