

## General Evidence

Citation	Design/Method Sample/Setting	Variables and Intervention	Outcome Measures	Results/Analysis	Limitations	Quality and Nursing Implications
<p>Artale, S., Grillo, N., Lepori, S., Butti, C., Bovio, A., Barzaghi, S., . . . Trojani, A. (2022). A nutritional approach for the management of chemotherapy-induced diarrhea in patients with colorectal cancer. <i>Nutrients</i>, 14(9), 1801. <a href="https://doi.org/10.3390/nu14091801">https://doi.org/10.3390/nu14091801</a></p>	<p><b>Design:</b> Prospective interventional study with no control arm</p> <p><b>Method:</b> Implementation of Mediterranean Modified Health Diet (MMHD)</p> <p><b>Sample:</b> 137 patients aged 18 years or older were enrolled; 63 (46%) were males, and the mean age was 65.3 (SD = 11.4) years. Patients had metastatic colorectal cancer, an Eastern Cooperative Oncology Group (ECOG) performance status of 0–2, and were receiving chemotherapy treatment with fluoropyrimidine, oxaliplatin, and/or irinotecan (CAPOX, FOLFOX, FOLFIRI, single agent Irinotecan)</p> <p><b>Setting:</b> Single center; Italy</p>	<p><b>Independent Variable(s):</b> MMHD</p> <p><b>Dependent Variable(s):</b> Prevalence of diarrhea</p> <p><b>Intervention:</b> Daily MMHD created by nutritionist following the World Cancer Research Fund prevention recommendations consisting of 1818 kcal, with specified fiber intake to minimize induction of diarrhea.</p> <p>Vitamin D levels were measured to evaluate the relationship of level to diarrhea severity.</p>	<p>Prevalence of diarrhea</p> <p>Common Terminology Criteria for Adverse Events (CTCAE), version 4.0 for diarrhea grading</p> <p>Vitamin D levels</p> <p>Mediterranean Diet Quality Index for Children and Adolescents (KIDMED) test to evaluate adherence to MMHD</p> <p>ECOG performance status.</p> <p>Malnutrition Universal Screening Tool (MUST)</p>	<p>Sixty of 137 (44%) patients had diarrhea during chemotherapy (42 patients had grade 1, 12 had grade 2, and 6 patients had grade 3).</p> <p>The mean for adherence to diet was 6.9 (SD = 1.7) and was significantly lower in patients with grades 2 and 3 diarrhea, (<math>p &lt; 0.001</math>). Scores higher than or equal to 8 are considered high adherence, scores of 4–7 are considered medium adherence, and scores of less than or equal to 3 are considered low adherence.</p> <p>All patients who had high adherence to diet had no diarrhea (<math>n = 20</math>) or grade 1 diarrhea (<math>n = 16</math>).</p> <p>Higher adherence to diet was associated with a lower risk of grades 2 and 3 diarrhea (<math>p &lt; 0.001</math>).</p> <p>Vitamin D levels were significantly lower in patients with grades 2 and 3 diarrhea during chemotherapy than those who had no diarrhea or grade 1 diarrhea (<math>p = 0.03</math>).</p> <p>Patients who completed a greater number of chemotherapy cycles had an increased risk of grades 2 and 3 diarrhea (<math>p = 0.02</math>).</p>	<p>Nonrandomized study with no control group for comparison</p> <p>Single center study</p> <p>KIDMED was altered by researchers from its original form to fit MMHD</p>	<p>An MMHD may help to decrease the severity of diarrhea in patients with colorectal cancer who are highly adherent to the diet.</p> <p>Diarrhea risk was increased by a greater number of chemotherapy cycles, and MMHD adherence was thought to decrease the severity of the diarrhea.</p> <p>This study is limited by the lack of a comparable control group, nonrandomization, and alteration of the KIDMED and MMHD. In addition, it was performed in Italy and may not be generalizable to other patient cohorts with colorectal cancer on various regimens.</p> <p>Differences in chemotherapy regimens among participants may have been a confounding variable that influenced final results.</p> <p>Chemotherapy-induced diarrhea occurs in more than half of colorectal cancer patients. In this study, an MMHD was implemented. Participants with greater adherence to the diet experienced less severe diarrhea. The number of chemotherapy cycles correlated with diarrhea incidence, underpinning the importance of prolonged adherence to a diet like the MMHD.</p> <p>Overall, more studies in the form of randomized controlled trials are needed to validate the findings of this study.</p>