

## Abstract

In this study, four common heavy metals, lead (Pb), cadmium (Cd), arsenic (As) and mercury (Hg) in rice and edible mushrooms of China were studied to evaluate contamination level and edible safety. Ninety-two (92) rice samples were collected from the main rice growing regions in China, and 38 fresh and 21 dry edible mushroom samples were collected from typical markets in Nanjing City. The analyzed metal concentrations were significantly different between rice and edible mushroom samples ( $p < 0.05$ ). The results showed that Pb, Cd and As contents in 4.3%, 3.3% and 2.2% rice samples respectively, were above maximum allowable concentration (MAC). In fresh edible mushroom, Pb and Hg contents in 2.6% samples were above MAC, respectively. However, only Hg content in 4.8% dry edible mushroom samples was above its MAC. Therefore, more than 95% rice and edible mushroom samples in our test had high edible safety.