

## **Mendi – Information Sheet**

### **Supporting Attention, Emotional Regulation & Executive Function**

At Children's Therapy Services, we use a range of evidence-informed, functional neurology approaches to support children's brain development, emotional regulation, attention, and self-control. Mendi® is one of these tools, providing a safe, non-invasive way to strengthen the brain networks responsible for focus, regulation, and cognitive control.

#### **What Is Mendi®?**

Mendi® is a wearable neurofeedback device that uses functional Near-Infrared Spectroscopy (fNIRS) to measure activity in the prefrontal cortex (PFC). The PFC is responsible for attention, emotional regulation, executive functioning, impulse control, planning, and working memory.

During sessions, children engage in simple visual tasks or games while wearing the headset. The device provides real-time feedback on brain activity, helping strengthen neural pathways linked to calm focus and self-regulation over time.

It supports:

- Attention and sustained focus
- Emotional regulation and self-control
- Executive functioning and planning
- Impulse control and decision-making
- Working memory and cognitive flexibility

#### **Why We Use Mendi® in Our Clinic**

Children with developmental, behavioural, or sensory differences may show reduced activation in the prefrontal cortex or difficulty with hemispheric communication. This can impact focus, behaviour, and emotional regulation.

Mendi® may be used to support:

- Improved focus and attention
- Reduced impulsivity and emotional outbursts
- Better organisation and planning
- Increased frustration tolerance
- Improved ability to regulate after stress

## **Understanding How Mendi® Supports Therapy**

### **Prefrontal Cortex Activation**

- Strengthens brain networks responsible for attention and regulation
- Supports top-down control of behaviour and emotions
- Enhances cognitive control and mental flexibility

### **Hemispheric Integration**

- Supports communication between left and right hemispheres
- Improves whole-brain balance and coordination
- Enhances both logical processing and emotional awareness

### **Neurofeedback & Neuroplasticity**

- Provides real-time feedback to train brain activity
- Supports long-term neural pathway strengthening
- Encourages development of calm, focused brain states

### **How Mendi® Is Used**

Mendi® is typically used in short, structured sessions, either in clinic or at home under guidance. Sessions may include brief neurofeedback training combined with regulation strategies such as breathwork.

A typical session may include:

- Initial assessment and baseline measurement
- Short neurofeedback training (5–15 minutes)
- Visual feedback through interactive tasks
- Monitoring progress over time
- Integration with other therapy approaches

### **What Are the Benefits?**

- ✓ Improved attention and sustained focus
- ✓ Better emotional and behavioural regulation
- ✓ Stronger impulse control
- ✓ Enhanced executive functioning skills
- ✓ Greater readiness for learning and participation
- ✓ Improved self-awareness and cognitive control

### **Who May Benefit?**

Mendi® may support children who experience:

- Attention difficulties or ADHD
- Emotional regulation challenges
- Sensory processing differences
- Learning or developmental delays
- Difficulties with focus, organisation, or behaviour

### **Is Mendi® Safe?**

Mendi® uses non-invasive light-based technology (fNIRS) to measure brain activity without delivering any electrical input. It is safe, gentle, and suitable for use within a supervised therapeutic program.

### **Our Approach at Children's Therapy Services**

Mendi® is integrated into a whole-child, individualised therapy plan that may include functional neurology, occupational therapy, sensory integration, and emotional regulation support. All interventions are aligned with meaningful, functional outcomes for each child.