The Multiethnic Cohort Study

Colorectal Cancer

The third most common cancer in both men and women in the United States

Risk Factors

- You can change:
  - Being overweight or obese;
  - Physical inactivity; Heavy alcohol use;
  - Smoking; Certain types of diets
- You cannot change:
  - Being older
  - History of colorectal polyps or cancer, and inflammatory bowel disease
  - Family history of colorectal cancer or adenomatous polyps
  - Inherited syndrome ( Lynch syndrome, familial adenomatous polyposis)
  - Race/ethnicity ( African Americans, Ashkenazi Jews)
  - Having type 2 diabetes

Major Findings in the MEC

- Racial/ethnic variation in colorectal cancer risk, 1993-2004

Incidence and Mortality in Hawaii

- Higher incidence and lower mortality in Hawaii compared to the U.S.

<table>
<thead>
<tr>
<th>Incidence</th>
<th>Mortality</th>
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<tbody>
<tr>
<td>HI</td>
<td>U.S.</td>
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<tr>
<td>44.3</td>
<td>40.6</td>
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<td>Rank among 50 States</td>
<td>Rank among 50 States</td>
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<td>11</td>
<td>15.1</td>
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Average annual rates per 100,000

- Higher levels of vitamin B6 and vitamin D in blood were associated with a lower risk of colorectal cancer by 51% and 40%, respectively.
- Current use of aspirin and other non-steroidal anti-inflammatory drugs (NSAIDs) was associated with a 23% lower risk in men but not in women.
- Ever use of menopausal hormone therapy was associated with a 19% lower risk among postmenopausal women.
- Higher diet quality (higher Healthy Eating Index-2010 scores) was associated with a lower risk (31% in men and 18% in women).
- Various genetic variants were found associated with colorectal cancer risk.

Recommendations for Colorectal Cancer Screening

- For people at average risk: start regular screening at age 45 and continue through age 75.
- For people at higher risk: might need to start screening before age 45.
- For people ages 76 through 85, the decision to screen should be based on a person’s preferences, life expectancy, overall health, and prior screening history.