

## **BIPOLAR DISORDERS Factsheet**

December 2021

## How is calcium related to bipolar disorder?

Cellular calcium concentrations are potentially disrupted in bipolar disorder. Intracellular calcium has a fundamental role in neuronal excitation, transmitter synthesis and release, and synaptic function and plasticity, and disruptions to these functions can affect mood. Cellular calcium levels may be altered by lithium and other psychotropic drugs.

What is the evidence for calcium alterations in people with bipolar disorder?

Moderate to high quality evidence suggests a medium-sized effect of increased intracellular calcium in people with bipolar disorder compared to controls. This effect was apparent in platelets and lymphocytes, in patients with mania or depression symptoms but not during euthymia, and in drug naïve and drug free patients.



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.