

# Dietary patterns in Inflammatory Bowel Disease- intolerances, quality of life and calcium/ vitamin D intake

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## Introduction

Food intolerances and food avoidance are common in inflammatory bowel disease (IBD). This cross-sectional study explored the prevalence of food intolerance patterns in IBD and assessed the food related quality of life (FR-QoL) and vitamin D and calcium intake in IBD patients.

## Methods:

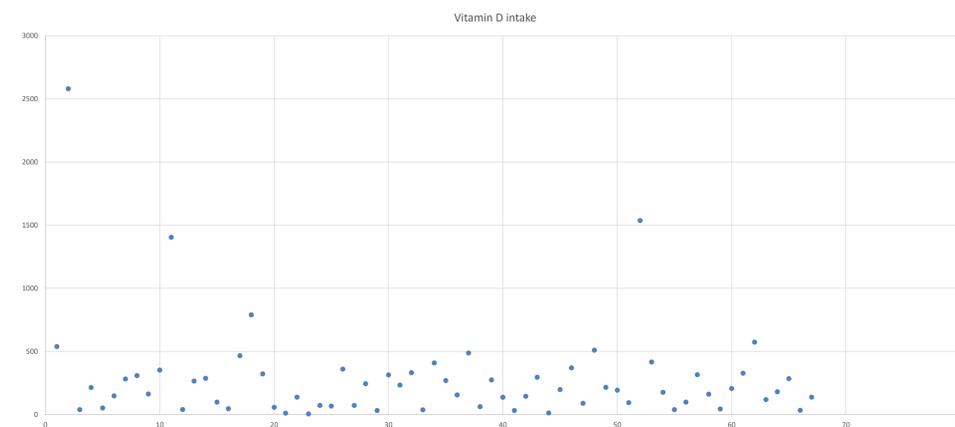
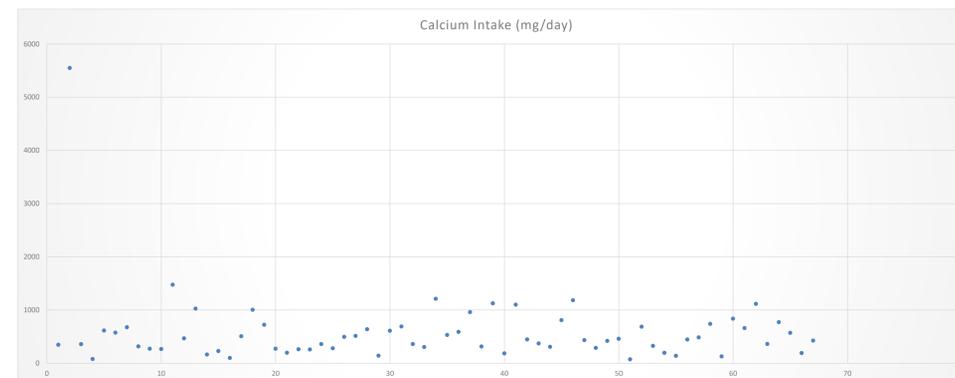
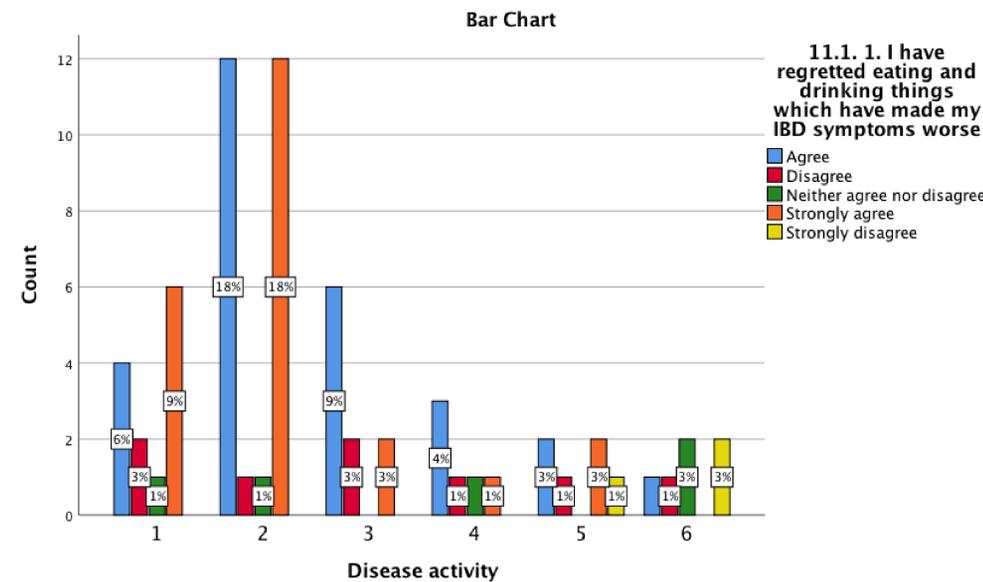
An online questionnaire with detailed questions relating to food groups commonly avoided, food related quality of life tool and calcium and vitamin D intake was displayed on the Crohn's and Colitis UK website.

Disease activity was assessed by the Minnesota IBD activity index. FR-QoL was assessed by a validated questionnaire (FR-QoL-29) which comprises of 29 statements encompassing different psychosocial aspects surrounding food and eating from an IBD symptoms perspective. Details of the type of IBD, duration of disease, previous surgery and disease activity were collected.



## References:

- Hughes, L. D., King, L., Morgan, M., Ayis, S., Direkze, N., Lomer, M. C., Whelan, K. (2015). Food-related quality of life in inflammatory bowel disease: development and validation of a questionnaire. *Journal of Crohn's and Colitis*, 10(2), 194-201.
- Ulitsky, A., Ananthakrishnan, A. N., Naik, A., Skaros, S., Zadvornova, Y., Binion, D. G., & Issa, M. (2011). Vitamin D deficiency in patients with inflammatory bowel disease: association with disease activity and quality of life. *Journal of Parenteral and Enteral Nutrition*, 35(3), 308-316.



## Results:

67 respondents (40 Crohn's, 23 ulcerative colitis, 2 unclassified and 2 microscopic colitis) participated in the survey. Food avoidance was seen in 65 (97%) patients, with mean number of foods avoided at 6. Vegetables were avoided in 60% of the patients, followed by wheat-based products in 56% of patients. 82% of patients reported that their IBD was active. Food related quality of life was poor in inflammatory bowel disease patients and disease activity significantly correlated with 16 out of the 29 statements. 60% reported that food has association with disease activity. 89% were apprehensive of eating a particular food with the fear that it might trigger their IBD symptoms. Calcium and vitamin D intake from the diet was low, with a mean of 581.8mg/day (recommended intake 1000mg/day) and 282.9 IU/day (recommended intake 400 IU/day) respectively. 55% of patients with low calcium intake and 57% of those with a low vitamin D intake were not on supplements.

**Conclusions:** This study highlights the high prevalence of food intolerances in the IBD community, resulting in high rate of food restrictions and less intake of foods rich in calcium and vitamin D. FR-QoL in IBD was poor. Food avoidances in IBD pose an important risk factor for poor nutrition, and majority of patients experience a low food related quality of life. Proactive assessment of food intolerances, FR-QoL and dietary intake of calcium and vitamin D is essential to identify and rectify underlying insufficiencies.