

Developing a safer form of acetaminophen

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Scientists are reporting development of a new process for producing large batches of a new and potentially safer form of the common pain-reliever acetaminophen. Credit: Wikimedia Commons

Scientists in Louisiana are reporting development of a process for producing large batches of a new and potentially safer form of acetaminophen, the widely used pain-reliever now the source of growing concern over its potentially toxic effects on the liver. Their study, which could speed development of a next-generation pain-reliever, is scheduled for the July 17 issue of *ACS' Organic Process Research & Development*.

In June, an advisory panel of the U. S. Food and Drug Administration recommended banning certain prescription pain relievers containing acetaminophen because of the drug's potential to cause [liver](#) damage when used in high doses. Mark Trudell and colleagues note in the study that scientists recently discovered a new form of [acetaminophen](#) that has similar potency to the original drug with a lower risk of liver toxicity.

But until now, scientists have had difficulty producing this substance in quantities suitable for industrial scale-up.

The researchers describe a simple, efficient method for producing the new pain-reliever using only a few starting materials and a short series of chemical reactions. In laboratory studies, they used the new method to produce multigram quantities of the substance with 99 percent purity. The scientists point out that the new process can be performed on a much larger production level if needed.

More information: "First Multigram Preparation of SCP-123, A Novel Water-Soluble Analgesic," *Organic Process Research & Development*

Source: American Chemical Society ([news](#) : [web](#))

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