# SEROTONIN



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## **BIPOLAR DISORDERS Factsheet**

#### What is serotonin?

The serotonergic system is a diffuse network in the central nervous system that plays a major role in mood regulation, particularly low mood and depression. The main agents for treating depression are antidepressants, including selective serotonin reuptake inhibitors or combined serotonin/ noradrenaline reuptake inhibitors. The mechanisms of these antidepressants result in increased synaptic levels of serotonin and/or noradrenaline.

## What is the evidence for serotonin changes in people with bipolar disorder?

Moderate quality evidence suggests increases in serotonin receptors (5-TH1R) in the hippocampus, parahippcampus, and amygdala of people with acute bipolar depression compared to controls. There were also increases in serotonin transporters (SERT) in the cingulate and insula of people with acute bipolar depression. Most patients were unmedicated.

Low quality evidence is unclear of changes in serotonin receptor or transporter levels in people with acute bipolar mania.

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NeuRA (Neuroscience Research Australia) is one of the largest independent medical and clinical research institutes in Australia and an international leader in neurological research.

Diseases of the brain and nervous system pose the greatest health, economic and social burden of any disease group because they are chronic, debilitating and have no known cures.

Medical research is the cornerstone of efforts to advance the health and wellbeing of families and the community. Our dedicated scientists are focussed on transforming their research into significant and practical benefits for all patients.

While we hope you find this information useful, it is always important to discuss any questions about bipolar disorder or its treatment with your doctor or other health care provider.

For more information see the technical table

## HOW YOUR SUPPORT HELPS

We are able to make significant advances due to the generosity of countless people. Your donation allows us to continue to work towards transforming lives. For information on how you can support our research, phone **1300 888 019** or make a secure donation at **neura.edu.au**.

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