Brain Tumour Australia Information © FACT SHEET 2 The Brain—How it works

The Brain—How it works

To better understand the effects of a brain tumour, it is helpful to know how the brain works.

Many people have seen pictures of human brains. The brain is part of the central nervous system.

The central nervous system (or nerve control centre) is composed of:

- the brain (the cerebrum the forebrain) which is divided into two cerebral hemispheres
- the cerebellum (the hindbrain)
- the brain stem
- the spinal cord

What is the brain made of?

The brain is comprised of nervous tissue. Nerves (or neurons) have two purposes: Communication

- sending
- receiving

messages (electrical currents) from various parts of the body.

A Foramen of Monro

- **B** Lateral ventricle (cavity of the right cerebral
- hemisphere)
- **C** Anterior commissure
- D Optic chiasma
- **E** Optic neive
- ${\bf F}$ Pituitary body
- **G** Crus cerebri
- ${\bf H}$ Aqueductus of Sylvius
- I Pons varroliiJ Fourth Ventricle

- N Corpora quadrigemina
- **O** Posterior commissure

K Medulla oblongata

P Pineal body

L Arbor vitae

M Cerebellum

- ${\bf Q}$ Cerebrum
- R Third ventricle
- S Middle commissureT Corpus callosum
- . .
 - U Fornix



While both

sides of the brain look the same, they work rather differently. It may seem strange but each half of the brain controls the opposite side of the body. ie. the right hemisphere controls the left side of the body and the left hemisphere controls the right side of the body and in most individuals the left hemisphere controls speech.

Each hemisphere is divided into sections or lobes, these are:

- frontal lobes
- parietal lobes
- temporal lobes
- occipital lobes
- limbic system that have <u>Specialised Functions</u>

The brain is divided into two halves (or hemispheres)

