Eyelights – Information Sheet

At Children's Therapy Services, we use a range of evidence-informed functional neurology tools to support children's neurological development, sensory processing, and self-regulation. One of these tools is Eyelights, a targeted form of light stimulation designed to activate specific neural pathways and help balance the brain's hemispheres.

What Are Eyelights?

Eyelights are specialised therapeutic glasses containing small LED lights that gently stimulate the brain through the visual pathway. The lights can be set to specific colours, most commonly blue or red depending on the child's neurological needs.

Each colour stimulates different neural networks and can activate either the left or right hemisphere to promote improved balance, attention, and regulation. Eyelights are widely used in functional neurology and developmental therapy to support whole-brain integration.

Why Do We Use Eyelights in Our Clinic?

Many children experiencing developmental, behavioural, motor, or sensory challenges show indicators of hemispheric imbalance. This means one hemisphere may be underactive or processing information less efficiently than the other.

Functional neurology uses targeted sensory input such as light stimulation to strengthen the weaker hemisphere and help the brain communicate more effectively.

Eyelights allow therapists to:

- Activate the under-functioning hemisphere
- Improve brain communication
- Support emotional regulation and arousal control
- Prepare the nervous system for learning and therapeutic activities

By choosing the appropriate colour (blue or red), we can guide the brain toward greater balance and stability.

Understanding Hemisphere Activation with Eyelights

BLUE Eyelights

Blue light is typically used to stimulate and activate the RIGHT hemisphere.

The right hemisphere supports:

- Emotional regulation
- Sensory integration
- Social understanding
- Body awareness
- Big-picture thinking
- Nonverbal communication

Blue Eyelights may be used when children show signs of underactive right hemisphere function, such as:

- Emotional dysregulation
- Sensory overwhelm or shutdown
- Social communication challenges
- Poor body awareness or balance
- Difficulty interpreting nonverbal cues
- Overly analytical or rigid thinking

Blue is commonly supportive for children with:
✅ Autism
✅ Sensory processing difficulties
✅ Emotional regulation challenges
✅ Motor coordination issues

RED Eyelights

Red light is typically used to activate the LEFT hemisphere.

The left hemisphere supports:

- Focused attention
- Sequencing and organisation
- Language
- Logic and step-by-step processing
- Reading and writing skills
- Task initiation

Red Eyelights may be used when children show signs of underactive left hemisphere function, such as:

- Distractibility
- Difficulty following instructions
- Poor planning and organisation
- Struggles with reading, writing, or sequencing
- Reduced processing speed

Red is commonly supportive for children with:
✅ ADHD / attention difficulties
✅ Learning challenges

✅ Executive functioning difficulties
✅ Low motivation or under-arousal for tasks

How Eyelights Help Children

For Children with ADHD

Eyelights can support attention networks by:

- Increasing activation of the left hemisphere (red)
- Strengthening pathways responsible for focus and impulse control
- Improving sustained attention
- Supporting regulation of hyperactivity or under-arousal

For Children with Autism

Eyelights help regulate whole brain functioning by:

- Activating the right hemisphere (blue) for emotional and social processing
- Supporting sensory modulation
- Improving body/spatial awareness
- Supporting emotional control and self-regulation

For Sensory Processing Differences

Eyelights can:

- Calm sensory over-responsivity
- Improve brain-body communication
- Reduce sensory overwhelm
- Support postural control and vestibular integration

For Developmental Delays or Learning Difficulties

Eyelights help:

- Strengthen neural pathways
- Improve left/right hemisphere communication
- Support reading, writing, sequencing, and motor planning
- Enhance readiness for learning and therapy tasks

How can Eyelights be used during a session?

Your therapist will:

1. Assess your child's neurological profile, including reflexes, balance, sensory processing, eye movements, and signs of hemispheric imbalance.
2. Select the appropriate Eyelight colour (blue or red) based on the child's functional neurology assessment.
3. Incorporate Eyelights into activities such as:

    - Balance and vestibular exercises
    - Primitive reflex integration
    - Cognitive tasks (reading, sequencing, tracking)
    - Visual-motor activities
    - Emotional regulation strategies
4. Monitor changes in attention, movement, behaviour, and arousal throughout the session.

The duration varies depending on goals some children use them for short bursts, others for longer periods as part of integrated therapy.

What Are the Benefits?

Eyelights may support:

✅ Improved focus and attention
✅ Better emotional regulation
✅ Reduced sensory overwhelm
✅ Enhanced left/right brain communication
✅ Increased activation of under-functioning brain areas
✅ Better balance, posture, and motor planning
✅ More effective engagement in therapy
✅ Reduced visual stress

Are Eyelights Safe?

Yes. Eyelights use soft LED lights that provide gentle neurological stimulation and are safe when used under professional guidance. They do not replace optometry or medical advice and are used as part of a holistic therapeutic plan.

Our Approach at Children's Therapy Services

We use Eyelights as part of an integrated model that may also include:

- Functional neurology assessments
- Occupational Therapy
- Primitive reflex integration
- Sensory modulation programs
- Behavioural and emotional regulation support
- Visual-motor and vestibular development programs

Every child's therapeutic plan is completely tailored to their neurological profile and developmental goals.