Nutrition and IBD: Common Practice Questions

The purpose of this point of care reference (POCR) is to provide evidence-based answers to common nutrition questions designed to support health professionals providing care to patients with inflammatory bowel disease (IBD).

Background

This resource was developed by the Digestive Health Nutrition Practice Working Group in collaboration with Nutrition Services, this resource reflects the latest evidence and expert consensus.

Frequently Asked Questions about Inflammatory Bowel Disease

Note: For the purposes of this POCR, the single term patient will be used to refer to clients, patients, and residents.

For information on inflammatory bowel disease for patients and providers, visit ahs.ca/IBD

For questions or further information, contact: Nutrition_Resources@ahs.ca

What is the top nutrition concern in IBD?

Malnutrition is the leading nutrition concern in IBD.

It's estimated that 20–85% of individuals with IBD experience malnutrition.[1] Malnutrition arises from an imbalance between nutrient intake and the body's requirements. Over time, this imbalance can lead to:

- Muscle loss and weakness
- Impaired immune function
- Reduced capacity for recovery
- Cognitive changes[2]

Importantly, malnutrition can occur during both active disease and remission, contrary to common misconceptions.[3]

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Why is malnutrition in IBD a serious concern?

Malnutrition is associated with several adverse outcomes, including:

- Poor clinical outcomes
- Increased hospitalization rates
- Reduced response to medication
- Higher risk of postoperative complications
- Lower quality of life[3]

How should health professionals address this concern?

Screening for malnutrition risk is essential, starting at diagnosis and continuing regularly throughout care.[1] Recommended screening tools include:

- Adults (inpatient/outpatient): Canadian Nutrition Screening Tool (CNST)
- Pediatrics (inpatient): Pediatric Nutrition Screening Tool (PNST)[4]

What happens after a positive nutrition screen?

If a patient screens positive for malnutrition:

- Refer to a registered dietitian for a comprehensive assessment and care.
- Encourage the patient to complete a food and symptom journal before the dietitian visit to help guide the nutrition care plan.[1] Visit ahs.ca/NutritionHandouts and search "food symptom journal."

Need more guidance?

Refer to the Inflammatory Bowel Disease and Nutrition Care Pathway for Gastroenterologists for detailed recommendations and protocols.

Should patients with IBD follow a low-fibre diet?

In most cases, patients with IBD should not follow a low-fibre diet. In fact, avoiding fibre has been associated with a higher risk of active disease.[5]

Benefits of Fibre in IBD

Dietary fibre can play a key role in managing IBD by helping to:[6]

- Minimize inflammation
- Modulate the immune response
- Restore the gut microbiome
- Reduce the risk of colorectal cancer

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Fibre Recommendations

Fibre intake recommendations for individuals with IBD are the same as for the general population.[7]

Table 1. Recommended Dietary Fibre Intake (grams per day)

Age (years)	Males	Females
1–3	19	19
4–8	25	25
9–13	31	26
14–18	38	26
19–50	38	25
50+	30	21
Pregnant	-	28
Breastfeeding	-	29

Addressing Fibre Intolerance

Some patients report that fibre worsens their symptoms.[8–10] To improve tolerance:

- Cook vegetables thoroughly instead of eating them raw
- Blend leafy greens or cooked vegetables into soups
- Puree fruits into smoothies
- Steam, sauté, or roast vegetables
- Use nut butters instead of whole nuts

Practical Guidance

Patients with IBD are encouraged to consume as much fibre as they can tolerate, gradually increasing intake to meet recommended levels.[8] If a low-fibre diet is used to reduce gastrointestinal symptoms, reassess fibre tolerance once symptoms improve. For patient resources on fibre, visit: ahs.ca/NutritionHandouts.

Fibre Supplements

While fibre supplements (e.g., powders, tablets, capsules) are available, food sources are preferred for their broader nutritional benefits and lower risk of side effects.[11]

Before using fibre supplements, consider:

- Hydration: Drink plenty of fluids with fibre supplements and throughout the day to prevent constipation
- Strictures: Avoid supplements if stricturing disease is present
- Medication Interactions: Fibre can affect drug absorption. Take medications 1 hour before or 2–4 hours after fibre supplements

Common interactions include:

- Reduced effectiveness of:
  - Tricyclic antidepressants (e.g., amitriptyline, doxepin, imipramine)
  - Mood stabilizer (e.g., lithium)
  - Diabetes medications (e.g., glyburide, metformin)
  - Seizure medication (e.g., carbamazepine)
  - Heart medication (e.g., digoxin)
- Enhanced effects of:
  - Bile acid sequestrants (e.g., cholestyramine, colestipol)

For more on supplement interactions, consult Natural Medicines or your pharmacy team.

What diet is recommended for IBD in remission and active disease?

The American Gastroenterological Association (AGA) recommends the Mediterranean diet for individuals with IBD, both in remission and during active disease, due to its benefits for overall health and disease management.[12]

Key components of the Mediterranean diet include:

- A variety of fruits and vegetables
- Monounsaturated fats (e.g., olive oil)
- Whole grains and legumes
- Lean proteins (e.g., fish, poultry)
- Limited intake of processed foods, added sugars, and salt

Benefits of the Mediterranean diet in IBD:[13]

- Reduced intestinal inflammation
- Improved disease activity and symptom control
- Enhanced quality of life
- High adherence and minimal adverse effects

For more information, visit ahs.ca/NutritionHandouts and search “IBD” or “Mediterranean diet.”

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Diet Modifications During Active Disease

Patients are encouraged to continue the Mediterranean diet during flares, with texture modifications to ease digestion and reduce discomfort. Refer to Table 2 below for guidance.

Table 2. Food Modifications Based on IBD Disease Stage[13]

Food Group	Remission	Active disease	History of Stricturing Disease
Fruit	No restrictions; individual tolerance	Remove skin/peel, blend, cook, or stew; limit dried fruit, coconut, pineapple, prunes	Follow active disease guidelines
Vegetables	No restrictions; individual tolerance	Cooked, peeled, blended; limit gas-producing vegetables	Follow active disease guidelines. Avoid skins, seeds, and raw salads
Whole grains and starches	Whole grains encouraged; cook-cool-reheat for resistant starch	Include soluble fibre (e.g., oats, barley); limit wheat bran, whole wheat flour	Avoid insoluble fibre, popcorn, wild rice
Nuts and seeds	No restrictions; individual tolerance	Use nut/seed butters without added sugar, salt, or fat	Follow active disease guidelines
Legumes	No restrictions; individual tolerance	Choose lentils, split peas, tempeh, tofu	Use mashed/pureed beans (e.g., hummus, tofu)
Dairy	Individual tolerance	Lower lactose, lactose-free, or fermented options may be better tolerated	No restrictions
Protein	No restrictions; individual tolerance	Choose fish, skinless poultry, eggs; limit red meat	Use fork-tender meats; avoid tough cuts unless stewed

Special Diets For Active Crohn's Disease

For patients with active Crohn's disease, the following evidence-based dietary strategies may help induce remission:

- Exclusive enteral nutrition (EEN): A 100% liquid formula diet, with no solid food or beverages except water.[14]
- Crohn's disease exclusion diet (CDED): A structured, three-phased diet that may be combined with partial enteral nutrition. It aims to reduce exposure to foods that negatively affect the gut microbiome.[12,15]

While many patients explore various anti-inflammatory diets, not all have strong supporting evidence. Nutrition therapy in IBD should be individualized and evidence-based. A referral to a registered dietitian is recommended when considering any elimination or therapeutic diet.

For more resources, visit ahs.ca/NutritionHandouts and search "IBD."

Which key nutrients should be monitored in IBD?

Micronutrient deficiencies are common in IBD, even among patients in remission or those who appear well-nourished. Over 50% of individuals with IBD have at least one vitamin or mineral deficiency.[3] Routine assessment of nutritional status is essential, especially in the presence of symptoms, surgical history, or medication use that may increase risk.

Refer to Table 3 for a summary of potential micronutrient deficiencies and evidence-based supplementation strategies.

Consult a registered dietitian for individualized assessment and management.

Table 3. Micronutrient Deficiencies and Supplementation in IBD[3]

Clinical Feature	Micronutrients of Concern	Recommendations
General health in IBD	Calcium, vitamin D, iron	• Prioritize dietary calcium; limit supplementation to less than 1000 mg/day. • Vitamin D: 1000 units/day from supplement. • Iron: screen complete blood count (CBC), ferritin, and C-reactive protein (CRP) at diagnosis, every 3 months in active disease, and every 6–12 months in remission.[1]
Anemia	Iron, vitamin B_{12}, folate	• Identify the cause of anemia. Follow iron-deficiency guidelines. Consider IV iron in active disease.
Low bone mineral density	Vitamin D, calcium, vitamin K, magnesium	• Calcium: 1000–1500 mg/day from food and supplements. • Vitamin D: 1000 units/day from supplement. • Regularly scheduled dual-energy X-ray absorptiometry (DEXA) scans.
Neurologic symptoms	Vitamin B_{12}, vitamin E	• Supplementation based on micronutrient testing
Cardiovascular disease	Selenium	• Supplement if deficient.

Clinical Feature	Micronutrients of Concern	Recommendations
Active diarrhea/high output ostomy	Electrolytes, zinc, magnesium	• Monitor and replace electrolytes as needed. • Short-term zinc/magnesium supplementation (less than 10 days); assess urine magnesium if persistent.
Draining fistula	Vitamin A, vitamin C, zinc, magnesium	• Short-term supplementation (less than 10 days). • Caution, zinc supplementation can result in copper/iron deficiency.
Recent surgery/wound healing	Vitamin A, vitamin C, zinc	• Short-term supplementation (less than 10 days).
Steatorrhea/malabsorption	Vitamins A, D, E, and K	• Use a complete multivitamin. Address the underlying cause of steatorrhea.
Ileal resection	Vitamin B_1, B_{12}, A, D, E, K, folate	• Lifelong B-complex. • Vitamin B_{12}: intramuscular or sublingual; aim for serum above 400 pg/mL.
Low fibre diet	Vitamin C	• Supplement 250–500 mg/day until diet improves.
Gluten free diet	B vitamins, vitamin D, zinc, iron, folate	• Consider a multivitamin or B complex.
Total parenteral nutrition (TPN)	Selenium, chromium, copper, manganese	• Include in TPN formulation.

Table 4. Medication-Related Micronutrient Considerations

Medication	Micronutrient Affected	Recommendation
Methotrexate	Folate	Supplement 1 mg/day
Sulfasalazine	Folate	Supplement 1 mg/day
Corticosteroids	Vitamins A, D, B_6, calcium	Supplement calcium and vitamin D with prolonged use
Isoniazid	Vitamin B_6	Supplement 50–100 mg/day or use B-complex
Cholestyramine	Vitamin A, D, E, K	Avoid taking with meals or supplements

How can I refer to a registered dietitian?

- Visit the Alberta Referral Directory and search for nutrition counselling.
- Health Link has registered dietitians available to answer nutrition questions. If a patient has a nutrition question, they can complete a self-referral at ahs.ca/811 or call 811 and ask to talk to a dietitian.
- To learn more about programs and services offered in your zone, visit ahs.ca/Nutrition
  - Workshops and classes can be found at ahs.ca/NutritionWorkshops
  - Patient handouts on nutrition are available at ahs.ca/NutritionHandouts

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