evaluation of the effects of a 3-day LRD on the gut microbiome.

**Methods** Faecal samples were obtained from 5 healthy subjects. Samples were collected while participants were on their regular diets and immediately after undertaking a 3-day LRD. DNA was extracted from samples using PSP spin stool DNA plus kit (Stratagene). The concentration of extracted DNA was determined using fluorometry. PCR was carried out on extracted DNA samples and gel electrophoresis was performed to determine the integrity of amplicons. A 2 step PCR strategy was utilized to produce amplicons for DNA sequencing specific to genes encoding highly conserved bacterial 16S ribosomal RNA samples. This yielded 25 microliter aliquots with a DNA concentration of 2 ng/microliter which were sequenced on the Illumina HiSeq platform. Statistical analysis was carried out using R (v.3.5.0). Gut microbiome compositions of participants before and after a 3-day LRD were represented using relative taxa abundance plots. The gut microbiomes of participants before and after a 3-day LRD were compared using fold change analysis to identify any differentially increasing or decreasing taxa. The gut microbiome richness of participants was determined and alpha diversity was calculated using Shannon diversity index. The beta diversity of the gut microbiomes of participants was determined using weighted unifrac distance matrix and plotted two-dimensionally using non-metric distance scaling (NMDS).

**Results** After a 3-day LRD, there were no significant taxa abundance changes that were consistent between subjects (figure 1). A 3-day LRD did not have a significant effect on the richness and alpha diversity of the gut microbiomes of subjects. A 3-day LRD did not have a significant effect on the beta diversity of the gut microbiomes of subjects (p = 0.981).

**Conclusions** A 3-day LRD did not have a significant effect on the gut microbiomes of participants. Combined with literature showing that laxatives have no long-lasting effects on the gut microbiome, our study shows that the bowel preparation regimen has no significant effects on the gut microbiome.

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**Abstract P274 Figure 1**

**P275 ANALYSIS OF EXCLUSIVE ENTERAL NUTRITION FORMULAS IN CROHN’S DISEASE – NEW INSIGHTS INTO DIETARY TRIGGERS**

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**Introduction/Background** Exclusive enteral nutrition (EEN) is an effective treatment for Crohn’s disease (CD).

**Aims** We hypothesised that ingredients of EEN formulas are less likely to initiate a disease flare and their dietary elimination is not essential for disease amelioration.

**Methods** We performed compositional analysis of EEN formulas with evidence of efficacy in management of active Crohn’s disease. Macronutrient content was compared against the dietary reference values (DRV), the UK National Diet and Nutrition Survey (NDNS), and intake of Crohn’s disease children. Food additives were cross-referenced against the FAO/WHO database.

**Results** 61 formulas were identified with variable composition (carbohydrates [22.8–89.3%], protein [7.8–30.1%], fat [0–52.5%]). Maltodextrin, milk protein and vegetable/plant oils were the commonest macronutrient sources. Their n-6:n-3 fatty acid ratio varied from 0.25–46.5. 56 food additives were identified (median per formula: 11). All formulas were lactose, gluten-free and 82% lacked fibre. The commonest food additives were emulsifiers, stabilisers, antioxidants, acidity regulators, and thickeners, figure 1. Food additives, implicated in Crohn’s disease aetiology, were present in formulas [modified starches (100%), carrageenan (22%), carboxymethyl cellulose (14%) and polysorbate 80 (5%)], figure 1. Remission rates did not differ between EEN formulas with and without those food additives. Analysis including only formulas from RCTs retained in the latest Cochrane meta-analysis produced similar findings. EEN formulas contained less energy from saturated fat than NDNS intake. Crohn’s disease children consumed more sugars, total/saturated fat than the EEN content.

**Conclusions** We have identified food ingredients which are less likely to trigger Crohn’s disease activity. We hereby challenge current perceptions surrounding the role of these ingredients in Crohn’s disease management.
Introduction BSG guideline on enteral feeding for adult hospital patients recommends that beds should be inclined at 30 degree or more whilst NG feeding is going through. This was believed to play an important role to reduce the rate of aspiration among NG-fed patients.

Methods Our QIP was a prospective study, comprising of 75 events of NG feeding data involving 15–16 stroke patients each cycle (of 3 cycles) collected over a span of 12 months. The primary outcome reviewed was the frequency of inappropriate bed inclination settings during feeding administration. We also reviewed the incidence of aspiration pneumonia among those who were fed at inappropriate bed angle. This was translated into Relative Risk (RR) and Odds Ratio (OR). In between each cycle of data collection, we implemented changes to the local system, and we monitor for improvement in the rate of aspiration among the NG-fed patient cohort.

Our objectives are to increase healthcare workers’ awareness of this BSG recommendation and to ensure that by February 2020, 100% of NG tube-fed patients are fed at bed angle >30 degrees at all times and the rate of aspiration is reduced to less than 10% among all NG-fed patients.

Results The QIP demonstrated that in 8 out of 75 NG feeding events, patients’ beds were not inclined satisfactorily. 6 people developed aspiration pneumonia, of which 3 were not inclined at appropriate angle. This equate to RR and OR to develop aspiration of 6.6 and 12.2 respectively among those who were fed at inappropriate bed inclination.

The incidence of inappropriate bed inclination was 16.7% in cycle 1. This was reduced to 9.1% in cycle 2 and 8% in cycle 3. The rate of aspiration was 13.3% in cycle 1. This was reduced to 6.1% in cycle 2 and <5% in cycle 3.