

Association between Different Drinks Consumption and Risk of Inflammatory Bowel Disease: A Dose-Response Meta-Analysis

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Peng, YJ; Wei, KX; Li, M.

**Corresponding author:**  
YuJie Peng

pyj202402@163.com

**Author Affiliation:**  
North Sichuan Medical College.

ADMINISTRATIVE INFORMATION

**Support** - North Sichuan Medical College.

**Review Stage at time of this submission** - Formal screening of search results against eligibility criteria.

**Conflicts of interest** - None declared.

**INPLASY registration number:** INPLASY2025120094

**Amendments** - This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 29 December 2025 and was last updated on 29 December 2025.

INTRODUCTION

**Review question / Objective** To Figuring out the connection bewteen inflammatory bowel disease (IBD) and different drinks in daily life.We selected cohort experiments, case-control experiments and cross-sectional studies to to complete our research.Chooseing the outcomes that contain indicators of Recurrence Rate and incidence Odd Rate included.

**Condition being studied** By searching for case-control studies, cohort studies and cross-sectional studies related to IBD and different drinks in databases such as Pubmed, Embase, Sinomed, web of science, cochrane, CNKI and Wanfang, Stata SE12.0 and Stata 15.0 was used to process the data we collected.

METHODS

**Participant or population** The total number of people included is 822,063,the IBD patients,including Crohn's Disease (CD) and Ulcerative Colitis(UC) totally 14,737.

**Intervention** Taking different drinks.

**Comparator** Do not consume drinks or little.

**Study designs to be included** Case-control studies, cohort studies and cross-sectional studies.

**Eligibility criteria** The article should include the number of patiens, investigation methods, types of beverages, frequency of beverage consumption,

OR values, RR values and 95% CI of dosage in the experimental group and the control group.

**Information sources** Databases such as pubmed, embase, Cochrane library, web of science, sinomed, Wanfang, and CNKI.

**Main outcome(s)** Providing the Relative Risk (RR) OR Odds Rate (OR) and 95% confidence interval (CI).

**Quality assessment / Risk of bias analysis** Newcastle-Ottawa Scale(NOS), Agency for Healthcare Research and Quality (AHRQ).

**Strategy of data synthesis** Using Stata SE 12.0, Stata 15.0 to analyze data,  $P < 0.05$  is statistically significant.  $I^2$  was used to evaluate heterogeneity among studies. When heterogeneity could be ignored ( $I^2 < 50\%$ ), a fixed-effects model was selected; otherwise, a random-effects model was chosen.

**Subgroup analysis** Regional subgroup.

**Sensitivity analysis** Using Stata SE 12.0 software to conduct sensitivity analysis, reflecting the sensitivity of an article based on the changes in the data after deleting one of the articles.

**Language restriction** English and chinese.

**Country(ies) involved** China.

**Keywords** Inflammatory bowel disease, Crohn's Disease, Ulcerative Colitis, Beverages, Alcohol, Coffee, Tea, Risk Factors, Meta-Analysis.

#### **Contributions of each author**

Author 1 - YuJie Peng.

Email: pyj202402@163.com

Author 2 - KeXi Wei.

Email: wkx15308095440@163.com

Author 3 - Min Li.