Dietary Patterns and Self Reported Associations of Diet with Symptoms of Inflammatory Bowel Disease

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Background: There are limited data on dietary patterns among patients with inflammatory bowel disease (IBD). There are many unsubstantiated recommendations on dietary modifications for patients with IBD. We sought to describe patient-reported dietary patterns and self-reported foods that help or worsen IBD symptoms among patients with IBD.

Methods: CCFA Partners is an Internet cohort of patients with IBD. Invitations to join the cohort were sent via email to individuals listed on CCFA rosters. Respondents completed a baseline survey that included modules on disease course and dietary patterns. We used the semiquantitative food frequency questionnaire developed by the National Cancer Institute to quantify average daily consumption of red meat, fruit, leafy vegetables, other vegetables, cheese, sweetened beverages, milk, tomatoes, dessert items, potatoes, soda, beans, pizza, processed meats, ice cream, and popcorn. We used open-ended questions to illicit food items that patients believed exacerbated or ameliorated their symptoms. For the first 2000 respondents, the free text responses were grouped into categories including similar food items. We ranked the most commonly reported food groups for each disease type [Crohn?s disease (CD), ulcerative colitis (UC), UC with ileal or Koch pouch (UC-pouch), and CD with an ostomy (CD-ostomy)]. We compared dietary patterns among the groups using age, sex, and disease activity adjusted linear regression. Data were available through October 2011.

Results: The cohort included 4001 patients with CD, 2156 with UC, 206 with UC-pouch, and 362 with CD-ostomy. The most frequently reported foods that exacerbated symptoms were non-leafy vegetables and fruit across all groups (Table). The most frequently reported foods that ameliorated symptoms were also fruit and non-leafy vegetables (Table). Compared to patients with CD, those with UC reported significantly greater consumption of fruit (p<0.001), leafy vegetables (p<0.001), non-leafy vegetables (p<0.001), and beans (p=0.010) and significantly less sweetened beverages (p<0.001) and soda (p<0.001). Compared to CD patients without an ostomy, CD patients with an ostomy reported significantly greater consumption of red meat (p=0.012), cheese (p=0.012), sweetened beverages (p<0.001), milk (p<0.001), potatoes (p=0.002), soda (p<0.001), and ice cream (p=0.021). Compared to UC patients without a pouch, UC patients with a pouch reported significantly greater consumption of sweetened beverages (p<0.001).

Conclusions: Although patients with UC reported consuming more fruit and vegetables than those with CD, fruit and leafy vegetables were commonly reported as both worsening and helping with symptoms by patients with CD, CD-ostomy, UC, and UC-pouch. The common patterns suggest that diet-related symptoms may be linked to dietary intolerance rather than effects on bowel inflammation.