

# Colorectal cancer risk factors in asymptomatic Chilean population: a survey of international collaboration between Japan and Chile

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## Abstract

In Chile, the mortality from colorectal cancer has been on the rise. A national screening program based on a fecal immunochemical test was started in 2012 as an international collaboration with Japan. This case-control study was designed to identify the risk factors for colorectal cancer, with a goal of increasing the participation rate for colorectal cancer screening. In accordance with the Strengthening the Reporting of Observational Studies in Epidemiology guidelines, we conducted a case-control study from 2012 to 2017; 23 845 asymptomatic participants were enrolled in the study. Participants who were fecal immunochemical test-positive or had a family history of colorectal cancer underwent a colonoscopy. We analyzed the odds ratio of the risk factors for colorectal cancer, including sex, age, family history, BMI, hypertension, diabetes, regular use of nonsteroidal anti-inflammatory drugs, alcohol consumption, smoking, physical activity, and daily intake of certain food items. For the screening program, 202 cases of colorectal cancer were detected, and 195 of them were evaluated pathologically after resection. Of these, 173 cases (88.7%) had colorectal cancer stage 0/1, 151 (77.4%) of which were treated with endoscopic resection. In the multivariate analysis, male sex, family history of colorectal cancer, and low intake of cereals or fibers were closely related to a high colorectal cancer incidence. Moreover, participants in their 60s and 70s had a higher incidence of colorectal cancer than those in their 50s. These results suggest that intensive screening of the high-risk population can help in improving the detection of colorectal cancer, whereas higher consumption of cereals or fibers can be effective in preventing its onset.

## Keywords

**Author Keywords:** [adenoma detection rate](#); [Chile](#); [colonoscopy](#); [colorectal cancer](#); [international collaboration](#); [Latin America](#); [risk factor](#); [screening](#)

**KeyWords Plus:**[DOSE-RESPONSE METAANALYSIS](#); [DIETARY FIBER](#); [DIABETES-MELLITUS](#); [COLON-CANCER](#); [BODY-MASS](#); [GUIDELINES](#); [MORTALITY](#); [TRENDS](#); [COLONOSCOPY](#); [STATISTICS](#)

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