

BIPOLAR DISORDERS Factsheet

December 2021

What is brain pH and lactate?

Maintenance of an adequate pH balance in all tissues and organs is important for good health. Decreased levels of brain pH are associated with increased levels of lactate, and vise versa. Lactate is an acidic source of fuel that is constantly generated and consumed in the brain. An imbalance in pH, particularly a shift toward high acidity, is associated with numerous physical and mental disorders

What is the evidence for brain pH and lactate in people with bipolar disorder?

Moderate to low quality evidence suggests increased brain lactate levels in people with bipolar disorder compared to controls.

Low quality evidence is unclear of pH differences.



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.