Table Tennis Experience for Adults with Down Syndrome

Movement and learning through shared play

At NeuroRally Spin, our Rally Together program offers adults with Down syndrome a table tennis experience built around their interests, choices and ways of learning. Through enjoyable rallies and purposeful practice, participants develop sporting skills while practising coordination, attention, memory and decision-making.

We adapt the pace, instructions and activities to the individual. A session may begin with rolling a ball or making a controlled racket contact and develop toward rallies, serving, placement and shared games. Our aim is to make learning meaningful, encourage confidence and create opportunities to connect through sport.

Experience supports learning and change

Experience is a powerful driver of change in the brain. What we do, practise and learn helps shape how our brains adapt. Meaningful experiences create opportunities for continued learning throughout adulthood.

This capacity to adapt through learning is called neuroplasticity. A table tennis activity gives each attempt a clear purpose: notice the ball, prepare the racket, make contact and see the result. Repetition and feedback give the participant opportunities to refine the movement and remember what works.

How we support adults with Down syndrome

Adults with Down syndrome continue to learn and develop skills. Some benefit from visual demonstrations, shorter instructions and extra time to process a cue. We combine these supports with active participation and opportunities to make choices, adapting to each person's strengths and preferences.

Table tennis gives movement and thinking a shared purpose. Following the ball involves visual attention; controlling the racket involves timing and hand–eye coordination. Preparing a stroke, shifting position and recovering for the next ball practise movement planning and body awareness. Remembering a target or waiting for a cue adds a manageable thinking challenge.

Participants can express a choice through speech, pointing, gestures or their communication device. We address the adult directly, ask what they want to work on and choose activities that reflect their interests. Their preferred communication remains part of the experience throughout the session.

What we practice through Table Tennis

These examples connect a sporting activity with a movement or thinking skill. We choose a few meaningful activities and develop them at a pace that suits the participant.

Training focus	General exercise example	What the activity practises
Visual tracking	Follow a rolling or gently fed ball and prepare for contact.	Directing attention to a moving object and following its path.
Hand and eye coordination	Meet the ball with the racket and return it toward the table.	Using visual information to guide the hand, racket and timing.
Movement planning and rhythm	Repeat a forehand or backhand, then return to a ready position.	Organising a movement sequence and developing consistent timing.
Body awareness and balance	Reach, shift weight or take a controlled step and return.	Awareness of body position and coordination of the trunk and limbs.
Reaction and anticipation	Notice which side the ball approaches and prepare a return.	Recognising direction and choosing when and how to respond.
Target practice	Aim toward a chosen area and notice where the ball lands.	Accuracy, force control and adjusting the next attempt.
Attention and focus	Work toward a short rally goal and refocus on the next ball.	Staying with a task and returning attention after a distraction.
Memory and sequencing	Remember a short order of targets, using a picture cue if helpful.	Holding steps in mind, recalling a pattern and following an order.
Colour choice and flexible thinking	Match a colour cue to a target, then try a different rule.	Recognising a cue, making a choice and adapting to a change.
Inhibition	Return for one cue and wait without swinging for another.	Pausing an automatic response and acting on the relevant cue.
Movement and cognition	Return the ball while counting or remembering a simple pattern.	Dual tasking by combining movement with a manageable thinking task.
Shared play and communication	Build a rally with a partner and communicate a preferred challenge.	Taking turns, expressing choices and working toward a shared goal.

Show the action. We demonstrate a stroke or target choice, then invite the participant to try. A short cue keeps the explanation clear.

Make the sequence visible. We use pictures, written words or a simple activity order when helpful. A visible reminder can reduce the need to remember a long spoken instruction.

Allow time to respond. We pause after a cue and allow the person to prepare. We adjust ball speed, target size, racket grip and seated or standing position to support controlled practice.

Build familiarity and introduce change. We repeat a useful pattern, then change one feature. Clear contrast and fewer competing sounds or visual distractions can make the next step easier to follow.

Connecting practice with everyday activities

Remembering a target sequence uses the ability to hold steps in mind, which is also involved in following a routine at home or work. Guiding the racket toward a ball uses vision and hand control, also involved in handling everyday objects. Choosing an activity and communicating with a partner create opportunities to practise expressing preferences and participating with others.

We ask the participant what matters in daily life and explore where a familiar strategy might help. With their agreement, a chosen supporter can use the same cue in another setting. Changes in table tennis skills and changes in everyday activities are considered separately.

Recognising progress and enjoying participation

Progress may be a more controlled contact, remembering a pattern with fewer reminders, choosing a new challenge or enjoying a longer rally with someone else. We recognise specific achievements and give the participant time to notice what they have learned.

Some adults want rallies, others want to develop technique or play matches. We can introduce serving, scoring and tactics as interest and skills grow. Rally Together makes room for recreation, continued learning and optional competition, with the participant's goals guiding the experience.

NeuroRally Spin Team | info@neurorallyspin.com