01

About the brain

What the brain does and the different parts that make it up.
What does the brain do?

The brain performs an incredible number of tasks. Different parts of the brain have different functions. The brain coordinates all the functions together to do different tasks. Sometimes you don’t know what a great job the brain does until it breaks down!

Different parts of the brain

- Allow you to think, learn, remember, dream, reason, experience emotions and make decisions
- Receive information from the world around you from various senses - sight, touch, taste, smell and sound
- Control body temperature, blood pressure, heart rate and breathing
- Coordinate movement when walking, talking, standing or sitting

All these tasks are coordinated, controlled and regulated by the brain so that the body works efficiently.

New Zealanders sustain a brain injury everyday - there’s help on hand
The brain

Each cerebral hemisphere has **four parts called lobes**. Each lobe controls different functions but _they all work together_.

Below is how the different parts of the brain help your body to function.

**Frontal lobe:**
- Think, plan and organise
- Work out how to do things
- Control emotions and impulses
- Get along with other people

**Occipital lobe:**
- Receive visual information
- Interpret colour, shape and distance

**Parietal lobe:**
- Know how your body feels and what position it is in e.g. standing or lying down
- Tell left from right
- Recognise things by sight or touch
- Read

**Temporal lobe:**
- Forms new memories
- Order things in your mind
- Categorise objects
- Understand sounds such as speech and music

**Brain stem:**
Controls vital life functions:
- Breathing
- Heart rate
- Consciousness
- Ability to sleep

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**Left and right cerebral hemispheres**

The two halves of the brain are called **cerebral hemispheres**.

The left side controls the right side of the body and the right side controls the left side of the body.

The two sides work together, but they generally process information in different ways and have various functions.

For example, generally the left side looks after speech, reading and writing while the right side looks after visual memory, drawing and musical appreciation.
Brain Injury

Damage to the brain can mean that some of the brain parts will not work as well for a time.

This means that some of the things that you are normally able to do may be difficult. It is important that you discuss these problems with your doctor so that they are able to advise and assist you.

Recovery

In most cases the symptoms of a mild traumatic brain injury resolve in about three months.

When a brain injury is more severe, it is difficult to predict the outcome in the early days. It may be weeks or months before the extent of recovery can be estimated. Recovery may be slow, but rehabilitation will help you make improvements.

Healing happens in a number of ways:
- Swelling and bruising of the brain reduces
- Blood clots are removed or absorbed by the body
- The brain may learn new ways to do things after the injury
- Rest is important to enable the brain to recover and heal

For further information

Some of the other leaflets in this series may help or you can contact your local Brain Injury Association, ACC, Ministry of Health or Disability Resource Information Centres.

For more information go to: [www.brain-injury.org.nz](http://www.brain-injury.org.nz)

My important contacts:

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