

Development and evaluation of an interactive online education platform to facilitate dietary change in pediatric inflammatory bowel disease

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Introduction: The effectiveness of the Crohns Disease Exclusion Diet (CDED) as a treatment for pediatric Crohns disease (CD) is currently being investigated. Feedback from previous use of the CDED in an Israeli sample indicated additional support was needed during the intervention. The CDED Study Canada provided an opportunity to address this feedback, tailor the education-based intervention to the Canadian sample and embed education evaluation into the CDED Study Canada.

Objectives: To develop and evaluate a client-centered education platform for use in dietary intervention implementation in pediatric CD.

Methods: Existing nutrition education materials were adapted, and additional education materials were created, including an online platform (website) which housed all patient education materials. The intervention was 12 weeks and included in-person sessions (Weeks 0 and 6) and the online platform. Participants (aged 4 to 18 years; n = 5) were recruited from Group 1 (intervention) of the CDED Study Canada. Participant satisfaction, knowledge uptake, and knowledge transfer (behaviour change) was assessed using a mixed-form questionnaire administered online pre- education (Week 0) and at Weeks 1, 6, 9, and 12. Knowledge transfer was also assessed using three-day diet records.

Results: All satisfaction questionnaire responses were positive except one. Mean knowledge scores increased significantly from pre-education (62.22 ± 10.18 ; $p = 0.049$) to Week 1 (98.33 ± 3.34 ; $p = 0.026$), Week 6 (97.33 ± 3.65), and Week 9 (97.78 ± 3.85 ; $p = 0.023$). Good knowledge transfer was observed throughout the intervention, as almost all foods in the three-day diet records met CDED guidelines.

Conclusion: The results suggest that a tailored, online education platform is an effective way to provide nutrition education to pediatric CD patients.

Significance to the Field of Dietetics: If the CDED is found to be an effective treatment for pediatric CD, the education framework could assist with future CDED implementation.

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