Do caffeine's effects differ with or without sugar?

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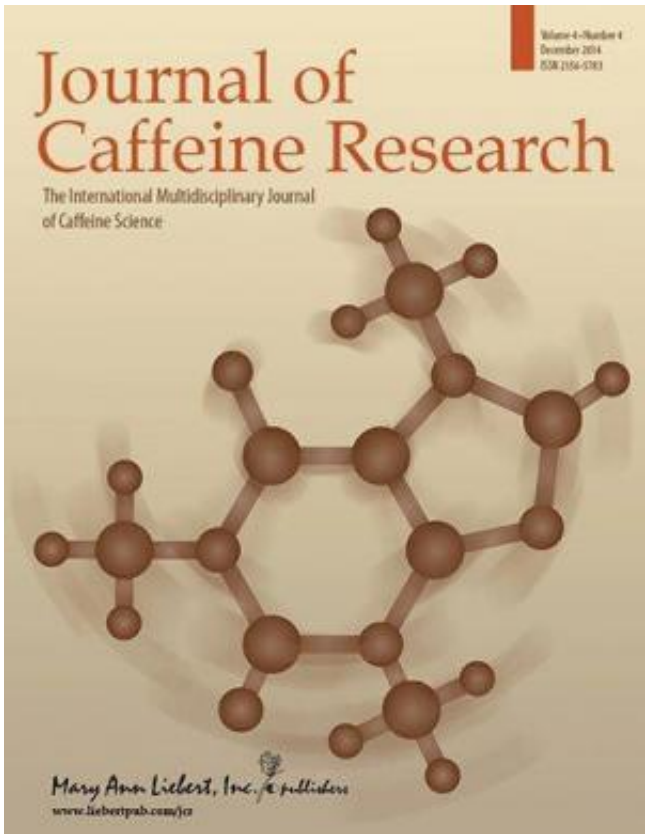

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Consuming caffeinated or sugary drinks can affect the body's metabolism, causing changes in heart and respiratory rate and weight gain. The results of a new study exploring whether individuals respond differently to caffeinated drinks that do or do not contain sugar and to sugar alone are published in *Journal of Caffeine Research: The International Multidisciplinary Journal of Caffeine Science*.

The article entitled "Caffeine With and Without Sugar: Individual Differences in Physiological Responses During Rest", by Elaine Rush, PhD and coauthors, Auckland University of Technology (Auckland, New Zealand), describes a study in which heart rate and carbon dioxide production (as a measure of respiration) were measured 30 minutes before and after individuals consumed a defined quantity of sugar, caffeine, or sugar and caffeine. Responses to the different treatments varied widely among individuals.

"Given the caveat that sugar itself affects brain reward just as caffeine does, and this effect will in itself cause variations, this is still an essential paper for the scientist and the lay person to read," says Patricia A. Broderick, PhD, Editor-in-Chief of *Journal of Caffeine Research*, 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.2014.0023 until January 16, 2015.

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