

Analysis of the Causes and Correction Methods of Constipation in Children

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Abstract. *The aim of this study is to analyze the factors contributing to constipation in children and summarize approaches to its management. This descriptive review draws on scientific literature to synthesize information on nutrition, defecation behavior, psychosocial factors, and medical causes. No separate clinical study, participant selection, or statistical analysis is presented. The literature identifies low fiber and fluid intake, physical inactivity, stool withholding, toilet-related fear, and stress as contributing factors. Family circumstances, school toilet conditions, certain medications, and coexisting diseases are also considered. Prolonged stool retention may worsen painful defecation and lead to encopresis. Management approaches include balanced nutrition, age-appropriate fluid and fiber intake, physical activity, regular toilet routines after meals, and emotional support. Dietary restrictions should be based on individual assessment and implemented under professional supervision. Overall, managing constipation in children requires an individual assessment of its causes and a consistent, comprehensive approach. Medical supervision, parental support, and ongoing follow-up should aim to improve the child's physical comfort and quality of life.*

Keywords: constipation, children, nutrition, fiber, encopresis, toilet habits

Introduction

Constipation is a common functional problem in children and can affect their physical, psychological, and social well-being. The main symptoms include abdominal pain, loss of appetite, fear of going to the toilet, holding in stool, and irritability. Possible causes include diet, low fluid intake, lack of physical activity, toilet habits, stress, family environment, allergies, and certain medications. If constipation continues for a long time, its causes should be investigated in more detail (Ayyubova et al., 2018, p. 122).

Main Causes of Constipation in Children

Constipation in children can have several causes. Common factors include an unhealthy diet, low intake of fiber, fruits, vegetables, and fluids. Fiber supports normal bowel movements, but too much may cause gas and bloating. Healthy fats also help the digestive system work properly. Drinking too little water can make stools hard and difficult to pass. Children should drink enough water and include soups and other liquid foods in their diet (Mulhem et al., 2022, p. 411).

Toileting Habits and Defecation Behavior

Toilet habits play an important role in constipation in children. When a child delays going to the toilet, stool remains in the bowel longer, loses water, and becomes hard and painful to pass. Pain can make

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Received: 19 May 2026; Accepted: 11 September 2026; Published online: 15 October 2026

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the child afraid of using the toilet and lead to stool-holding behavior (Kliegman & Geme, 2019, pp. 143–145). Parents should avoid pressure or punishment and provide calm support. Proper toilet posture, with the feet supported, can make bowel movements easier. Regular toilet sitting after meals can also help develop a healthy routine. School toilet conditions and toilet training should also be considered carefully. Positive encouragement and consistent habits are important for prevention and treatment (Ozen & Gurakan, 2018, pp. 288–291; Safiyeva et al., 2026).

The Role of Psychological and Social Factors

Constipation in children is not only a physical problem but is also linked to psychological and social factors. Functional constipation affects about 9.5% of children worldwide. Stress caused by family problems, school, fear, or emotional pressure can worsen bowel habits and make passing stool difficult (Panova & Sadykova, 2023, p. 241). Some children avoid using toilets at school or in public places, which can lead to harder stools and chronic constipation. Long-term constipation may reduce self-confidence, social activity, and school performance. In some cases, encopresis may also develop. Emotional support, a stable family environment, and reducing toilet-related fear are important parts of effective treatment (Zakharova et al., 2018, pp. 82–83).

Link to Allergies and Food Sensitivities

Constipation in children is a multifactorial condition, and food allergy or food sensitivity may contribute in some cases. Foods such as cow's milk protein, wheat, soy, eggs, nuts, and seafood can affect bowel function in sensitive children. Food allergy may cause inflammation in the intestine, which can slow bowel movements and make stools harder to pass. Food sensitivity, on the other hand, may lead to gas, bloating, abdominal discomfort, and changes in bowel habits through non-immune mechanisms (Guandalini & Dhawan, 2022, p. 112).

Some studies suggest that temporarily removing suspected foods, especially cow's milk or wheat, may reduce constipation and abdominal symptoms in certain children. However, elimination diets should not be used routinely because removing important food groups may cause nutritional deficiencies and negatively affect growth. Such diets should therefore be supervised by a doctor or dietitian.

Diagnosis should include a detailed dietary history, symptom monitoring, and, when appropriate, allergy tests or elimination and reintroduction of suspected foods (Hyams et al., 2016, pp. 244–246). Keeping a food diary may also help identify possible triggers. Gut microbiota, fiber balance, and psychological factors should also be considered. Overall, food-related causes should be assessed individually, and treatment should focus on accurate diagnosis, balanced nutrition, and a comprehensive approach (Tabbers et al., 2014, pp. 188–189).

The Effects of FODMAPs and Certain Carbohydrates

Constipation in children is not caused only by low fiber and fluid intake. In some children, sensitivity to fermentable carbohydrates known as FODMAPs may also affect bowel function. Foods containing lactose, certain fruits, wheat products, and sugar alcohols can increase gas, bloating, abdominal pain, and discomfort. In selected cases, temporarily reducing FODMAP intake may improve these symptoms, but this diet should only be used under professional supervision because unnecessary food restriction may lead to nutritional deficiencies (Isayev et al., 2017, p. 349).

Long-term constipation may also lead to encopresis, a condition in which stool leaks involuntarily, usually in children older than four years. Chronic stool retention can enlarge the rectum and reduce its sensitivity, so the child may not feel the need to pass stool. Softer stool can then leak around the hard stool and soil the underwear. This is not intentional behavior (Melnikova et al., 2020, p. 182).

Encopresis can negatively affect a child's self-confidence, social life, and school adjustment. Effective treatment should include more than medication (Törüner & Şimşek, 2019, p. 156). A balanced diet, regular toilet habits, daily routine, psychological support, and appropriate parental behavior are also important. Early intervention, individual assessment, and long-term follow-up are essential for improving both physical and emotional well-being (Turkish Society of Pediatric Gastroenterology, 2022, p. 35).

Table 1

Numerical data on FODMAP, functional constipation, and encopresis

Indicator	Percentage/figure	Explanation
The average prevalence of functional constipation in children	9.5–14%	Overall prevalence of constipation among children
Maximum prevalence of constipation in some studies	20–30%	It may vary depending on the age group and diagnostic criteria.
Reduction in abdominal pain when FODMAPs are reduced	30–50%	Possible improvement observed in sensitive children
Reduction of bloating and gas complaints when FODMAPs are reduced	Up to 40%	Regarding the reduction of fermentable carbohydrates
Prevalence of encopresis among children	1.5–4%	It is primarily observed in children over the age of 4.
Encopresis in 4-year-old children	4%	It is most commonly encountered in early childhood.
Encopresis in 10-year-old children	1.6%	The incidence rate decreases with age.
The association between cases of encopresis and constipation	90–95%	In most cases, the primary cause is functional constipation.
Duration for the diagnosis of encopresis	At least 3 months	Symptoms must be persistent.
Recurrence for the diagnosis of encopresis	At least once per month	It is taken into account in the clinical assessment.

Positive result in comprehensive treatment	70–90%	When nutrition, behavior, and toileting routines are implemented together
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Source. Prepared by the author.

Table 1 presents key data on FODMAP sensitivity, functional constipation, and encopresis in children. Functional constipation affects about 9.5–14% of children, while encopresis occurs in 1.5–4%. Most encopresis cases are related to constipation. FODMAP reduction and comprehensive treatment may significantly improve symptoms and overall outcomes.

Medications and Other Medical Reasons

Constipation in children is not always caused by diet, low fluid intake, or poor toilet habits. In some cases, it may develop as a side effect of medications. Opioid painkillers, diuretics, anticholinergic drugs, iron supplements, some antiepileptic medicines, and certain blood pressure medications can slow bowel movements and make stools harder. Therefore, all medications should be reviewed when evaluating a child with constipation.

Increasing fiber and fluids may not be enough if the problem is medication-related. A doctor should assess the dose, duration, and possible alternatives. Parents should not stop prescribed medicines without medical advice (Zeevenhooven et al., 2017, pp. 5–7).

Constipation may also be linked to digestive disorders such as gut microbiota imbalance, SIBO, impaired bowel movement, or irritable bowel syndrome. Endocrine, metabolic, neurological, and congenital conditions may also contribute. Hypothyroidism and calcium-related disorders are examples of possible medical causes.

Further medical evaluation is especially important when constipation is long-lasting, does not improve with treatment, or is associated with poor growth, weight loss, severe abdominal pain, or blood in the stool. Effective management requires identifying the underlying cause and creating an individualized treatment plan for the child (Yüce et al., 2020, p. 482).

Correction Methods

Correction of constipation in children requires a comprehensive and gradual approach. Key methods include dietary adjustment, increased fluid and fiber intake, healthy fats, physical activity, and proper toilet habits. Emotional support and stress reduction are also important. In some cases, medication may be prescribed by a physician. FODMAP-containing or allergenic foods can be adjusted individually when necessary. Probiotics may help support healthy gut microflora (Wyllie et al., 2021, p. 675). Children should be encouraged to sit on the toilet regularly, especially after meals. Overall, treatment should be individualized, consistent, and adapted to the child's needs to achieve better and lasting results (Ivashkin et al., 2019, pp. 14–16).

Conclusion

Constipation in children is a multifactorial issue; factors such as diet, fluid intake, physical activity, psychological state, family environment, toilet habits, allergies, and underlying medical conditions play significant roles in its development. It is incorrect to view constipation merely as a failure to empty the bowels; the condition impacts a child's overall health and quality of life. Effective management requires balancing the diet, increasing fluid and fiber intake, incorporating healthy fats,

ensuring physical activity, and establishing proper toilet habits. In cases that are chronic or recurrent, medical supervision, family support, and an individualized approach are essential.

Declaration of Competing Interests

The author declares that they have no competing interests.

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