

# Provincial Inflammatory Bowel Disease and Nutrition Pathway For Gastroenterologists

This primary care pathway was co-developed by primary and specialty care and includes input from multidisciplinary teams. It is intended to be used in conjunction with specialty advice services, when required, to support care within the medical home. Wide adoption of primary care pathways can facilitate timely, evidence-based support to physicians and their teams who care for patients with common low-risk gastrointestinal (GI) conditions and improve appropriate access to specialty care, when needed. To learn more about primary care pathways, check out this short video or click here to visit Primary Care Supports webpage at Primary Care Supports | Alberta Health Services.

## INFLAMMATORY BOWEL DISEASE (IBD) AND NUTRITION PATHWAY PRIMER

- Inflammatory bowel disease (IBD) is identified by chronic and relapsing inflammation of different segments in the gastrointestinal tract. The course of the disease often involves periods of exacerbation and periods of remission. While the etiology of IBD is multifactorial and not clearly understood, nutrition plays a key role in both etiopathogenesis and clinical courses<sup>1</sup>.
- At present, a paucity of nutrition recommendations for adult IBD exists within the scientific community; this is largely related to the absence of large clinical trials. Certain dietary patterns, such as the Mediterranean diet, are thought to exert a positive influence on the intestinal microbiome<sup>2</sup>. Conversely, saturated fats, excess salt, emulsifiers, artificial sweeteners and food additives have been identified in their ability to adversely alter the intestinal microbiome, intestinal immunity, and mucosal barrier thus, exacerbating intestinal inflammation<sup>3</sup>.
- Diet recommendations in IBD may also depend on disease course. There are experimental models, observational studies and pilot studies outlining independent dietary recommendations for remission, disease exacerbations and symptom management.
- Ultimately, an anti-inflammatory style of eating (e.g., Mediterranean diet) with concomitant reduction in ultra
  processed foods is gaining traction within the scientific community due to the potential benefits in modulating
  the intestinal microbiome.<sup>3</sup>

## **EXPANDED DETAILS**

## 1. Diagnosis of Inflammatory Bowel Disease

This pathway is intended to be followed by patients who have a confirmed diagnosis of Inflammatory Bowel Disease from a Gastroenterologist.

#### 2. Malnutrition Risk Screening Tool

# **Canadian Nutrition Screening tool (CNST)**

- The reported prevalence of malnutrition in IBD ranges between 20 and 85%4.
- Malnutrition in IBD is a predictor of poor clinical outcomes including increased rates of infection, longer hospital stays, prolonged recovery after surgery, and higher healthcare costs<sup>4</sup>.
- While the gold standard for malnutrition assessment is a Registered-Dietitian-delivered Subjective Global Assessment, such resources are not feasible for self-managed patient pathways.
- The CNST was validated in an IBD outpatient population with 77.2% sensitivity and 75.5% specificity.5
- Triage based on the CNST is as follows:
  - Two "YES" indicate nutrition risk. Weight loss gained back is a "NO" to weight loss.
    - o 2a. Nutrition Risk NO (the absence of 2 'YES'). No intervention required at this time.
    - o **2b. Nutrition Risk YES.** Refer to a Registered Dietitian

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# 3.The 'My IBD Diet' - Self-Managed Nutrition Pathway for IBD

# A. My IBD Diet: Eating to Lower Inflammation

The following tables outline general food categories to either 'Choose Most Often' or 'Choose Less Often when following My IBD Diet. More information on the 'My IBD Diet' can be found at AHS' <u>Nutrition Education</u> (search for 'My IBD Diet').

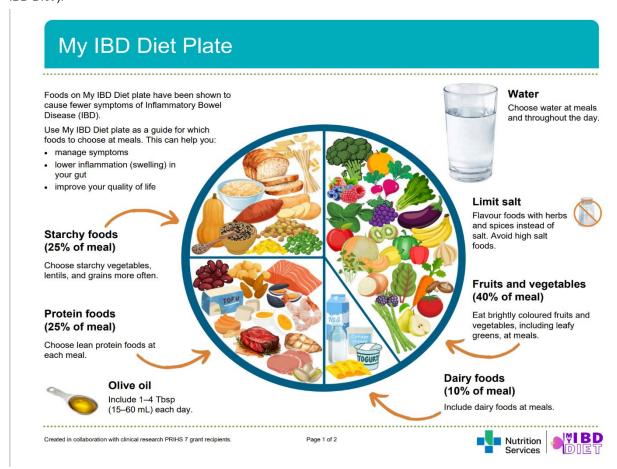
Food and Nutrient Categories to Choose Most Often		
•	Fats (monounsaturated and omega-3 fatty acids)	
•	Dietary fibers	
•	Polyphenols/Antioxidants	
•	Probiotics	
•	Vitamin D	
•	Lean proteins	

Food and Nutrient Categories to Choose Less Often		
•	Fats (saturated/trans/omega-6 fatty acids)	
•	Emulsifiers and food additives	
•	Artificial sweeteners	
•	Red meats (frequent intake)	
•	Processed meats	
•	Excessive salt	
•	Alcohol containing beverages	

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#### B. My IBD Diet Plate

The following pictorial outlines specific daily food and dietary habits that are congruent with 'My IBD Diet: Eating to Lower Inflammation'. More information on the 'My IBD Diet' can be found at AHS' <u>Nutrition Education</u> search for 'My IBD Diet').



## 4. Special Considerations - Self-managed Symptom Management Tools

The following information may be considered should symptoms persist despite following 'My IBD Diet: General Guidelines to Lower Inflammation' and 'My IBD Diet Plate: Eating to Lower Inflammation.'

- 1. Gas and bloating
  - Reduce consumption of gas producing foods such as legumes (beans), cabbage, broccoli and cauliflower.
- 2. Diarrhea or high output ostomy
  - a. Reduce intake of <u>insoluble fiber</u> and high sugar food and drinks. Increase intake of <u>soluble fibers</u> and trial an <u>oral rehydration solution</u>.
- 3. Constipation
  - a. Increase dietary fiber, fluid intake and activity.

## 5. Therapeutic Diets in IBD

The etiopathogenesis of IBD involves impaired intestinal barrier function and altered composition and function of the intestinal microbiome.<sup>6</sup> A Western diet high in saturated fat, sugar and processed foods contributes to intestinal microbiome dysbiosis and has been implicated in the pathogenesis of IBD<sup>7</sup>. Therapeutic diets exist for IBD, and while

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each one is unique in its approach, all have certain underlying principles in common as they seek to eliminate nutrients connected to dysbiosis.

Exclusive enteral nutrition is known as an effective first-line therapy for pediatric Crohn's disease, however, universal adult IBD recommendations remain lacking. Recently, the American Gastroenterology Association cited the <u>Crohn's Disease Exclusion Diet (CDED)</u> and partial enteral nutrition (PEN) as an adjunct therapy in active Crohn's disease.<sup>3</sup> Pilot trials utilizing the Crohn's Disease Exclusion Diet (CDED) have been shown to induce remission in both pediatric<sup>8,9</sup> and adult populations.<sup>10,11</sup>

The Crohn's Disease Exclusion Diet is a whole foods diet designed to limit foods that may adversely alter the intestinal microbiome, intestinal immunity, and intestinal barrier function. The inclusion and exclusion criteria of the Crohn's Disease Exclusion Diet are challenging to manage and may increase risks of weight loss, malnutrition, and micronutrient deficiency. Furthermore, the Crohn's Disease Exclusion Diet is neither replete in calcium nor vitamin D. As such, the inherent risks associated with this restrictive diet indicate the necessity of a consultation to a Registered Dietitian.

## **Evidence-based therapeutic diets** for active IBD include:

- Exclusive Enteral Nutrition (EEN)
- Partial Enteral Nutrition (PEN)
- Crohn's Disease Exclusion Diet (CDED)

#### Therapeutic diets with limited evidence in active IBD:

- IBD Anti-Inflammatory Diet (IBD-AID)
- Specific Carbohydrate Diet
- Auto-Immune Protocol

It is important to note that diet therapy in IBD is not a one-size fits all approach. Related to complexities within microbial and genetic diversity, IBD phenotype and individual health conditions, all dietary options should be explored between the individual living with IBD and a Registered Dietitian.

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## PROVIDER RESOURCES

## **Advice Options**

Non-urgent advice is available to support family physicians.

- Gastroenterology electronic advice is available across the province via Alberta Netcare eReferral and
  eConsult (responses are received within five calendar days). View <u>Netcare eReferral</u> for more information.
- Non-urgent telephone advice connects family physicians and specialists in real time via a tele-advice line.
   Family physicians can request non-urgent advice from a gastroenterologist:
  - In the Calgary Zone at <u>specialistlink.ca</u> or by calling 403-910-2551. This service is available from 8:00 a.m. to 5:00 p.m. Monday to Friday (excluding statutory holidays). Calls are returned within one (1) hour.
  - In the Edmonton and North Zones by calling 1-844-633-2263 or visiting penconnectmd.com. This service is available from 9:00 a.m. to 6:00 p.m. Monday to Thursday and from 9:00 a.m. to 4:00 p.m. Friday (excluding statutory holidays and Christmas break). Calls are returned within two (2) business days.

Description	Website
Refer to a Registered Dietitian	<ul> <li>Visit <u>Alberta Referral Directory</u> and search for nutrition counselling</li> <li>To learn more about programs and services offered by zone, visit <u>ahs.ca/Nutrition</u>.</li> </ul>
Crohn's and Colitis Canada	www.crohnsandcolitis.ca
GI Society - Canadian Society of Intestinal Research	www.badgut.org
Canadian Digestive Health Foundation	www.cdhf.ca
Nutritional Therapy for IBD	www.nutritionaltherapyforibd.org

# **PATIENT RESOURCES**

Description	Website
MyHealth Alberta Resources  Lifelong health management  Eating Well  Diet for IBD	<ul> <li>myhealth.alberta.ca/ibd/lifelong-health-management</li> <li>myhealth.alberta.ca/ibd/lifelong-health-management#eating-well</li> <li>myhealth.alberta.ca/health/AfterCareInformation/pages/conditions.aspx?Hwld=abk7230#abs8120</li> </ul>
Alberta Health Services Resources     My IBD Diet Plate     Nutrition Education Materials     Nutrition Workshops and Classes	<ul> <li>ahs.ca/assets/info/nutrition/if-nfs-my-ibd-diet-plate.pdf</li> <li>ahs.ca/NutritionHandouts</li> <li>ahs.ca/NutritionWorkshops</li> </ul>
Resources from Crohn's and Colitis Canada	crohnsandcolitis.ca/Support-for-You/Information-and- Resources-Hub
Ask a dietitian a nutrition question	Complete a self-referral at <u>ahs.ca/811</u> or call 811 and ask to talk to a dietitian.
Patient Pathway: My IBD Diet	ahs.ca/assets/info/aph/if-aph-scn-dh-ibd-nutrition-patient- pathway.pdf

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## **BACKGROUND**

## About this pathway

- Digestive health primary care pathways were originally developed in 2015 as part of the Calgary Zone's
  Specialist LINK initiative. They were co-developed by the Department of Gastroenterology and the Calgary
  Zone's specialty integration group, which includes medical leadership and staff from Calgary and area Primary
  Care Networks, the Department of Family Medicine and Alberta Health Services.
- The pathways were intended to provide evidence-based guidance to support primary care providers in caring for patients with common digestive health conditions within the medical home.
- Based on the successful adoption of the primary care pathways within the Calgary Zone, and their impact on timely access to quality care, in 2017 the Digestive Health Strategic Clinical Network (DHSCN) led an initiative to validate the applicability of the pathways for Alberta and to spread availability and foster adoption of the pathways across the province.

#### Authors and conflict of interest declaration

This pathway was reviewed and revised under the auspices of DHSCN in 2024, by a multi-disciplinary team. Names of participating reviewers and their conflict of interest declarations are available on request.

## Pathway review process, timelines

Primary care pathways undergo scheduled review every two to three years, or earlier if there is a clinically
significant change in knowledge or practice. The next scheduled review is 2027. However, we welcome feedback
at any time. Please email comments to <u>Digestivehealth.SCN@ahs.ca</u>.

# **Copyright information**

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## **Disclaimer**

This pathway represents evidence-based best practice but does not override the individual responsibility of healthcare professionals to make decisions appropriate to their patients using their own clinical judgment given their patients' specific clinical conditions, in consultation with patients/alternate decision makers. The pathway is not a substitute for clinical judgment or advice of a qualified health care professional. It is expected that all users will seek advice of other appropriately qualified and regulated health care providers with any issues transcending their specific knowledge, scope of regulated practice or professional competence.

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