

# OSTROM WORKSHOP RESEARCH SERIES

## Zheng Zhou

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“Reduce Rice Consumption to Mitigate Inorganic Arsenic Exposure: Development and Evaluation of a Risk-Communication Intervention in College Rice Consumers”



**Wednesday, February 5, 2020**

12:00–1:00 PM • Ostrom Workshop, 513 N. Park

Regular rice consumers are under an elevated risk of lung and bladder cancers associated with exposure to inorganic arsenic (iAs) via their rice intake. Past risk mitigating strategies largely focus on controlling the concentration of iAs in rice by technical and regulatory means. This paper proposes one risk-communication intervention to reduce daily rice intake as an alternative approach. Social-behavioral determinants of rice consumption were identified using psychometrical questionnaire. Risk information was organized by the Health Belief Model framework into the intervention material, with emphases on identified determinants. The impact of intervention on social-behavioral determinants of rice consumption was evaluated using a randomized controlled trial (n=136). Perceived risks were identified as the strongest, single determinant that individuals with greater perceived risk have higher likelihood to reduce their daily rice consumption. After taking the intervention, the treatment group (n=67) showed a significant increase in perceived risks.

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Zheng Zhou is a doctoral student of Environmental Health in School of Public Health with a focus on quantitative risk assessment. Zheng seeks to incorporate advanced statistical methods into the current risk assessment work. His research interests extend to the development, implementation and evaluation of risk management strategies. Zheng holds a BA in Economics from China Pharmaceutical University and a Master of Public Health (MPH) from Indiana University.

Presentations are open to the public (see our website for papers). You are welcome to bring your lunch. For questions, contact Allison Sturgeon (sturgeon@iu.edu; 812/855-3151).