

# Altering Intake and Managing Symptoms: Feasibility of a Diet Modification Intervention for Post-Treatment Bowel Dysfunction in Rectal Cancer

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**BACKGROUND:** Bowel dysfunction is a common long-term effect of rectal cancer treatment that affects a survivor's quality of life, with few empirically based interventions for symptom management.

**OBJECTIVES:** The objective was to determine the acceptability of diet modification for bowel dysfunction in postsurgical rectal cancer survivors.

**METHODS:** 11 rectal cancer survivors who were at least six months post-treatment and reported moderate to severe bowel symptoms completed 10 telephone coaching sessions focusing on diet and symptom management over four months. Feasibility was assessed by study enrollment rate and intervention completion rate.

**FINDINGS:** Diet modification coaching for bowel symptom management is feasible for post-treatment rectal cancer survivors. The intervention can be evaluated for efficacy because of potential to serve as a scalable and accessible approach for effective bowel symptom management.

## KEYWORDS

rectal cancer; survivorship; bowel dysfunction; diet; quality of life; goal setting

## DIGITAL OBJECT IDENTIFIER

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**ADVANCES IN RECTAL CANCER TREATMENTS HAVE RESULTED** in longer survival after diagnosis. For rectal cancer survivors, treatments are often associated with persistent symptoms that affect quality of life (QOL). Treatments, the sequenced combination of chemotherapy, radiation therapy, and surgery, commonly include surgical procedures such as abdominoperineal resection (i.e., a resection of the rectum or anus with the creation of a permanent ostomy) and low anterior resection with rectal anastomosis (i.e., rejoining healthy ends of the bowel) (Burch, 2021). In 90% of survivors who undergo low- to mid-rectum resection, an anastomosis is accompanied by a temporary diverting ileostomy (Keane, Sharma, et al., 2020).

Bowel dysfunction is a common and often debilitating long-term effect of rectal cancer treatment. Published prevalence rates of bowel dysfunction in long-term survivors (greater than two years post-treatment) range from 27% to 56% (Bohlok et al., 2019; Burch, 2021; Dulskas et al., 2020; Keane, Fearnhead et al., 2020; van Heinsbergen et al., 2020). For patients who have had an anastomosis, low anterior resection syndrome (LARS) describes the constellation of postoperative bowel symptoms, including fecal incontinence, frequency, urgency, sense of incomplete fecal evacuation, and flatulence (Bohlok et al., 2019; Harpain et al., 2020; Keane, Fearnhead, et al., 2020). Symptom characteristics are dynamic, with wide variation in frequency and severity.

A common self-management strategy used to achieve bowel control is diet modification (Cuthbert et al., 2021; Sun et al., 2015, 2019; Wiltink et al., 2020). However, dietary adjustments are often made without structured guidance, and survivors often avoid certain foods, such as vegetables, fruits, and whole grains, because of a perceived risk of associated bowel problems (Sun et al., 2019). Alternative evidence-based approaches are needed to support appropriate diet modifications for symptom management, while simultaneously promoting healthy dietary choices for cancer survivorship (Rock et al., 2020).

The purpose of this pilot study is to describe the feasibility and acceptability of altering intake and managing symptoms (AIMS), a telephone-based diet modification intervention for bowel dysfunction in rectal cancer survivors.