Relationship of urinary arsenic metabolites to intake estimates in residents of the Red River Delta, Vietnam

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Abstract: This study investigated the status of arsenic (As) exposure from groundwater and rice, and its methylation capacity in residents from the Red River Delta, Vietnam. Arsenic levels in groundwater ranged from Author Keywords: Arsenic; Groundwater; Human urine; Methylation capacity; Red River Delta; Rice; Vietnam

Index Keywords: Arsenic levels; Concentration ratios; Dimethylarsinic acids; Drinking waters; Human urine; Human urines; Monomethylarsonic acids; Potential healths; Red River Delta; Red river deltas; Rice; Vietnam; Alkylation; Body fluids; Grain (agricultural product); Groundwater; Health risks; Hydrogeology; Metabolites; Methylation; Potable water; Risk perception; Rivers; Underground reservoirs; Arsenic; arsenic; ground water; arsenic; child health; drinking water; Food and Agricultural Organization; food consumption; groundwater pollution; health risk; metabolite; methylation; pollution exposure; public health; rice; urine; World Health Organization; adolescent; adult; article; controlled study; dietary intake; exposure; female; health hazard; human; male; metabolite; methylation; rice; risk assessment; river ecosystem; Viet Nam; water sampling; Adolescent; Adult; Age Factors; Arsenic; Diet; Environmental Monitoring; Female; Food Contamination; Humans; Male; Methylation; Oryza sativa; Risk Assessment; Rivers; Sex Factors; Vietnam; Water Pollutants, Chemical; Water Supply; Young Adult; Asia; Eurasia; Red River Delta; Southeast Asia; Viet Nam

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