

# Is Depression Just Bad Chemistry?

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## *Scientific American Mind:*

A commercial sponsored by Pfizer, the drug company that manufactures the antidepressant Zoloft, asserts, “While the cause [of depression] is unknown, depression may be related to an imbalance of natural chemicals between nerve cells in the brain. Prescription Zoloft works to correct this imbalance.” Using advertisements such as this one, pharmaceutical companies have widely promoted the idea that depression results from a chemical imbalance in the brain.

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Much of the general public seems to have accepted the chemical imbalance hypothesis uncritically. For example, in a 2007 survey of 262 undergraduates, psychologist Christopher M. France of Cleveland State University and his colleagues found that 84.7 percent of participants found it “likely” that chemical imbalances cause depression. In reality, however, depression cannot be boiled down to an excess or deficit of any particular chemical or even a suite of chemicals. “Chemical imbalance is sort of last-century thinking. It’s much more complicated than that,” neuroscientist Joseph Coyle of Harvard Medical School was quoted as saying in a blog by National Public Radio’s Alix Spiegel.

Indeed, it is very likely that depression stems from influences other than neurotransmitter abnormalities. Among the problems correlated with the disease are irregularities in brain structure and function, disturbances in neural circuitry, and various psychological contributions, such as life stressors. Of course, all these influences ultimately operate at the level of physiology, but understanding them requires explanations from other vantage points.

Read the whole story: [\*Scientific American Mind\*](#)