

Nutrition and IBD

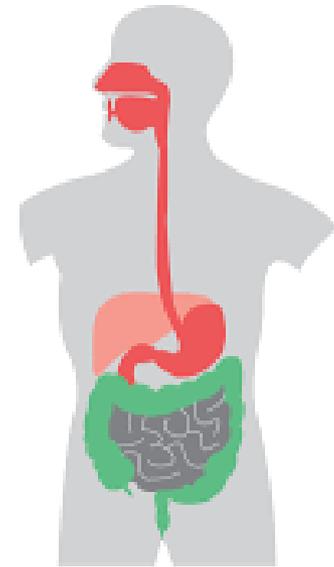
Presented by

Hannah Price, paediatric dietitian at RHH

Hannah.price@ths.tas.gov.au

Lauren Farquhar, adult dietitian at RHH

Lauren.farquhar@ths.tas.gov.au



Microbiota and IBD

- The human intestinal microbiome is composed of a diverse group of microorganisms colonising the gastrointestinal tract
- IBD is associated with alterations in the composition of the intestinal microbiota generally characterised by decreased diversity
- Patients with active IBD have different microbial composition compared to patients in remission
- Dietary composition was shown to affect the microbiota balance, therefore, it is conceivable that altering the diet can impact the inflammatory response

Nutritional Status and IBD

- Need to ensure adequate growth in children and weight maintenance in adults
- When in active disease malabsorption can occur due to the inflammation
 - Malnutrition
 - Micronutrient deficiencies
- Symptom management
 - Poor appetite and intake due to pain and change in bowel habits
- Increased requirements due to inflammation
- Unnecessary food restrictions, particularly those prior to diagnosis and difficulty reintroducing given history
- Drug induced malabsorption (steroids decreases calcium absorption)

Crohn's - Treatment During an Exacerbation

Paediatrics

- Exclusive Enteral Nutrition (EEN) often first choice
- Enables gut rest and also provides adequate nutrition to improve growth
- Generally for 6-8 weeks
- Use polymeric feeds as more palatable, may require nasogastric feeds if unable to take orally
- Reintroduction starts with plain low fibre, low lactose foods and upgrades to normal diet within a few weeks whilst titrating down nutritional supplement drinks
- May still continue on some nutritional supplement drinks along with diet to help ensure adequate energy and nutrient intake

Crohn's - Treatment During an Exacerbation

Adults

- The use of EEN in adults is not routine. However there is emerging evidence suggesting it can be as effective as corticosteroid therapy.
 - New diagnosis, ileal involvement
 - Poor compliance in older studies with less palatable feeds
- The future of EEN in the adult population may be set to change! Working group established June 2018.
- During an exacerbation dietary management currently involves adopting a low fibre or low residue diet (limited fruit and vegetables, white bread and pasta, no nuts and seeds)
- The length of dietary change is usually indicated by symptom resolution
- It is then encouraged to increase fibre back to normal amount when feeling well

Ulcerative Colitis - Treatment During an Exacerbation

- Limited evidence as to the role of diet in the management of UC
- In adults a low fibre diet may be recommended to provide symptom relief
- Encouraged to monitor for trigger foods but not overly restrict
- The use of probiotics, particularly *E. Coli* Nissle 1917, *Lactobacillus* GG, Probio-Tec AB-25 and a multi-strain probiotic called VSL no. 3 may be effective in maintaining remission
- Future studies need to focus on the effects of different probiotic strains and different dosages to determine which patients would benefit from probiotic treatment
- Enteral nutrition does not have a primary therapeutic option in UC but can be used for nutrition support

EEN, Supplementary EN and Surgery

- The use of supplementary or partial EN in combination with whole foods may have the potential to induce and maintain remission
- Partial EN has shown to be effective in preventing postoperative recurrence of CD
- The use of EEN >4 weeks prior to surgery could reduce the need for surgical resections
 - Reduce poor surgical outcomes
 - Significant reduction in recurrence rates after resection
 - Lower rates of stoma creation
 - Decrease in urgent operation requirement
 - Reduce the need for immune suppression

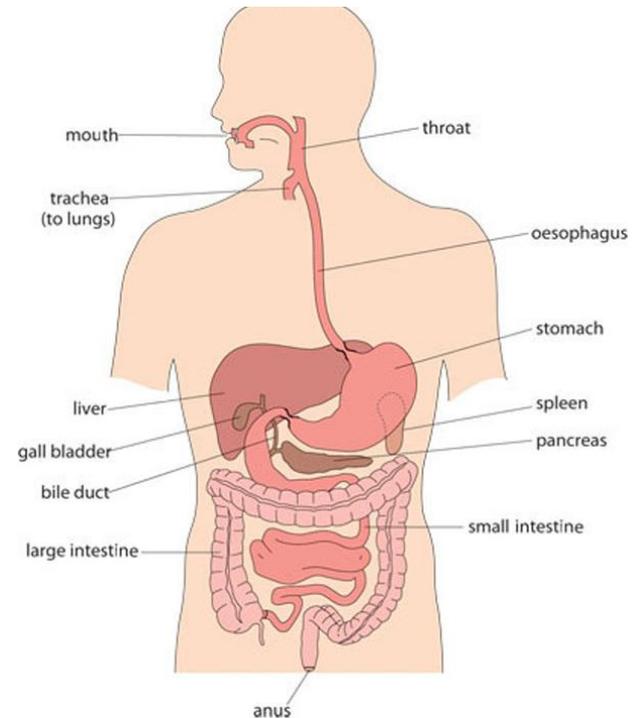
Diet after resections

UC – colostomy

- Majority of bowel function maintained
- Fluid is important
- Can manipulate diet according to output

CD – ileostomy / short gut

- Nutritional implications different depending on how much GIT is left and where the resection occurred
- Ileal resections require the most nutritional intervention
- Particularly B12, electrolytes and fluid
- Can manipulate diet according to output



FODMAPS

- **F**ermentable **O**ligosaccharides, **D**isaccharides, **M**onosaccharides **A**nd **P**olyols
- A low FODMAP diet is commonly used to help manage the symptoms of IBS
- Research suggests that it may also be useful with symptom management in IBD
- In patients with CD, a low FODMAP diet did not reduce the total amount of gut bacteria, but did change the types of bacteria present
- A low FODMAP diet may help alleviate symptoms when no active disease is present, unsure if there is any impact on inducing or maintaining remission

Where to get more info

- See a dietitian
 - Ask for a referral from your gastroenterologist, GP or paediatrician
 - Can be seen at RHH or privately
 - Dietitians Association of Australia lists Accredited Practising Dietitians
 - <https://daa.asn.au>
 - Email us lauren.farquhar@ths.tas.gov.au or hannah.price@ths.tas.gov.au
- Useful websites and resources
 - <https://www.crohnsandcolitis.com.au>
 - <https://www.crohnsandcolitis.org.uk>
 - <https://www.monashfodmap.com>

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