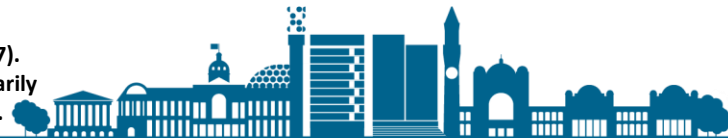




Optimisation before Crohn's surgery using Exclusive Enteral Nutrition

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Exeter CRG Jan 2024



Evidence supporting pre-op Exclusive Enteral Nutrition in adults



Multiple small studies; mostly single centre & retrospective

EEN Systematic review

- Improve **albumin** levels, reduce **CRP**
- Reduce **complication** rates
- Reduce **stoma** rates

Possibly

- Allow time to wean off steroids
- Improve nutritional status
- Allow time to stop smoking

Shariff S et al Nutrients. 2021 Dec 8;13(12)

Gordon-Dixon A et al A systematic review. Clin Nutr ESPEN. 2021 Dec;46:99-105



Optimisation before Crohn's surgery using Exclusive enteral Nutrition (OCEaN) Trial Schema and Flowchart



Population

Adult patients having elective surgery for luminal small bowel and/or colonic Crohn's Disease (CD) – including primary or re-do surgery - identified as potentially eligible for trial during acute hospital admission, MDT discussion or outpatient clinic.

as in-depth
both arms.

Dual Primary outcomes at 6 weeks post operation:

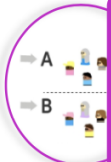
Patient reported Crohn's Life Impact Questionnaire (CLIQ) - assessing the impact of Crohn's disease on the patient
Comprehensive Complication Index (CCI) - a measure of post-operative complications



Consent



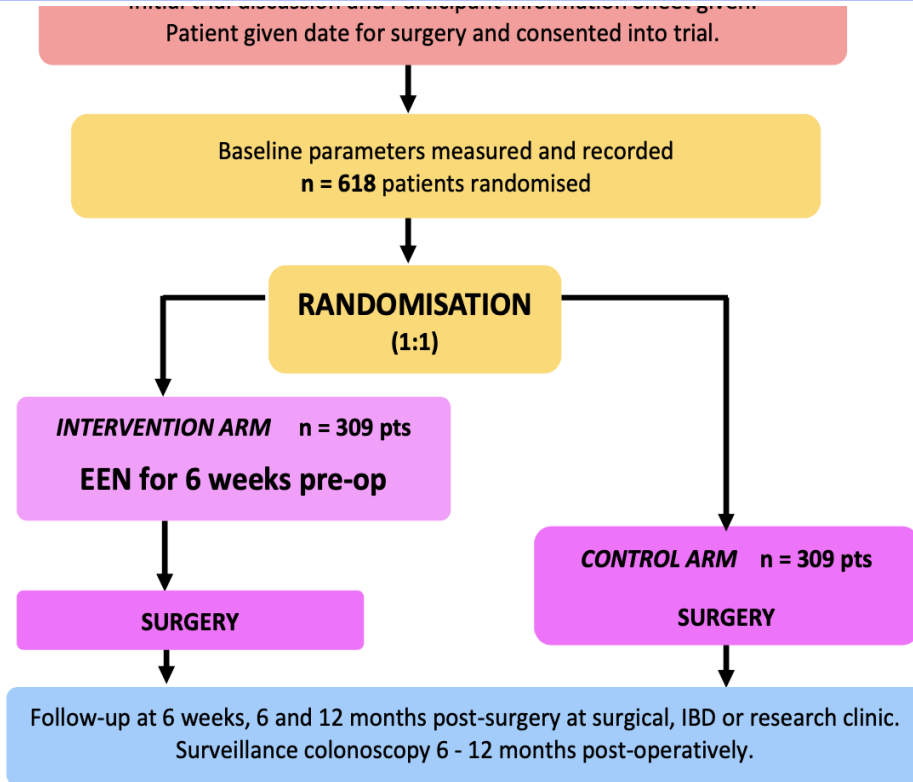
Randomisation



Treatment Allocation



Follow-up



Internal pilot with embedded qualitative evaluation of EEN as a pre-surgical optimisation strategy to reduce the need for surgery and improve the understanding of the comparative experience of pre- and post-operative outcomes.

Will also assess:

- LOS
- Proportion avoiding surgery
- EEN Compliance
- Cost Effectiveness
- Disease recurrence rates
- Qualitative outcomes



Optimisation before Crohn's surgery using Exclusive Enteral Nutrition



Inclusion criteria:

- “ Any patient undergoing planned surgery for small bowel and/or colonic CD (primary or repeat surgery)
- “ Age ≥ 16 years
- “ Willingness to go on EEN for the duration of the intervention period (minimum of 6 weeks)
- “ Capacity to give informed consent

Exclusion criteria

- “ Surgery for peri-anal CD, ulcerative colitis, or indeterminate colitis
- “ Patients who require parenteral nutrition in the 6 weeks prior to surgery
- “ Inability to comply with the trial schedule or follow up





1. I avoid eating large meals. <i>Tick one</i>	<input type="radio"/> True	<input type="radio"/> Not True
2. I worry about where the nearest toilet is. <i>Tick one</i>	<input type="radio"/> True	<input type="radio"/> Not True
3. I need a lot of time to do things in the morning. <i>Tick one</i>	<input type="radio"/> True	<input type="radio"/> Not True
4. I find it hard to manage. <i>Tick one</i>	<input type="radio"/> True	<input type="radio"/> Not True
5. There is not much fun in my life. <i>Tick one</i>	<input type="radio"/> True	<input type="radio"/> Not True
6. I have lost interest in sex. <i>Tick one</i>	<input type="radio"/> True	<input type="radio"/> Not True
7. I often feel lonely. <i>Tick one</i>	<input type="radio"/> True	<input type="radio"/> Not True
8. It affects my image of myself. <i>Tick one</i>	<input type="radio"/> True	<input type="radio"/> Not True
9. I am unable to enjoy my food. <i>Tick one</i>	<input type="radio"/> True	<input type="radio"/> Not True
10. I don't like to sleep away from home. <i>Tick one</i>	<input type="radio"/> True	<input type="radio"/> Not True
11. I rarely wake up feeling refreshed. <i>Tick one</i>	<input type="radio"/> True	<input type="radio"/> Not True
12. I have no sense of humour. <i>Tick one</i>	<input type="radio"/> True	<input type="radio"/> Not True
13. I am conscious of my appearance. <i>Tick one</i>	<input type="radio"/> True	<input type="radio"/> Not True
14. I feel vulnerable to other illnesses. <i>Tick one</i>	<input type="radio"/> True	<input type="radio"/> Not True
15. My condition is always in the back of my mind. <i>Tick one</i>	<input type="radio"/> True	<input type="radio"/> Not True
16. I feel dependent on others. <i>Tick one</i>	<input type="radio"/> True	<input type="radio"/> Not True
17. I rarely feel clean. <i>Tick one</i>	<input type="radio"/> True	<input type="radio"/> Not True
18. I have to be careful about what I eat. <i>Tick one</i>	<input type="radio"/> True	<input type="radio"/> Not True
19. I worry about having an accident. <i>Tick one</i>	<input type="radio"/> True	<input type="radio"/> Not True
20. I am unable to go on long trips. <i>Tick one</i>	<input type="radio"/> True	<input type="radio"/> Not True
21. I am embarrassed about making smells. <i>Tick one</i>	<input type="radio"/> True	<input type="radio"/> Not True
22. I avoid looking at myself. <i>Tick one</i>	<input type="radio"/> True	<input type="radio"/> Not True
23. I worry that I neglect people close to me. <i>Tick one</i>	<input type="radio"/> True	<input type="radio"/> Not True
24. I only feel comfortable at home. <i>Tick one</i>	<input type="radio"/> True	<input type="radio"/> Not True
25. I never feel well. <i>Tick one</i>	<input type="radio"/> True	<input type="radio"/> Not True
26. I can't go out for meals. <i>Tick one</i>	<input type="radio"/> True	<input type="radio"/> Not True
27. I have low self-esteem. <i>Tick one</i>	<input type="radio"/> True	<input type="radio"/> Not True





Type of EEN: As per local and patient preference



Inflammatory Bowel Diseases, 2022, XX, 1–6
<https://doi.org/10.1093/ibd/izac039>
Advance access publication 8 March 2022
Original Research Articles - Clinical



Comparing Effectiveness of a Generic Oral Nutritional Supplement With Specialized Formula in the Treatment of Active Pediatric Crohn's Disease

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- No difference in clinical effectiveness or adherence
- There is a difference in cost...





On-line support tool



**Associate PI scheme
Keen to get as many on this as possible**

Banner authorship agreed



Advise on EEN from expert dieticians



EEN: Online support tool




futurelearn.com

FutureLearn: Online Courses and Degrees from Top Universities

Your learning - FutureLearn

What you can expect as a participant - The OCEAN trial and your EEN - King's College London

- WEEK 1 Open now
 - Getting started with EEN
 - Welcome to the course
 - Your first days using an EEN diet
 - 1.5 What you can expect as a participant Video
 - 1.6 How to get the prescription Article
 - 1.7 Other food and drink Article
 - 1.8 Patient story: Addy's experience of a liq... Video
 - The types of Exclusive Enteral Nutrition
 - The side effects of EEN diets
 - Week summary
- WEEK 2 Open now
 - Getting up to speed with EEN
- WEEK 3 Open now
 - Staying motivated
- WEEK 4 Open now
 - The final 4-6 weeks and preparing ...



[View transcript](#) [Download video: standard or HD](#)

What you can expect as a participant

0 comments

You have been randomly assigned to receive EEN.

This online support is designed to help you manage the liquid diet and communicate with others involved in the study. We understand that it can be difficult to stick to just this liquid drink for six weeks so we want to offer you as much support as we can.

In the video, Miranda Lomer and Dearbhaile O'Hanlon discuss the

[Support](#)

[Previous](#) [Mark as complete](#) [Next](#)



OCEaN qualitative study



- To help explore the **acceptability and experience of EEN as a pre-surgical intervention**

- **Interviews with patients who have consented to the trial**
 - pre-op (1-2 weeks prior to surgery)
 - follow-up (12 weeks post surgery)

- Both arms of RCT

- **Interviews with staff**





COAST

**CROHN'S &
COLITIS UK**

Crohn's Optimisation And Surgical Timing

Aim:

- Does early vs late surgery for TI disease results in improved QoL / cost-effectiveness
- To assess whether surgery improves dietary intake, diet quality, dietary diversity and food related QoL

Design:

EPIC Food Frequency Questionnaire (EPIC-FFQ) and Food Related Quality of Life (FRQoL) questionnaire at:

- Baseline
- 6 weeks after surgery
- 52 weeks after surgery





48 sites have expressed interest
13 sites in set up
5 SIVs completed

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Rachel.cooney@uhb.nhs.uk





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