



## A Preventive Approach

Aims to decrease rates of morbidity and mortality, also reducing overall healthcare costs.

**Early discussion, education, and emphasis** on downstream consequences of inadequately treated disease can better inform patients.

Family history genetic tests create **personalised prevention programmes** by detecting malignancies and risks, to inform changes, and **prevent development of disease at an earlier, curable stage.**

Interventions focus on **lifestyle adaptation**, and **encourage patients to be proactive** with their approach to healthcare.

Identifying which preventive measures are better delivered at primary, secondary, and tertiary care levels is crucial to delivery of quality care.



Barriers:

- Focus on symptom control ahead of prevention
- Infrequent healthcare visits
- Confusion over where and when preventive services should be offered

## IBD



**4.9 million** cases globally in **2019**  
**~2.2 million Americans** will live with IBD by **2025**

**Lifestyle modification** significantly reduces risk, improving QoL and patient outcomes.

Primary care providers are often not comfortable providing **routine preventive care** to patients with IBD, particularly those on immunosuppressants.

Patients often consider their gastroenterologist their primary provider of care. Clinicians must **communicate comorbidities** with the patient, and **co-ordinate with other specialists** to improve quality of care.



## Colorectal Cancer

Third most common cancer type worldwide, growing annually.

Highest rates currently seen in Asia; China reports 280,000 deaths per year, and Japan 60,000.



Mortality can be reduced through **screening** and **early detection**. Improved **colonoscopy** has contributed to improvement in recent years.

**FOBT, sigmoidoscopy, and colonoscopy**, which is the 'gold standard', are the most used screening techniques.



**FIT** continues to prove an effective and sustainable tool for population-based screening.

Primary prevention interventions involve **dietary measures** such as limiting red and processed meat.

Recent developments in drug therapy are promising.

Protective factors to decrease risk:



Physical activity



Aspirin



Combination hormone replacement therapy



Polyp removal

## Gastrointestinal Cancer

**Cessation of smoking** and treating *Helicobacter pylori* infection are protective factors that decrease risk.

**Risk assessment** is recommended in families with cancer predisposition, eg., Lynch syndrome, hereditary diffuse gastric cancer, and polyposis syndromes.

**Gut microbiota** plays an important role in dictating carcinogenesis.

Ongoing investigations focus on providing preventive treatment through modification of this gut microbiome.

Preventive recommendations:



Regular physical activity



Maintenance of a healthy weight



High fibre diet with vitamins A and C



Limiting alcohol intake

**Key:**  
FIT: faecal immunochemical test; FOBT: faecal occult blood test; IBD: inflammatory bowel disease; QoL: quality of life.

### References:

- Weaver KN, Long MD. Preventive medicine in inflammatory bowel disease. *Clinical Gastroenterol Hepatol*. 2019;17(5):824-8.
- Farraye FA et al. ACG clinical guideline: preventive care in inflammatory bowel disease. *Am J Gastroenterol*. 2017;112(2):241-58.
- Kanth P, Inadomi JM. Screening and prevention of colorectal cancer. *BMJ*. 2021;374:n1855.
- National Institutes of Health (NIH); National Cancer Institute (NCI). Colorectal cancer prevention (PDQ®)-patient version. 2022. Available at: <https://www.cancer.gov/types/colorectal/patient/colorectal-prevention-pdq>. Last accessed: 22 May 2023.
- Nolfo F et al. Pharmacological and dietary prevention for colorectal cancer. *BMC Surg*. 2013;13(Suppl 2):S16.
- World Health Organization (WHO); International Agency for Research on Cancer (IARC). Colorectal cancer awareness month 2022. 2022. Available at: <https://www.iarc.who.int/featured-news/colorectal-cancer-awareness-month-2022/>. Last accessed: 22 May 2023.
- Binefa G et al. Colorectal cancer: from prevention to personalized medicine. *World J Gastroenterol*. 2014;20(22):6786-808.
- Chiu H-M et al. Long-term effectiveness of faecal immunochemical test screening for proximal and distal colorectal cancers. *BMJ*. 2021;70(12):2321-9.
- GI Doctors. Gastrointestinal cancer prevention. 2022. Available at: <https://gidocors.co.uk/tests/cancer-prevention/>. Last accessed: 23 May 2023.
- Abegunde AT et al. Preventive health measures in inflammatory bowel disease. *World J Gastroenterol*. 2016;22(34):7625-44.

- Lopes EW et al; EPIC-IBD Investigators. Lifestyle factors for the prevention of inflammatory bowel disease. *Gut*. 2022;72(6):1093-100.
- UChicago Medicine. Gastrointestinal cancer risk & prevention. 2023. Available at: <https://www.uchicagomedicine.org/cancer/types-treatments/gastrointestinal-cancers/gi-cancer-risk>. Last accessed: 23 May 2023.
- Stanford Medicine Health Care. Stomach cancer prevention. 2023. Available at: <https://stanfordhealthcare.org/medical-conditions/cancer/stomach-cancer/stomach-cancer-prevention.html>. Last accessed: 23 May 2023.
- Kouzu K et al. Bacterial translocation in gastrointestinal cancers and cancer treatment. *Biomedicines*. 2022;10(2):380.
- Wang R et al. Global, regional and national burden of inflammatory bowel disease in 204 countries and territories from 1990 to 2019: a systematic analysis based on the Global Burden of Disease Study 2019. *BMJ*. 2023;13(3):e065186.
- World Health Organisation (WHO). International Agency for Research on Cancer. Colorectal Cancer Awareness Month 2022. 2022. Available at: <https://www.iarc.who.int/featured-news/colorectal-cancer-awareness-month-2022/>. Last accessed: 25 May 2023.
- Bowel Cancer UK. Diet. 2019. Available at: <https://www.bowelcanceruk.org.uk/about-bowel-cancer/risk-factors/reducing-your-risk/diet/#:-:text=There%20is%20strong%20evidence%20that,meats%20as%20much%20as%20possible>. Last accessed: 14 August 2023.