

# Statin consumption could lead to anxiety

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Long-term administration of statins, the anti-cholesterol drugs, could lead to [anxiety](#) and major [depression](#) in patients and also develop suicidal tendencies, scientists at the Centre for Cellular and [Molecular Biology](#) (CCMB) here have established.

A team of scientists led by [Amitabha Chattopadhyay](#) studied the effect of statin on human serotonin receptors expressed in animal cells and established the link between use of cholesterol-lowering drugs and mood disorders.

"The novel results of our study represent the first report describing the effect of long-term cholesterol depletion on this type of neurotransmitter receptor and suggest that chronic, low cholesterol levels in the brain may trigger anxiety and depression," Chattopadhyay said a press conference along with CCMB director [Ch Mohana Rao](#) here today.

Chattopadhyay's study has been published in the latest edition of Biochemistry , brought out by the [American Chemical Society](#) .

"Our results assume broader significance in the context of previous observations that symptoms of anxiety and major depression are apparent in humans upon long-term administration of statin and cortical cholesterol content is found to be lower in mood disorders. This is relevant since some [statins](#) have been reported to cross the blood-brain barrier and their use has been associated with a reduced risk of Alzheimer's disease," Chattopadhyay pointed out.

"Only a certain percentage of those who use statins are prone to mood disorders. Our findings are based only on cell study and we need to conduct clinical trials. This is only a tip of the iceberg and we are planning to conduct animal experiments to take our [research](#) further," Chattopadhyay said.

Mood disorder was, however, not a common side-effect of the use of statins but the percentage of those prone to it could not quantified right now, he said.

"Our study will contribute to the development of new drug and even the existing drugs could be modified to reduce the side-effects like myopathy, kidney failure and headache, apart from mood alteration," the senior scientist noted.

Statins, the widely-used anti-cholesterol drugs, currently have a worldwide market of 25 million USD, including a Rs 1,000 crore market in [India](#) per annum.

Research scientists Yamuna Devi Paila, Sourav Ganguly, [Sandeep Shrivastava](#) and [Thomas J Pucadyil](#) assisted Chattopadhyay in conducting the study.