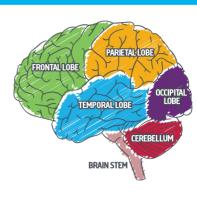




HOW YOUR BRAIN WORKS

Each part of your brain is responsible for a different function. Your brain is divided into four lobes, the cerebellum and the brain stem.



FRONTAL LOBE CONTROLS:

- Attention
- Decision making
- Emotional, social, sexual
- Expressive language
- Verbal expression
- Judgement
- Spontaneity
- Problem solving
- Motivation
- Motor integration
- Voluntary movement
- Sequencing

OCCIPITAL LOBE CONTROLS:

- Reading (the perception and recognition of printed words)
- Visual perception
- Visual processing

CEREBELLUM CONTROLS:

- Balance and equilibrium
- Eye movement
- Coordination of voluntary movement
- Gross and fine motor coordination
- Postural control

TEMPORAL LOBE CONTROLS:

- Behaviour (aggressive)
- Face recognition
- Short- term memory
- Receptive language
- Language comprehension
- Musical awareness
- Selective attention
- Object categorisation
- · Locating objects

PARIETAL LOBE CONTROLS:

- Academic skills
 - Awareness of body parts Eye-hand coordination
 - Tactile perception
- Spatial orientation
- Object naming
- Right/left organisation
- Visual attention

BRAIN STEM CONTROLS:

- Arousal and sleep regulationBalance and movement
- Autonomic nervous system (heart rate, breathing, temperature etc)
 - Level of alertness
- Swallowing food and fluid





CHANGES AFTER BRAIN INJURY

Every brain injury is unique because no two people with the same injury will react and respond exactly the same. Changes in brain function depend on which part of the brain is affected.

AFTER FRONTAL LOBE DAMAGE **CHANGES OR DIFFICULTIES** WITH:

- Spontaneity
- Verbal expression
- Sequencing Voluntary movements
- Perseveration Attention
- Inflexible thinking Personality changes
- Problem-solving
- Disinhibition

AFTER OCCIPITAL LOBE DAMAGE **CHANGES OR DIFFICULTIES** WITH: Reading and writing

- Visual defects Word blindness
- Hallucinations
- Visual distortions Perceiving colour

AFTER CEREBELLUM DAMAGE CHANGES OR DIFFICULTIES

- Movement co-ordination
- Tremors/dizziness
- Slurred speech
- Postural control Eve movements

AFTER TEMPORAL LOBE DAMAGE CHANGES OR DIFFICULTIES WITH:

- Short-term memory
- Naming objects
- More aggressive behaviour
- Understanding words
- Persistent talking
- Selective attention
- Change in sexuality

AFTER PARIETAL LOBE DAMAGE CHANGES OR DIFFICULTIES WITH:

- Right/left confusion Mathematics
- Spelling
- Impaired touch
- Language disorder
- Perception Spatial awareness

Manipulating objects

AFTER BRAIN STEM DAMAGE CHANGES OR DIFFICULTIES WITH:

- Automatic movements
- Co-ordinated movements
- Regulating sleep Controlling breathing
- Heart rate
- Swallowing Dizziness



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