

FEATURE FOCUS: Vestibular Training



At Balanceability, we see many children who are naturally good at balancing; some find it so easy that they are gliding on a balance bike within a couple of hours, even if they've never sat on a bike before. Other children, however, struggle with their balance, sometimes to the extent that they even find standing on one leg challenging.

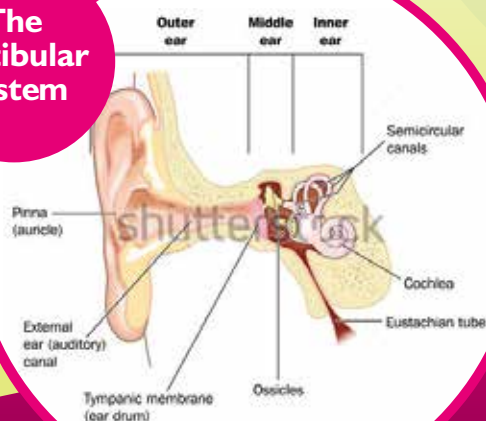
We notice that these children may be particularly cautious about how they move their bodies. They prefer sedentary games, small groups and more manageable spaces. This may have nothing to do with not wanting to get involved or being shy, however, but may be due to a relatively common phenomenon: a hypersensitive vestibular system.

The vestibular system coordinates movement with balance (see box). A child with hypersensitive vestibular systems finds it difficult to separate incoming sensory impressions. The messages to their brain tell them that they're at risk of losing their balance, even when there is only a very small risk of doing so. The child reacts accordingly, making exaggerated movements in response to what they experience as a risk of falling. This can have a huge impact on a child's willingness to take part in physical activities that challenge the vestibular system – somersaults, hopping, spinning, twisting, jumping and so on. They may avoid climbing frames, swings and roundabouts. No wonder these children are hesitant about riding a bike!

The problem is that if the child avoids such activities, the development of their motor skills can be impeded, which can affect many other parts of their learning and progress.

At Balanceability, we know that there is a lot that can be done to help, long before introducing the child to the bike. The idea is to get the child's body to react appropriately to a movement, acceleration or change of direction in order to maintain balance and stop the it from over-reacting. We use activities that stimulate the vestibular system in a way that is controlled, safe and at the child's own pace.

The Vestibular System



Try this exercise!

Set up a short line of Balanceability Footprint shapes close together, to make a continuous line. (You can make the shapes overlap if the child has very small feet.) Ask the child to step along these, squeezing in as many short steps as they can before they reach the end. This makes the child focus on their feet, rather than on the end of the trail. Their sense of sight helps them to keep their balance. Focusing on feet like this also minimises the tendency to flail about with their arms if they do feel unsteady.

You can extend the exercise by getting the child to do the same thing, but walking along the Balanceability equipment called the 'River', a series of colourful pieces that join together to create a slightly raised walkway. A child will also often come up with their own idea about how to make the exercise more challenging (a plank set at a shallow angle, for example) so ask them for their ideas too. This means that they feel they have control over the activity and the level of difficulty.

The child's brain needs to recognise and learn to automate a movement so that it becomes more efficient and fluid, and so they need to perform the movement repeatedly. Over time, the child will realise that practice and repetition helps them become more proficient.

Vestibular stimulation training also increases self-confidence. Children who can rely on their vestibular system to give them accurate feedback about what their bodies are doing are more likely to take part in all kinds of physical activities, including cycling.



The sensory system that controls our sense of balance and spatial coordination is called the vestibular system, located in the inner ear. The vestibular system has two parts: one part looks after linear accelerations, and the other responds to rotational movements. From moment to moment, the vestibular system sends signals to the eyes and to the muscles that keep us upright, coordinating movement with balance. A good working vestibular system is critical to being able to cycle: basically, it helps you move forward without wobbling.



For more information visit our website or email:
info@balanceability.com

www.balanceability.com