

## Brain building block glutamate could be key to treating Alzheimer's, schizophrenia, depression

Glutamate is often called the “major excitatory neurotransmitter” within the brain. It is the brain’s “go” signal. [Neuroscientist David] Baker notes that glutamate receptors are found in every kind of brain cell, which means it is doing more than regulating the activity of neurons, it is regulating the brain’s support cells too. Glutamate is that widespread and important! But being almost everywhere increases the chances that something, somewhere, could go wrong. Thus, most disorders of the brain involve some degree of glutamate dysfunction. This includes disorders such as schizophrenia, depression, obsessive-compulsive disorder, [Alzheimer's disease](#) and more.

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Baker believes that the key to treating diseases of the brain can be found in the complexity of glutamate signaling. This chemical isn’t only released by neurons, but there are multiple ways in which the human brain releases glutamate. Baker’s research suggests that the brain has forms of glutamate signaling between cells that are needed for highly specialized forms of activity. “If so, we may be able to selectively target specialized forms of glutamate signaling, which could revolutionize how we conceive of and treat complex brain disorders,” says Baker.

**Read full, original post:** [Glutamate Built the Brain—Can It Treat It, Too?](#)