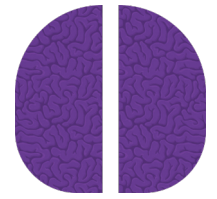


MENTAL HEALTH AND MINDFULNESS



COMPLETE COW BRAIN

This plastinate illustrates the primary components of the encephalon. The two brain hemispheres serve as crucial landmarks for locating the higher brain functions, encompassing perception, processing, and response to incoming stimuli. The brain exhibits characteristic grooves and convolutions. Directly beneath the hemispheres lies the diencephalon, housing the thalamus and hypothalamus. The latter is intricately linked to the pituitary gland. Following the diencephalon, we encounter the brain stem, comprising the mesencephalon, pons, and medulla oblongata. The brain stem serves as the hub for vital functions such as breathing, blood pressure regulation, and more. Above the brain stem is the cerebellum, directly involved in the coordination of movement and equilibrium.

1. Right brain hemisphere (telencephalon).
2. Left brain hemisphere (telencephalon).
3. Cerebellum.
4. Medulla oblongata.
5. Pons.
6. Mesencephalon.
7. Diencephalon.
8. Optic chiasma.
9. Right rhinencephalon.
10. Left rhinencephalon.



SAGITTAL HALF COW BRAIN

The sagittal view of the encephalon reveals anatomical details that are not visible in the entire organ. Each brain hemisphere contains a small cavity housing cerebrospinal fluid, vital for brain nourishment. This fluid is also present within the diencephalon, the mesencephalon (via the Sylvian aqueduct), the pons, and the medulla oblongata. The corpus callosum serves as the conduit where numerous nervous fibers (axons) interconnect the left and right hemispheres.

The morphology of the cerebellum presents a distinctive branching pattern resembling foliage, earning it the moniker "tree of life."

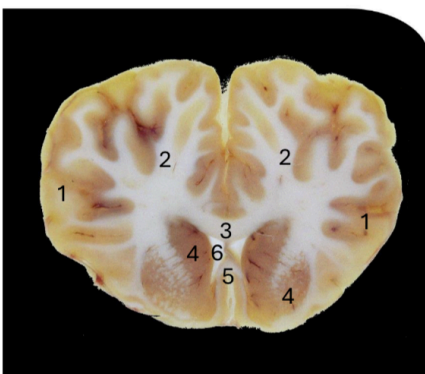
1. Right brain hemisphere (telencephalon).
2. Corpus callosum.
3. Thalamus (diencephalon).
4. Hypothalamus (diencephalon).
5. Optic chiasma.
6. Mesencephalon.
7. Sylvian aqueduct.
8. Pons.
9. Medulla oblongata.
10. Cerebellum (tree of life).
11. Right lateral ventricle.



TRANSPARENT TRANSVERSAL SECTION

In this section showcases the inner anatomy of the encephalon, specifically at the level of the telencephalon. The grey matter (depicted in orange) corresponds to the location of the neuronal cell bodies (soma), while the white matter encompasses all neural projections (dendrites and axons) crucial for interconnecting neurons. As previously mentioned, the main connection between the two brain hemispheres is facilitated by the corpus callosum. Positioned below it are the brain ventricles, which contain cerebrospinal fluid. Beneath the ventricles lie significant cerebral nuclei responsible for regulating movement and other essential functions critical for normal physiological processes.

1. Cortex (grey matter).
2. White matter (corona radiata).
3. Corpus callosum.
4. Basal nuclei.
5. Rostral commissure.
6. Lateral ventricle.





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