

## SCHIZOPHRENIA Factsheet

October 2020

### What is serotonin?

Serotonin is a neurotransmitter whose dysregulation may underlie the negative symptoms and high rates of depression seen in people with schizophrenia. Supporting this, selective serotonin reuptake inhibitors have been found to be effective in treating the negative symptoms of the disorder. Furthermore, acute tryptophan depletion, a dietary manipulation that lowers brain serotonin (5-HT) synthesis, has been shown to worsen negative symptoms.

### What is the evidence for serotonin?

Moderate to high quality evidence found a medium-sized effect of elevated prefrontal serotonin 5-HT<sub>1A</sub> receptors in people with schizophrenia compared to people without schizophrenia. Moderate quality evidence also found a medium to large effect of reduced prefrontal serotonin 5-HT<sub>2A</sub> receptors in people with schizophrenia.

For more information see the technical table



*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 schizophrenia or its treatment with your doctor or other health care provider.*

### 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/donate/schizophrenia](http://neura.edu.au/donate/schizophrenia).