

Colorectal Cancer and Health Behaviours in the BC Generations Project:

Primary Prevention and Early Detection

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Background & aims

- Colorectal cancer (CRC) is the third most frequent cause of cancer-related death in Canada (1).
- CRC primarily affects older people, and as such, the number of cases is predicted to rise as the Canadian population ages (2).
- The evidence clearly shows that modifiable health behaviours, such as physical activity, a healthy diet, and undergoing regular screenings, are central to preventing CRC.

Research question: How adherent are BC residents to primary and secondary CRC prevention behaviours, and what are the correlates of this adherence?

This research will assess :

1. Rates of adherence to primary and secondary CRC-prevention behaviours (as defined by the Canadian Cancer Society)
2. Correlates of this adherence in participants of the **BC Generations Project (BCGP)**.

Data source

The BC Generations Project



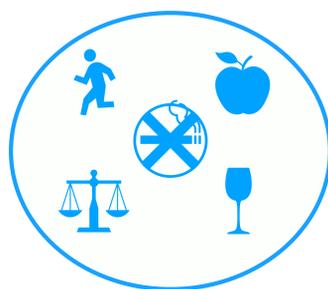
- The data used in this research were made available by the BC Generations Project, British Columbia's largest ever health study (approx. n=30,000)
- Part of a national initiative - the **Canadian Partnership for Tomorrow**
- **Data:** health information and biological samples
- **Eligibility:** BC residents aged 35-69 at recruitment
- **Overall study aims:** to learn more about how environment, lifestyle and genes contribute to cancer and other chronic diseases.

Methods

Analytic samples

1. BCGP participants with complete data for relevant CRC prevention behaviours and correlates. All with a previous diagnosis of cancer were excluded.
2. BCGP participants within the age range recommended for CRC screening (50 to 74 years) in BC. All with a previous diagnosis of cancer were excluded.

CRC prevention behaviours



Correlates

- Demographic and socioeconomic factors
- Family history of CRC
- Perceived health
- Time since last routine medical check up

Analysis

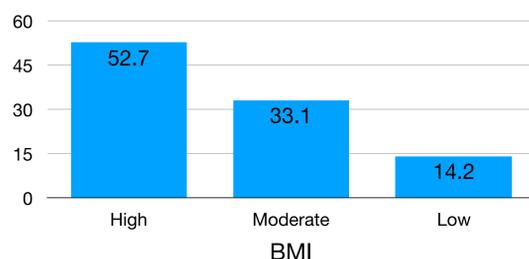
- Proportions will be calculated to describe adherence in the primary and secondary CRC prevention analytic samples.
- Associations between health behaviours and correlates will be assessed using logistic regression models.
- Potential confounders will be added individually to those models in which an association is found, as determined by the unadjusted odds ratios and 95% confidence intervals.

Preliminary results

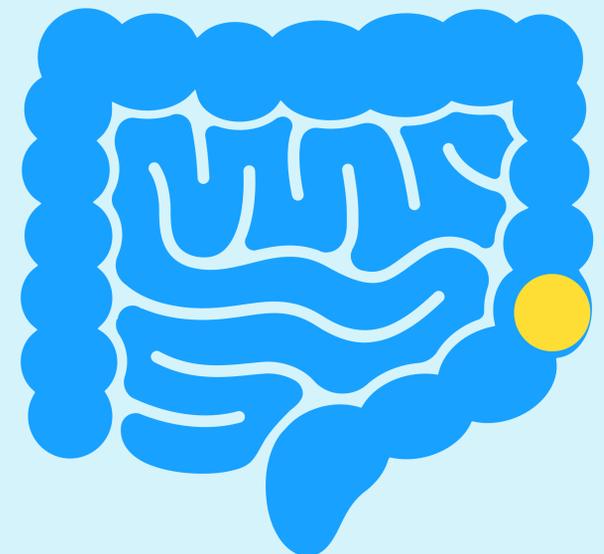
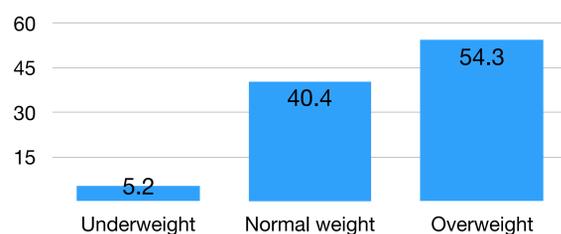
Preliminary assessment of **analytic sample 1** indicates a healthy sample (n= 16,995):

- Nearly 86% are moderately to highly active
- Only 5% classified themselves as occasional or daily smokers
- Most participants reported alcohol consumption 1-7 times a week (59.2%)
- In contrast, >50% of the sample were overweight (BMI 25+)

Physical activity (IPAQ)



BMI



Discussion & future work

To be completed

1. Calculation of rates of adherence to secondary CRC prevention behaviours
2. Assessment of associations between CRC prevention behaviours and correlates

Summary of results to date

1. BCGP participants represent a healthy sample, with 85.8% achieving Canadian Cancer Society activity recommendations (moderate or high on IPAQ). Other studies have reported levels as low as 17.6% of Canadians meeting these guidelines (3).
2. Smoking rate is also lower than reported elsewhere. In 2014, 18.1% of Canadians described themselves as occasional or daily smokers (4).

Future work

1. Improved understanding of the prevalence and correlates of CRC prevention behaviours can be used to inform CRC prevention interventions.
2. The next step of this thesis work will be to examine health behaviour change in CRC survivors within the BCGP data set, using both baseline and follow up data to establish an unbiased assessment of this change.

References

1. Steering Committee. Special Topic: Predictions of the future burden of cancer in Canada. Canadian Cancer Society; 2015.
2. Canadian Cancer Society. Canadian Cancer Society's Advisory Committee on Cancer Statistics. (2015). Canadian Cancer Statistics 2015. Toronto, ON: Canadian Cancer Society; 2015.
3. Statistics Canada Table 117-0019 Distribution of the household population meeting/not meeting the Canadian physical activity guidelines, by sex and age group.
4. Statistics Canada. Smoking, 2014. Available from: <http://www.statcan.gc.ca/pub/82-625-x/2015001/article/14190-eng.htm>