Cruciferous vegetables, glutathione S-transferase polymorphisms, and the risk of colorectal cancer among Chinese men.

PURPOSE: To assess the associations between cruciferous vegetable (CV) intake, GST gene polymorphisms, and colorectal cancer (CRC) in a population of Chinese men.

METHODS: Using incidence density sampling, CRC cases (N = 340) diagnosed before December 31, 2010 within the Shanghai Men's Health Study were matched to noncases (N = 673). CV intake was assessed from a food frequency questionnaire and by isothiocyanate levels from spot urine samples. GSTM1 and GSTT1 were categorized as null (0 copies) versus non-null (1 or 2 copies). Conditional logistic regression was used to calculate odds ratios and 95% confidence intervals for the association between CV intake and GST gene variants with CRC, and statistical interactions were evaluated.

RESULTS: CRC risk was not associated with CV intake, whether measured by self-report or by urinary isothiocyanate nor with GST gene variants. No statistical interactions were detected between CV intake and GST gene variants on the odds of CRC. Stratifying by timing of urine sample collection and excluding CRC cases diagnosed in the first 2 years did not materially alter the results.
**CONCLUSIONS:** This study provides no evidence supporting the involvement of CV intake in the development of CRC in Chinese men.

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