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EATING DISORDERS IN CHILDREN AND ADOLESCENTS WITH  
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## EATING DISORDERS IN CHILDREN AND ADOLESCENTS WITH TYPE 1 DIABETES: A LITERATURE REVIEW

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## ABSTRACT

**Introduction:** Diabetes affects over 422 million people worldwide, with Type 1 Diabetes (T1D) increasing by 3–4% annually, particularly in children. Effective T1D management requires lifelong insulin therapy, which is psychologically demanding and may contribute to Disordered Eating Behaviors (DEB). Such behaviors heighten the risk of developing diabetes-specific eating disorders.

**Materials and Methods:** A systematic literature search of PubMed (2020–2024) identified case-controlled studies examining the occurrence (n=5) or risk (n=4) of eating disorders (EDs) among children and adolescents with T1D.

**Results:** Across 3025 T1D patients, 861 (28.5%) were diagnosed with EDs. Females were more frequently affected (496; 57.6%) than males (331; 38.4%). Risk-focused studies involving 612 patients found 199 at risk of developing EDs, with a similar predominance among females (63; 31.7%) compared to males (62; 31.2%).

**Conclusions:** This review underscores the high prevalence and risk of EDs in children and adolescents with T1D, with females disproportionately affected. These disorders are strongly associated with anxiety, depression, insulin omission, and restrictive eating, contributing to poor glycemic control. Vigilant monitoring, particularly through HbA1c measurement, is essential. Early recognition of symptoms and the integration of comprehensive psychological support into diabetes care are crucial for prevention and management. Strategies such as establishing structured routines, encouraging physical activity, and promoting stress management may mitigate the risk of ED. Addressing these challenges is imperative for optimizing both metabolic and psychological outcomes in young patients with T1D.

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## KEYWORDS

Type 1 Diabetes, Eating Disorders, Adolescents, Children, Disordered Eating Behaviors

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## Introduction

Diabetes mellitus is a chronic metabolic disease characterized by a defect in the production or action of insulin. Insulin, secreted by pancreatic  $\beta$ -cells, is the primary hormone responsible for regulating glucose uptake into tissues and maintaining blood glucose homeostasis. When insulin production or utilization is impaired, hyperglycemia occurs, which, if persistent, may damage multiple organ systems over time [1]. Chronic complications of uncontrolled diabetes include cardiovascular disease, nephropathy, neuropathy, retinopathy, and impaired wound healing, all of which significantly reduce quality of life and life expectancy [2-3].

Globally, an estimated 422 million people are currently living with diabetes, and prevalence continues to rise steadily in both high-income and low- to middle-income countries [2]. While type 2 diabetes mellitus (T2D) accounts for the majority of cases, type 1 diabetes (T1D) represents a smaller but rapidly growing public health concern. The incidence of T1D has been increasing annually by 3–4%, particularly in children and adolescents [4]. This concerning trend has prompted intensified research efforts to elucidate the etiology, risk factors, and pathological mechanisms underlying T1D, as well as the long-term consequences of the disease and its comorbidities.

Unlike T2D, T1D is an autoimmune condition characterized by the immune-mediated destruction of pancreatic  $\beta$ -cells, ultimately leading to absolute insulin deficiency [5]. Exogenous insulin treatment is a first-line treatment, but successful management of T1D extends beyond insulin injections [6]. It requires daily, complex self-management practices that include frequent blood glucose monitoring, careful carbohydrate counting, balancing food intake with physical activity, and adjusting insulin doses in response to constantly changing physiological and lifestyle factors. Such regimen demands vigilance and self-discipline, which can be especially burdensome for children and adolescents who are simultaneously navigating developmental, social, and psychological challenges [7].

The psychological burden of diabetes self-management has been increasingly recognized as a key determinant of health outcomes [8]. Many individuals with T1D struggle to maintain optimal glycemic control, despite adherence to treatment recommendations. Emerging evidence suggests that psychosocial factors such as stress, anxiety, and depression are closely linked to diabetes-related distress and poor metabolic outcomes [9-11]. Of particular concern is the heightened risk of eating disorders (EDs) in individuals with T1D, which significantly complicates disease management and increases the likelihood of both acute and long-term complications [12].

EDs are psychiatric conditions characterized by maladaptive eating patterns, distorted body image, and unhealthy weight-control behaviors [13]. In individuals with T1D, these disorders often manifest as Disordered Eating Behaviors (DEB), which may include rigid meal planning, extreme dietary restraint, fear of hyperglycemia, compulsive exercise, preoccupation with weight control, or deliberate manipulation of insulin doses [14-15]. Unlike typical EDs observed in the general population, eating pathology in T1D is often closely tied to the disease's demands, particularly the need to monitor diet, body weight, and insulin use [16].

One well-documented risk factor for DEB in T1D patients is elevated body mass index (BMI) [17]. Evidence indicates that individuals with T1D frequently exhibit higher BMI than their non-diabetic peers, partly due to insulin therapy, which promotes weight gain through enhanced glucose uptake and reduced glycosuria [18]. A higher BMI is often linked with greater body dissatisfaction. For many young people with T1D, this dissatisfaction can translate into restrictive eating habits or even deliberate insulin omission as a way to manage weight. Over time, these behaviors reinforce one another, creating a cycle in which worries about body image drive unhealthy practices that ultimately compromise both metabolic control and overall health [19].

Studies demonstrated that adolescent girls and young women with T1D are disproportionately affected by EDs, in comparison to the opposite sex [20]. Approximately 20% of women with diabetes are estimated to meet diagnostic criteria for an ED, and adolescent girls with T1D face more than double the risk compared to their peers without diabetes [14-15].

In recent years, terms such as *diabulimia* and *diarexia* emerged to describe diabetes-specific EDs phenotypes, though these terms are not formally recognized in diagnostic classifications. *Diabulimia* refers to the intentional omission or reduction of insulin doses to induce weight loss. By reducing insulin availability, glucose remains in the bloodstream and is excreted in the urine via osmotic diuresis, leading to caloric loss and rapid weight reduction [21]. However, insulin omission is associated with recurrent episodes of hyperglycemia, diabetic ketoacidosis (DKA), and, in the long term, an accelerated risk of microvascular and macrovascular complications [22].

*Diarexia*, a less commonly discussed phenomenon, parallels anorexia nervosa but occurs within the context of T1D. It involves extreme caloric restriction and sometimes concomitant insulin underuse, motivated by intense fear of weight gain and distorted body image. While the terminology may be controversial, these constructs highlight the need to recognize that T1D not only predisposes individuals to classical EDs but also shapes clinical manifestations that require specific interventions [13-14,19,23].

The coexistence of T1D and EDs presents a difficult clinical challenge. Each condition on its own requires intensive management, but together they place an even heavier burden on patients. The ongoing demands of diabetes care, such as frequent glucose checks, fear of hypoglycemia, and the constant pressure to maintain acceptable HbA1c levels, can lead some individuals to adopt harmful coping mechanisms such as insulin restriction or rigid dietary control [24]. In addition, EDs in people with T1D are often accompanied by other mental health problems, most commonly depression and anxiety [25].

The two-way relationship between psychological health and metabolic control is recognized in many studies [26-28]. Poor glycemic regulation can contribute to mood disturbances through mechanisms such as changes in neurotransmitter activity, while mental health conditions often make diabetes management more difficult. Adolescents are particularly at risk, given the challenges of development, identity formation, peer influence, and heightened concerns about body image. In this age group, EDs may emerge gradually, with warning signs including unexplained hyperglycemia, repeated hospitalizations for DKA, or an excessive focus on weight [19,29-30]. These signs are often subtle and can be overlooked until serious complications develop.

Recognition and management of EDs in individuals with T1D may be challenging for healthcare providers. Traditional diabetes care models prioritize metabolic control, often emphasizing HbA1c as the key outcome measure [31]. However, a sole focus on glycemic targets may inadvertently aggravate psychological distress and promote disordered eating, especially in adolescents. Multidisciplinary approaches that integrate endocrinology, psychology, nutrition, and family-based interventions are crucial for addressing both metabolic and psychological needs [32].

Early identification of disordered eating in T1D depends on careful observation of behavioral and metabolic patterns. Healthcare providers should be attentive to signs such as repeated unexplained blood glucose fluctuations, consistent insulin omission, or intense focus on body image [33-34]. To support this process, screening tools specifically designed for the T1D population, such as the Diabetes Eating Problem Survey–Revised (DEPS-R), can help identify individuals at risk [35]. Systematic monitoring of these patterns allows for timely support, although barriers such as stigma, limited awareness, and insufficient mental health resources can delay recognition and intervention.

Treatment approaches should combine education, medical stabilization, and psychological support. While patient education regarding the dangers of insulin manipulation is an important first step, it is insufficient without addressing the underlying emotional and cognitive drivers of disordered eating [25]. Cognitive-behavioral therapy (CBT), family-based therapy, and integrated diabetes-mental health programs have demonstrated promise in reducing DEB and improving outcomes [36]. Effective long-term management also involves helping patients build resilience by encouraging consistent daily routines, supporting regular and balanced physical activity, and providing strategies to manage stress [37].

## **Materials and methods**

### *Inclusion Criteria*

This systematic review encompasses research published from 2020 to 2024, ensuring the inclusion of the latest findings. It specifically focuses on investigating the relationship between the occurrence and risk of developing EDs in children and adolescents diagnosed with T1D. By including studies within this timeframe, it aims to capture recent insights into the correlation between EDs development and minors previously diagnosed with T1D, facilitating a thorough and current analysis.

### *Exclusion Criteria*

To maintain study quality and relevance, specific exclusion criteria are established. Studies published in languages other than English or those not aligning with the specified objectives of exploring T1D associations with EDs in children and adolescents will be disregarded. Additionally, studies presented solely as abstracts, conference proceedings, and books will be excluded to eliminate preliminary or incomplete findings and ensure a robust synthesis of information derived exclusively from peer-reviewed, comprehensive studies, providing a solid basis for analysis and focusing on comprehensive research articles.

### *Search Process*

Customized search strings were crafted by combining various keywords. The search terms used for this study include: "Type 1 diabetes and eating disorders in children", "Type 1 diabetes and eating disorders in adolescents", "T1D and ED in minors", "Incidence of ED in T1D children", "Incidence of ED in T1D adolescents", "Incidence of ED in T1D minors", "Risk of developing ED in T1D children", "Risk of developing ED in T1D adolescents", and "Risk of developing ED in T1D minors". The Medline/PubMed database was utilized to retrieve research articles.

### *Study Selection*

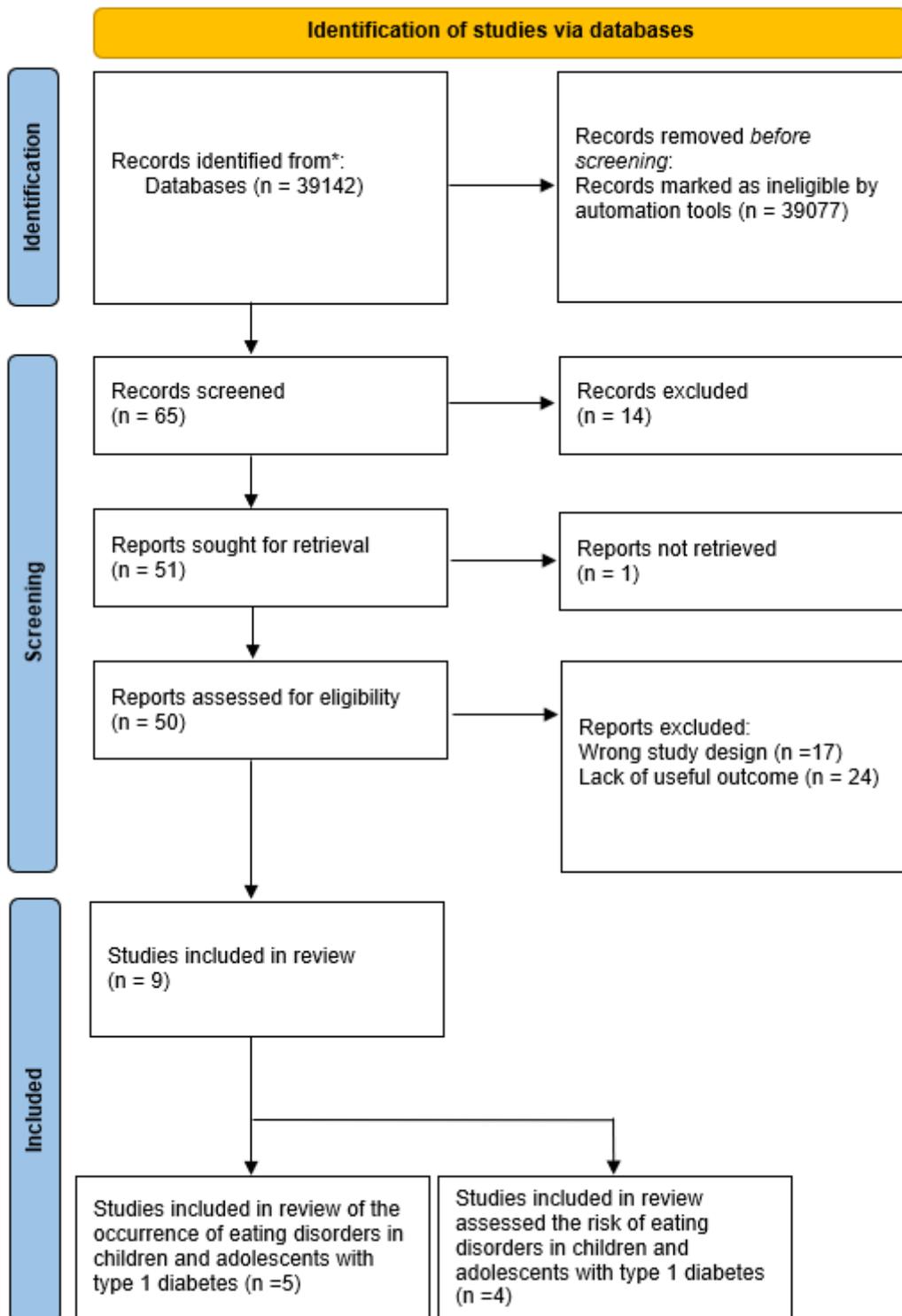
A two-step strategy was employed for study selection. Initially, relevant articles were identified using the specified keywords. Essential information was extracted, and titles and abstracts were reviewed for eligibility and relevance. In the subsequent step, full-text articles were independently assessed. PubMed was used to access complete texts, and two reviewers independently screened the articles. Any discrepancies were resolved through discussion, ensuring consensus before including studies in this review.

### *Data Extraction*

The reviewers conducted data extraction for each article independently. Extracted data about EDs, T1D, and EDs in T1D children and adolescents' conclusions in this systematic review were drawn from study outcomes. Primary references were relied upon for extraction, with cross-referencing conducted by verifying cited sources. It is noteworthy that the chosen study already provided a summary of these references.

### *Final Study Selection*

Various search strings were designed and implemented for searches in both databases. A total of 39,142 references were identified from PubMed. References from the initial step were screened for the study's timeframe and duplication. Subsequently, 39,077 references were eliminated based on these observations. Thus, 65 references were considered for the next step. Among these, approximately 14 were excluded based on eligibility criteria. Subsequently, 51 were sought for retrieval, out of which 1 was eliminated due to the inability to retrieve the report. Another 50 were assessed for eligibility, out of which 41 were excluded based on incorrect study design (17) or lack of useful outcome (24). Consequently, a total of 9 references were selected for writing the Systematic Literature Review (SLR) of the study, out of which 5 were used to identify the occurrence, and 4 were used to identify the risk of ED in children and adolescents with T1D.



*Fig. 1. PRISMA flow diagram of study selection.*

## Results

Across five studies [38-42], a total of 3,025 children and adolescents under 18 years old with T1D were examined. Among these, 1,334 were female and 1,424 were male, although two studies (Rose et al. [41] and Ludvigsson et al. [42]) did not report a gender breakdown. Across all studies, 861 patients (28.5%) were diagnosed with an ED. Females were more frequently affected, with 496 cases (57.6%), compared to 331 males (38.4%). It should be noted that 32 patients (approximately 3.7% of the total) lacked gender-specific information, which may slightly affect these proportions.

Across all studies, a consistent pattern emerged: female patients were more likely to develop ED, a trend that aligns with general population data but may be amplified by the demands of managing T1D.

A summary of the occurrence data, including gender breakdowns and study details, is presented in Table 1.

**Table 1.** Occurrence of eating disorders in individuals with type 1 diabetes

Study	T1D combined	T1D women	T1D men	ED combined	ED women	ED men	Year
Troncone <i>et al.</i> [38]	690	337	353	194	118	74	2022
Troncone <i>et al.</i> [39]	1562	750	812	464	291	173	2023
Marks <i>et al.</i> [40]	506	247	259	171	87	84	2021
Rose <i>et al.</i> [41]	100	-	-	25	-	-	2020
Ludvigsson <i>et al.</i> [42]	167	-	-	7	-	-	2024

T1D combined - number of patients under 18 years old diagnosed with T1D

T1D women - number of females under 18 years old diagnosed with T1D

T1D men - number of males under 18 years old diagnosed with T1D

ED combined - number of patients under 18 diagnosed with ED who also suffer from T1D

ED women - number of females under 18 diagnosed with ED who also suffer from T1D

ED men - number of males under 18 diagnosed with ED who also suffer from T1D

Four studies [19, 43-25] examined the risk of developing ED among pediatric T1D patients, encompassing 612 participants. Of these, 160 were female and 155 male, while the largest study (Propper-Lewinsohn et al. [45], 297 participants) did not report gender-specific data. Overall, 199 participants (32.5%) were identified as being at increased risk for developing an ED. Females slightly outnumbered males in the at-risk group, with 63 (31.7%) compared to 62 (31.2%), though 74 patients (37.2% of the total) lacked gender-specific information.

Individual study results showed substantial variability. Despite these differences, both male and female adolescents with T1D demonstrated measurable vulnerability, with females showing slightly higher susceptibility.

These findings are summarized in Table 2, which details the number of patients with T1D, the number at risk of developing ED, and the gender-specific breakdown.

**Table 2.** Risk of developing eating disorders in individuals with type 1 diabetes

Study	T1D combined	T1D women	T1D men	ED risk combined	ED risk women	ED risk men	Year
Kafali <i>et al.</i> [43]	75	42	33	11	13	8	2020
Tarçın <i>et al.</i> [19]	92	47	45	70	34	36	2023
Boccolini <i>et al.</i> [44]	148	71	77	34	16	18	2023
Propper-Lewinsohn <i>et al.</i> [45]	297	-	-	84	-	-	2023

T1D combined - number of patients under 18 years old diagnosed with T1D

T1D women - number of females under 18 years old diagnosed with T1D

T1D men - number of males under 18 years old diagnosed with T1D

ED risk combined - number of patients under 18 with a heightened risk of developing ED who suffer from T1D

ED risk women - number of females under 18 with heightened risk of developing ED who suffer from T1D

ED risk men - number of males under 18 with heightened risk of developing ED who suffer from T1D

### **Discussion and Conclusions**

The findings of this systematic review confirm that EDs in individuals with T1D represent a significant clinical challenge, particularly in children and adolescents. Our analysis demonstrated that nearly one in three patients either had or were at heightened risk for disordered eating. This prevalence is striking when compared with the general adolescent population, where rates of EDs are estimated to be substantially lower. The evidence highlights that the coexistence of T1D and EDs is not an isolated phenomenon but rather a frequent and pressing comorbidity that requires greater clinical awareness and proactive management strategies.

Across studies, EDs were more prevalent among females with T1D, consistent with patterns seen in non-diabetic populations. Insulin therapy, which can contribute to weight gain, may intensify body image concerns and increase vulnerability. Troncone et al. [20] and others found that females were disproportionately represented among ED cases. However, up to one-third of affected patients were male, indicating that EDs in T1D should not be viewed as a predominantly female issue.

Poor glycemic control is often an early indicator of EDs in T1D, with persistent hyperglycemia, recurrent DKA, and unexplained glucose fluctuations signaling possible insulin manipulation or disordered eating. Regular review of glucose records and HbA1c remains essential, though these markers alone may miss cases, as some adolescents maintain near-normal values despite unhealthy behaviors. Screening tools such as the Diabetes Eating Problem Survey–Revised (DEPS-R) provide additional value by identifying at-risk patients before complications arise.

Prevention requires addressing physical, psychological, and social factors. Zeiler et al. [46] noted the benefits of structured routines, consistent physical activity, and open family communication in reducing disordered behaviors. Parental involvement is particularly important in shaping attitudes toward food, body image, and diabetes care. Education programs that engage both adolescents and families, together with balanced activity guidelines, may help limit unhealthy patterns and reduce stigma around weight changes linked to insulin therapy.

Our review also highlighted several limitations in the current literature. Many studies varied widely in their definitions of EDs and the tools used for assessment, making direct comparisons challenging. Some relied on self-report questionnaires, which may underestimate or overestimate prevalence due to social desirability bias or lack of insight among adolescents. Others failed to provide gender-specific data, limiting our ability to fully explore sex-based differences. Moreover, most studies were cross-sectional, restricting conclusions about causality. Longitudinal research is needed to better understand how ED behaviors evolve over time in the context of T1D and what factors predict persistence or remission.

This review reinforces that eating disorders in individuals with type 1 diabetes are a common and serious clinical problem. They are more prevalent in female patients but are also significant among males, and are closely linked with psychiatric comorbidities such as anxiety and depression. Clinical recognition should extend beyond glycemic measures to include systematic screening for disordered eating patterns, particularly in adolescents. Preventive strategies that promote structured routines, balanced activity, and stress management, combined with comprehensive psychosocial support, are essential. Multidisciplinary care models that integrate mental health support into routine diabetes management offer the best chance of improving both metabolic and psychological outcomes. By recognizing and addressing EDs in T1D early, healthcare providers can help safeguard not only physical health but also the emotional well-being of this vulnerable population.

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## REFERENCES

1. Cloete, L. (2022). Diabetes mellitus: An overview of the types, symptoms, complications and management. *Nursing Standard*, 37(1), 61–66. <https://doi.org/10.7748/ns.2021.e11709>
2. World Health Organization. (2024, November 14). Diabetes. World Health Organization. <https://www.who.int/news-room/fact-sheets/detail/diabetes>
3. Oputa, R. N., & Oputa, P. U. (2024). Chronic complications of diabetes mellitus. *West African Journal of Medicine*, 41(8), 904–908.
4. Akil, A. A., Yassin, E., Al-Maraghi, A., Aliyev, E., Al-Malki, K., & Fakhro, K. A. (2021). Diagnosis and treatment of type 1 diabetes at the dawn of the personalized medicine era. *Journal of Translational Medicine*, 19(1), 137. <https://doi.org/10.1186/s12967-021-02778-6>
5. Syed, F. Z. (2022). Type 1 diabetes mellitus. *Annals of Internal Medicine*, 175(3), ITC33–ITC48. <https://doi.org/10.7326/AITC202203150>
6. Quattrin, T., Mastrandrea, L. D., & Walker, L. S. K. (2023). Type 1 diabetes. *The Lancet*, 401(10394), 2149–2162. [https://doi.org/10.1016/S0140-6736\(23\)00223-4](https://doi.org/10.1016/S0140-6736(23)00223-4)
7. Benton, M., Cleal, B., Prina, M., Baykoca, J., Willaing, I., Price, H., & Ismail, K. (2023). Prevalence of mental disorders in people living with type 1 diabetes: A systematic literature review and meta-analysis. *General Hospital Psychiatry*, 80, 1–16. <https://doi.org/10.1016/j.genhosppsych.2022.11.004>
8. van Duinkerken, E., Snoek, F. J., & de Wit, M. (2020). The cognitive and psychological effects of living with type 1 diabetes: A narrative review. *Diabetic Medicine*, 37(4), 555–563. <https://doi.org/10.1111/dme.14216>
9. Winkley, K., Upsher, R., Stahl, D., Pollard, D., Kaser, A., Brennan, A., Heller, S., & Ismail, K. (2020). Psychological interventions to improve self-management of type 1 and type 2 diabetes: A systematic review. *Health Technology Assessment*, 24(28), 1–232. <https://doi.org/10.3310/hta24280>
10. McCarthy, M., Ilkowitz, J., Zheng, Y., & Vaughan Dickson, V. (2022). Exercise and self-management in adults with type 1 diabetes. *Current Cardiology Reports*, 24(7), 861–868. <https://doi.org/10.1007/s11886-022-01707-3>
11. Shiel, E. V., Hemingway, S., Burton, K., & King, N. (2023). Self-management of type 1 diabetes in young adults: Is it impeded by aspects of everyday life? A scoping review. *Diabetes & Metabolic Syndrome*, 17(12), 102918. <https://doi.org/10.1016/j.dsx.2023.102918>
12. Toni, G., Berioli, M. G., Cerquiglini, L., Ceccarini, G., Grohmann, U., Principi, N., & Esposito, S. (2017). Eating disorders and disordered eating symptoms in adolescents with type 1 diabetes. *Nutrients*, 9(8), 906. <https://doi.org/10.3390/nu9080906>
13. Treasure, J., Duarte, T. A., & Schmidt, U. (2020). Eating disorders. *The Lancet*, 395(10227), 899–911. [https://doi.org/10.1016/S0140-6736\(20\)30059-3](https://doi.org/10.1016/S0140-6736(20)30059-3)
14. Coleman, S. E., & Caswell, N. (2020). Diabetes and eating disorders: An exploration of “Diabulimia.” *BMC Psychology*, 8(1), 101. <https://doi.org/10.1186/s40359-020-00468-4>
15. Dzięwa, M., Bańka, B., Herbet, M., & Piątkowska-Chmiel, I. (2023). Eating disorders and diabetes: Facing the dual challenge. *Nutrients*, 15(18), 3955. <https://doi.org/10.3390/nu15183955>
16. Ripoli, C., Ricciardi, M. R., Zuncheddu, E., Angelo, M. R., Pinna, A. P., & Ripoli, D. (2022). Emotional eating and disordered eating behaviors in children and adolescents with type 1 diabetes. *Scientific Reports*, 12(1), 21854. <https://doi.org/10.1038/s41598-022-26271-2>
17. Barsal Çetiner, E., Donbaloğlu, Z., İnan Yüksel, A., Singin, B., Aydın Behram, B., Bedel, A., Parlak, M., & Tuhan, H. (2024). Disordered eating behaviors and associated factors in children and adolescents with type 1 diabetes. *Archives de Pédiatrie*, 31(7), 455–460. <https://doi.org/10.1016/j.arcped.2024.04.006>
18. Yafei, S., Hummadi, A., Badedi, M., Darraj, H., Khawaji, A., Alzughbi, T., Abutaleb, R., Alhagawy, A. J., Alnami, A., Kudam, B., Bahsan, F., Kariri, M., Adawi, M., Dagheriri, M., Hassan, R., Soeid, M., & Alzughbi, N. (2023). Disordered eating behaviors and insulin restriction in Saudi adolescents and young adults with type 1 diabetes. *Medicina*, 59(2), 345. <https://doi.org/10.3390/medicina59020345>
19. Tarçın, G., Akman, H., Güneş Kaya, D., Serdengeçti, N., İncetahtacı, S., Turan, H., Doğangün, B., & Ercan, O. (2023). Diabetes-specific eating disorder and possible associated psychopathologies in adolescents with type 1 diabetes mellitus. *Eating and Weight Disorders*, 28(1), 36. <https://doi.org/10.1007/s40519-023-01559-y>
20. Troncone, A., Cascella, C., Chianese, A., Zanfardino, A., Piscopo, A., Borriello, A., Casaburo, F., Del Giudice, E. M., & Iafusco, D. (2020). Body image problems and disordered eating behaviors in Italian adolescents with and without type 1 diabetes: An examination with a gender-specific body image measure. *Frontiers in Psychology*, 11, 556520. <https://doi.org/10.3389/fpsyg.2020.556520>
21. Rivolta, B., Masserini, B., Bernardi, I., Camera, A., Liboà, F., Solerte, S. B., Cerabolini, C., & Cerutti, N. (2024). Diabulimia and type 1 diabetes: An unknown and emerging problem. *Endocrine, Metabolic & Immune Disorders Drug Targets*. Advance online publication. <https://doi.org/10.2174/0118715303314948240419060714>
22. Goddard, G., & Oxlad, M. (2023). Insulin restriction or omission in type 1 diabetes mellitus: A meta-synthesis of individuals' experiences of diabulimia. *Health Psychology Review*, 17(2), 227–246. <https://doi.org/10.1080/17437199.2021.2025133>

23. Ruelens, C., & Vrieze, E. (2022). Diabetes mellitus en eetstoornissen: Aangepaste behandeling nodig [Diabetes mellitus and eating disorders: Modified treatment is necessary]. *Tijdschrift voor Psychiatrie*, 64(4), 220–225.
24. Fayyaz, F., Khosravi, S., Mosallanejad, A., Tabatabaei-Malazy, O., Hashemi Nazari, S. S., & Shaghghi, M. (2023). Determinants of self-monitoring of blood glucose in Iranian children and adolescents with type 1 diabetes. *International Journal of Endocrinology and Metabolism*, 21(4), e138377. <https://doi.org/10.5812/ijem-138377>
25. Henríquez-Tejo, R., & Cartes-Velásquez, R. (2018). Impacto psicosocial de la diabetes mellitus tipo 1 en niños, adolescentes y sus familias: Revisión de la literatura [Psychosocial impact of type 1 diabetes mellitus in children, adolescents and their families: Literature review]. *Revista Chilena de Pediatría*, 89(3), 391–398. <https://doi.org/10.4067/S0370-41062018005000507>
26. Ortiz, M. S., & Myers, H. F. (2014). Control metabólico en pacientes diabéticos tipo 1 chilenos: Rol del estrés psicológico [Association between psychological stress and metabolic control in patients with type 1 diabetes mellitus]. *Revista Médica de Chile*, 142(4), 451–457. <https://doi.org/10.4067/S0034-98872014000400006>
27. Aljawarneh, Y. M., Al-Qaissi, N. M., & Ghunaim, H. Y. (2020). Psychological interventions for adherence, metabolic control, and coping with stress in adolescents with type 1 diabetes: A systematic review. *World Journal of Pediatrics*, 16(5), 456–470. <https://doi.org/10.1007/s12519-020-00352-6>
28. Matejko, B., Drynda, A., Cyranka, K., Juza, A., Nabrdalik, K., Kwindacz, H., Szromek-Białek, P., Strzała-Kłeczek, A., Araszkiwicz, A., Gumprecht, J., Zozulińska-Ziółkiewicz, D., Małeck, M., & Klupa, T. (2025). Continuous glucose monitoring as a tool for psychological support – Exploring metabolic control and psychological well-being after initial CGM implementation in adults with type 1 diabetes. *Psychiatria Polska*, 1–19. Advance online publication. <https://doi.org/10.12740/PP/OnlineFirst/205875>
29. Tarçın, G., Akman, H., Güneş Kaya, D., Serdengeçti, N., İncetahtacı, S., Turan, H., Doğangün, B., & Ercan, O. (2023). Correction: Diabetes-specific eating disorder and possible associated psychopathologies in adolescents with type 1 diabetes mellitus. *Eating and Weight Disorders*, 28(1), 48. <https://doi.org/10.1007/s40519-023-01576-x>
30. Winston, A. P. (2020). Eating disorders and diabetes. *Current Diabetes Reports*, 20(8), 32. <https://doi.org/10.1007/s11892-020-01320-0>
31. Sellami, S., Berriche, O., Hchaichi, A., Sfar, H., Ben Amor, N., Cherif, A., Smida, A., & Jamoussi, H. (2020). Eating disorders in type 1 diabetic adolescent. *La Tunisie Médicale*, 98(11), 838–845.
32. Dickens, Y. L., Haynos, A. F., Nunnemaker, S., Platka-Bird, L., & Dolores, J. (2015). Multidisciplinary residential treatment of type 1 diabetes mellitus and co-occurring eating disorders. *Eating Disorders*, 23(2), 134–143. <https://doi.org/10.1080/10640266.2014.964609>
33. Gong, J. Y., & Wentworth, J. M. (2024). Resolution of symptoms of binge eating disorder associated with semaglutide treatment for obesity and type 1 diabetes. *Internal Medicine Journal*, 54(9), 1586–1587. <https://doi.org/10.1111/imj.16499>
34. Merwin, R. M., Moskovich, A. A., Honeycutt, L. K., Lane, J. D., Feinglos, M., Surwit, R. S., Zucker, N. L., Dmitrieva, N. O., Babyak, M. A., Batchelder, H., & Mooney, J. (2018). Time of day when type 1 diabetes patients with eating disorder symptoms most commonly restrict insulin. *Psychosomatic Medicine*, 80(2), 222–229. <https://doi.org/10.1097/PSY.0000000000000550>
35. Atik-Altınok, Y., Eliuz-Tipici, B., İdiz, C., Özgür, S., Ok, A. M., & Karşıdağ, K. (2023). Psychometric properties and factor structure of the Diabetes Eating Problem Survey-Revised (DEPS-R) among adults with type 1 diabetes mellitus. *Eating and Weight Disorders*, 28(1), 71. <https://doi.org/10.1007/s40519-023-01602-y>
36. Harrison, A., Konstantara, E., Zaremba, N., Brown, J., Allan, J., Pillay, D., Hopkins, D., Treasure, J., Ismail, K., & Stadler, M. (2024). A cognitive behavioural model of the bidirectional relationship between disordered eating and diabetes self-care in adult men with type 1 diabetes mellitus. *Diabetic Medicine*, 41(5), e15287. <https://doi.org/10.1111/dme.15287>
37. Wisting, L., Reas, D. L., Bang, L., Skriverhaug, T., Dahl-Jørgensen, K., & Rø, Ø. (2017). Eating patterns in adolescents with type 1 diabetes: Associations with metabolic control, insulin omission, and eating disorder pathology. *Appetite*, 114, 226–231. <https://doi.org/10.1016/j.appet.2017.03.035>
38. Troncone, A., Affuso, G., Cascella, C., Chianese, A., Pizzini, B., Zanfardino, A., Iafusco, D., & Diabetes Study Group of Italian Society of Paediatric Endocrinology and Diabetology. (2022). Prevalence of disordered eating behaviors in adolescents with type 1 diabetes: Results of a multicenter Italian nationwide study. *The International Journal of Eating Disorders*, 55(8), 1108–1119. <https://doi.org/10.1002/eat.23764>
39. Troncone, A., Affuso, G., Cascella, C., Chianese, A., Zanfardino, A., Iafusco, D., & Diabetes Study Group of Italian Society of Paediatric Endocrinology and Diabetology. (2023). Prevalence and multidimensional model of disordered eating in youths with type 1 diabetes: Results from a nationwide population-based study. *Journal of Pediatric Psychology*, 48(9), 731–739. <https://doi.org/10.1093/jpepsy/jsad016>
40. Marks, K. P., Thastum, M., Jensen, M. B., Kristensen, L. J., Mose, A. H., Pouwer, F., & Birkebæk, N. H. (2021). Overeating, binge eating, quality of life, emotional difficulties, and HbA1c in adolescents with type 1 diabetes: A Danish national survey. *Diabetes Research and Clinical Practice*, 182, 109150. <https://doi.org/10.1016/j.diabres.2021.109150>

41. Rose, M., Streisand, R., Tully, C., Clary, L., Monaghan, M., Wang, J., & Mackey, E. (2020). Risk of disordered eating behaviors in adolescents with type 1 diabetes. *Journal of Pediatric Psychology*, 45(5), 583–591. <https://doi.org/10.1093/jpepsy/jsaa027>
42. Ludvigsson, J., & Olsen Faresjö, Å. (2024). The importance of factors early in life for development of eating disorders in young people, with some focus on type 1 diabetes. *Eating and Weight Disorders*, 29(1), 5. <https://doi.org/10.1007/s40519-023-01633-5>
43. Yilmaz Kafali, H., Atik Altinok, Y., Ozbaran, B., Ozen, S., Kose, S., Tahillioglu, A., Darcan, S., & Goksen, D. (2020). Exploring emotional dysregulation characteristics and comorbid psychiatric disorders in type 1 diabetic children with disordered eating behavior risk. *Journal of Psychosomatic Research*, 131, 109960. <https://doi.org/10.1016/j.jpsychores.2020.109960>
44. Boccolini, G., Marino, M., Tiberi, V., Iannilli, A., Landi, G., Grandi, S., Tossani, E., Isped Study Group, & Cherubini, V. (2023). A risk profile for disordered eating behaviors in adolescents with type 1 diabetes: A latent class analysis study. *Nutrients*, 15(7), 1721. <https://doi.org/10.3390/nu15071721>
45. Propper-Lewinsohn, T., Gillon-Keren, M., Shalitin, S., Elran-Barak, R., Yackobovitch-Gavan, M., Fayman, G., David, M., Liberman, A., Phillip, M., & Oron, T. (2023). Disordered eating behaviours in adolescents with type 1 diabetes can be influenced by their weight at diagnosis and rapid weight gain subsequently. *Diabetic Medicine*, 40(11), e15166. <https://doi.org/10.1111/dme.15166>
46. Zeiler, M., Wittek, T., Graf, T., Bozic, I., Nitsch, M., Waldherr, K., Karwautz, A., Wagner, G., & Berger, G. (2023). Psychosocial impact of the COVID-19 pandemic for adolescents with type 1 diabetes: A qualitative interview study involving adolescents and parents. *Behavioral Medicine*, 49(4), 412–422. <https://doi.org/10.1080/08964289.2022.2084358>