## V. Literature Review

The objective of the literature review was to collect information on IBD patient perceptions of symptom management and relief through dietary intake, non-standard of care, standard of care, and overall QOL.

### Methods

A thorough literature review of Medline database (PubMed) and Google Scholar were searched between January 2024 and June 2024 to find all related studies written in English that pertain to adult IBD patients, interventions used by the patient, and patient perceived outcomes in symptom management. The quality of studies was assessed and evaluated using the Academy of Nutrition and Dietetics Evidence Analysis Library® Quality Criteria Checklist for Primary Research.

Inclusion criteria include studies with adults over the age of 18 with a diagnosis of IBD who have self-reported on patient perceptions and actions regarding treatment intervention (either standard treatment or non-standard treatment), patient self-prescribed treatment interventions and patient reported symptom outcomes. Exclusion criteria include studies that did not report patient perspectives and outcomes, studies on pediatric (<18 years) IBD patients, and studies published in non-English languages.

### Search Results

The search identified sixteen studies that explored the correlation between patient perception on IBD symptom management and dietary intake, non-standard of care, standard of care, and overall QOL. Most studies found were cross-sectional (11/16). Additionally, two systematic review studies, one case-control study, and 2 review papers were also found.

**Studies Included in Literature Review**

Seven of these studies met inclusion criteria and were included in the literature review. All studies included are cross-sectional studies. Two studies occurred in Southern Italy,[22,23] one in Italy,[24] two in the United Kingdom,[25,26] one in Poland,[27] and one study was an online survey that included IBD patients from over 13 countries.[28] Five studies included received a positive rating after QCC review using the Academy of Nutrition and Dietetics Evidence Analysis Library® Quality Criteria Checklist for Primary Research.[22,23,24,25,27] Two studies received a negative rating.[26,28] One study received a negative rating due to inconsistent data results and percentages (i.e. percentages for both "Disease Type" and "Gender" went over 100%).[26] Additionally, study authors included surveys that were incomplete and/or received "no response" on survey questions.[26] The other study received a negative rating due to the absence of statistical analysis methods used.[28]

**Review**

Studies included in the systematic literature review show there is a correlation between symptom management and overall QOL. Additionally, these studies suggest that IBD patients modify their diet, lifestyle, and avoid self-perceived "trigger" foods in an attempt to manage or "control" IBD symptoms. Notably, many IBD patients report they believe diet was the main cause of their IBD development.[22,27] Interestingly, IBD patients also report their belief that dietary intake is more important and effective than pharmacotherapy in managing symptoms.[23,27] Lastly, IBD patients reported they want to receive more nutritional advice/information.[23,26]

Despite these studies suggesting there is a correlation between symptom management and overall QOL, there is still a significant gap in current scientific literature that explores the association between standard treatment versus non-standard of treatment in overall symptom

management and QOL. This study poses to answer this question by collecting IBD patient perceptions to better understand *what* IBD patients are doing for symptom management and *why* they chose either standard treatment or non-standard treatment.

# Evidence Summary Table

| | Was all data self-report? Chart Review? | | | were they all official Dx? | Add column for Main Outcome or DVs to be able to compare with what you are doing | | | |
|---|---|---|---|---|---|---|---|---|
| **First Author** | **Study Design** | **Study Size** | **Location** | **IBD Diagnosis** | **Age Range/ Mean Age** | **Gender** | **Key Findings** | **Quality Rating** |
| Guida L (2021) [22] | Cross-Sectional Study (Interview) | 167 | Southern Italy | CD: 86 (51.5%)<br>UC: 81 (48.5%) | 18-77 years<br>48.6 ± 16 | Male: 96 (57.5%)<br>Female: 71 (42.5%) | 40.7% believed diet was main cause of disease; 80% avoided "trigger" foods; 25% used nutritional supplements; 39.8%-53.6% reduced social activities. | (+) |
| Palamenghi L (2024) [24] | Cross-Sectional Study (Online Survey) | 890 | Italy | CD: 445 (50%)<br>UC: 445 (50%) | 18-85 years<br>47 ± 14 | Male: 355 (39.9%)<br>Female: 535 (60.1%) | Food Choice Questionnare revealed that participants choose to consume certain foods because 78% believed helps control symptoms, 73% believe "it's healthy," 59% because "it's pleasant," and 58% because "it's natural." Food-Related Quality of Life revealed "health-conscious" and "balanced" groups had higher food QOL. | (+) |
| Godala M (2023) [27] | Cross-Sectional Study (Interview) | 82 | Poland | CD: 48 (58.5%)<br>UC: 34 (41.5%) | <20->60 years<br>38.1 ± 11.6 | Male: 40 (48.8%)<br>Female: 42 (51.2%) | 75.6% modified diet after IBD diagnosis; 32.9% believed diet initiated disease; 85.4% believed diet may be trigger for IBD relapse; 14.6% believed dietary habits as/or more important than pharmacotherapy in disease management; 53.7% followed specific diets; 81.7% followed food restrictions in an attempt to prevent relapse. | (+) |
| | Cross-Sectional Study (2 Online Surveys) | 302 Quality of Life (QOL) Survey;<br>502 (Treatment Experience Survey) | Various | QOL Survey:<br>CD: 177 (59%)<br>UC: 125 (41%)<br>Treatment Experience Survey:<br>CD: 296 (59%)<br>UC: 206 (41%) | 19 ->60 years | QOL Survey:<br>Male: 74 (24.5%)<br>Female: 228 (75.5%)<br>Treatment Experience Survey:<br>Male: 117 (23.3%)<br>Female: 385 (76.7%) | ≥50% report IBD symptoms impact most aspects of daily life; ~42.5% report symptoms negatively impact relationships; ~31.5% report not dating or pursuing intimate relationship; 70% report anxiety, embarrassment, and/or depression; <25% report experiencing positive emotions. | (-) |
| Whelan K (2021) [25] | Cross-Sectional Study (Paper Questionnare) | 1,221 | United Kingdom | CD: 789 (64.6%)<br>UC: 432 (35.4%) | 39.8 ± 15.1 | Male: 593 (48.7%)<br>Female: 625 (51.3%) | 71% report avoiding food and/or beverages that exacerbate IBD symptoms; 70% report having to be more aware of food consumption; 69% report certain foods have triggered IBD symptoms; 67% report food and/or drink enjoyment has been negatively impacted by knowledge IBD symptoms may be triggered; 35% report restricted lifestyle due to altered IBD eating habits. | (+) |
| Larussa T (2019) [23] | Cross-Sectional Study (Survey) | 90 | Southern Italy | CD: 23 (25.6%)<br>UC: 67 (74.4%) | 47.2 ± 17.4 | Male: 54 (60%)<br>Female: 36 (40%) | 86% report diet quality and quantity changed after IBD diagnosis; 46% report appetite negatively affected; 37% report diet more important than medication in controlling disease behavior; 29% follow personalized diet; 26% report not eating outside the home due to fear of IBD flare; 8% report foods may trigger IBD; 0% reported alternative therapy or herbal medication use to treat IBD symptoms; 70% report wanting to receive more advice/information on diet. | (+) |
| Limdi JK (2015) [26] | Cross-Sectional Study (Survey) | 400 | Manchester, United Kingdom | CD: 156 (39%)<br>UC: 205 (51%) | 48.4 ± 16.6 | Male: 180 (45%)<br>Female: 218 (55%) | 56% report diet modification since IBD diagnosis; 68% report avoidance of certain foods; 73% report affected appetite and pleasure of food consumption; 16% report relief from consuming certain foods during disease flare-up; 60% report certain foods exacerbate disease symptoms during relapse; 31% report receiving dietary advice from registered dietitian; 67% report they would like to receive nutritional advice. | (-) |