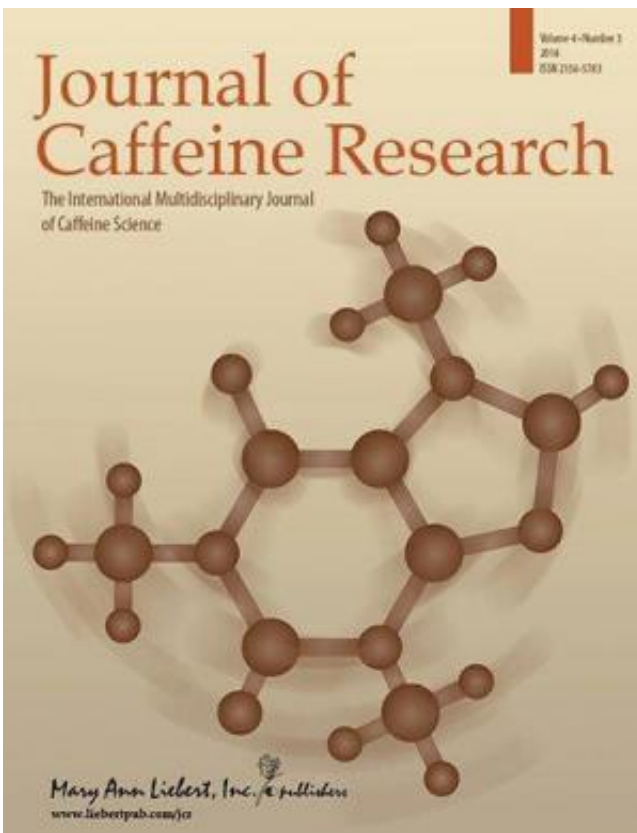


Caffeine counters cocaine's effects on women's estrus cycles

November 20 2014



Credit: Mary Ann Liebert, Inc., publishers

Women are more sensitive to the effects of cocaine and more susceptible to cocaine abuse than men. Cocaine's ability to disrupt a woman's estrus cycle may explain the sex differences in cocaine addiction, and new evidence that caffeine may be neuroprotective and

able to block cocaine's direct effects on the estrus cycle reveals novel treatment possibilities, according to an article published in *Journal of Caffeine Research: The International Multidisciplinary Journal of Caffeine Science*

In the article "[Cocaine Shifts the Estrus Cycle Out of Phase and Caffeine Restores It](#)", Patricia Broderick, PhD and Lauren Malave, City College of New York, City University of New York Graduate Center, City University of New York, and NYU Langone Medical Center, New York, NY, show that [cocaine](#) shifts the estrus cycle, thereby changing a woman's estrogen levels. Caffeine can block these changes, suggesting that antagonists of the adenosine system may have a role in treating [cocaine addiction](#).

"This is cutting-edge work that has never been shown before. It is critical knowledge relevant to women's reproductive health," says Patricia A. Broderick, PhD, Editor-in-Chief of *Journal of Caffeine Research* and Medical Professor in Physiology, Pharmacology & Neuroscience, The Sophie Davis School of Biomedical Education, The City College of New York, The City University of New York, and Adjunct Professor in Neurology, New York University Langone Medical Center and Comprehensive Epilepsy Center.

More information: The article is available free on the *Journal of Caffeine Research* website at <http://online.liebertpub.com/doi/full/10.1089/jcr.2014.0015> until December 20, 2014.

Provided by Mary Ann Liebert, Inc

Citation: Caffeine counters cocaine's effects on women's estrus cycles (2014, November 20)

retrieved 12 July 2023 from <https://medicalxpress.com/news/2014-11-caffeine-counters-cocaine-effects-women.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.