



# Avoidant/restrictive food intake disorder: Introducing a new DSM-5 eating disorder

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## What is ARFID?

Avoidant/Restrictive Food Intake Disorder, also known as ARFID, is a new eating disorder that was introduced in the 5th edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-5).<sup>1</sup> ARFID has replaced Feeding Disorder of Infancy and Early Childhood, which was described in the DSM-IV.<sup>2</sup> The latter category was very rarely used, and there is little information on the characteristics of children and adolescents who were diagnosed with this disorder.

Feeding and eating are important activities that allow children and youth to maintain adequate nutrition and to grow and develop normally. Although well-designed prospective studies investigating rates of feeding disturbances observed in community-based paediatric practices are lacking, it is recognized that a proportion of patients present at varying ages with feeding difficulties, food restriction and food avoidance that may or may not be easily explained. In the past, patients with clinically significant feeding issues not explained by other medical conditions were often given varying diagnoses, including failure to thrive, food avoidance emotional disorder, selective eating disorder, picky eating, or eating disorder not otherwise specified (EDNOS). Research investigating the frequency, characteristics, course, and outcomes of this group of patients are limited. In an attempt to better classify, understand, and study these patients, the DSM-5 Eating Disorder Working Group rearticulated the diagnosis of "Feeding Disorder of Infancy and Early Childhood" (which was rarely used or studied) and named this new eating disorder ARFID.<sup>1</sup>

Avoidant restrictive food intake disorder is defined in the DSM-5<sup>1</sup> definition by a persistent failure to meet appropriate nutritional and/or energy needs leading to one or more of the following:

- weight loss or inadequate growth (i.e., crossing percentiles on the growth chart for weight and/or height or failure to achieve expected weight gain over time)
- a significant nutritional deficiency (which warrants additional clinical attention)
- dependence on tube feeding or nutritional supplements to sustain adequate intake



- Impaired psychosocial functioning, such as an inability to eat with others. This relates to nutritional specific behaviours or psychosocial impairment that has arisen as a result of the nutritional issues, not behaviour more generally typified by other psychosocial disorders or psychiatric illness.

Children and adolescents who would be excluded from having a diagnosis of ARFID are those individuals who have a clinical problem that is better described in some other way. Therefore, a diagnosis of ARFID would **not** be given if:

- the nutritional problems are better explained by a lack of available food or a cultural practice (such as religious fasting),
- the person endorses body image concerns, dissatisfaction with body shape or weight or fears related to weight gain, such as in anorexia nervosa (AN) or bulimia nervosa (BN),
- the clinical problem is better accounted for by an existing medical condition or another mental disorder.<sup>1</sup>

### **How do I make a diagnosis of ARFID in children with existing medical conditions or another mental disorder?**

There are a few studies that suggest children and adolescents with ARFID have high rates of comorbid psychiatric disorders.<sup>3-6</sup> In the case where the eating disturbance occurs in the context of another medical or psychiatric disorder, the severity of the eating disturbance **MUST** be greater than what you would routinely observe to be associated with the medical or psychiatric disorder and warrant additional clinical attention. To try and put this in context, a diagnosis of ARFID could be considered when the focus or emphasis of what you are doing with the family intensifies to a point that you're spending most, if not all of your time, dealing with nutritional and weight related issues in cases where this would not otherwise be expected. Patients struggling with ARFID will often require extra feeding-related resources and support in order to prevent malnutrition or to manage the medical or psychiatric complications.

It is always helpful to present a case example to illustrate this issue. Let us consider the case of a 12-year-old male that was diagnosed with Autism Spectrum Disorder (ASD) before age 2. He has been followed longitudinally by a health care provider. The child has always been rigid around food and his mother describes numerous "strategies" that the family has employed over the years to optimize his nutritional intake. Over the course of his life, sequential height and weight plots have demonstrated consistent and adequate growth as demonstrated by weight, height and body mass index (BMI) percentiles. On a recent health visit, you note that his weight has plateaued since his last visit 18 months earlier, and height percentile has decreased from the 25th percentile to the 10th percentile. His parents report that the start of a new school this academic year caused "a lot of stress and challenges" and his nutritional intake has been "a real problem" despite their best efforts to promote intake. The mother states that her son is more restricted now in the foods he will eat and that his overall intake has also decreased. As well, she notes that he has gotten into a pattern whereby he will only eat food prepared by his grandmother (who lives within the home). In reviewing his growth curve carefully, you determine that his current weight is about 6 kg lower than what you would have otherwise predicted based upon his growth trajectory. Despite the fact that a diagnosis of ASD may be associated with food-related challenges, the severity of the eating issues have intensified significantly in the



### ***Avoidant/restrictive food intake disorder: Introducing a new DSM-5 eating disorder (continued)***

previous 12 months and persisted for 18 months, compromising in his growth and development. The family reports that they have “tried everything they could” to support their son’s nutrition. The eating behaviours are causing impairment far beyond his previous baseline. This is a child who would meet the diagnostic criteria for ARFID.

### **How common is ARFID?**

ARFID is a new diagnostic category and, as such, we do not know how common ARFID is in the paediatric population. Preliminary data in North American suggests that the incidence of ARFID in paediatric tertiary care ED programs ranges between 6% and 14% (Fisher et al, 2013; Norris et al, 2013) and up to 22.5% in those in a paediatric eating disorder day treatment program. Although the majority of these patients would have been referred from community settings, there are no studies that have specifically looked at incidence rates of ARFID using community-based samples. Importantly, studies to date have focused primarily on children and adolescents who have been referred to ED programs; there are no studies that have examined rates of ARFID in younger cohorts with more varied feeding disturbances.

### **Who can develop ARFID?**

While few studies on ARFID have been published, anecdotal experience suggests that it can present throughout the lifespan: in childhood, adolescence or adulthood. If the disorder presents during childhood or adolescence, it may persist into adulthood. ARFID can occur in both males and females.<sup>1,3-6</sup>

### **How is ARFID different from other eating disorders?**

Children and adolescents with ARFID have impaired and distressed eating behaviours and symptoms but **do not** experience body image-related concerns or fears about gaining weight as witnessed in patients with AN and BN.<sup>1</sup>

In general, compared to AN and BN, patients with ARFID are more likely to be younger, have a longer duration of illness before they are diagnosed, are more likely to be male, and have a greater likelihood of having medical and/or psychiatric symptoms co-occurring with the disorder.<sup>3-6</sup>

### **How is ARFID different from picky eating?**

ARFID is not the same as ‘picky eating’. Part of the challenge with describing ‘picky eating’ relates to the fact that there is no standardized definition. Picky eating is generally defined as occurring in children who are of a normal weight but consume an inadequate variety of foods through rejection of foods that may either be familiar or unfamiliar to them.<sup>2</sup> Common characteristics include limitations in the variety of foods eaten, unwillingness to try new foods and aberrant eating behaviours.<sup>7</sup> These behaviours generally peak between the 2nd and 6th year of life, with gradual reduction over time such that few are affected beyond their early adult years.<sup>8-10</sup> For most picky eaters, food avoidance is limited to a small number of foods, appetite and overall caloric intake is normal, and growth and development occur normally. The eating patterns found among picky eaters usually resolve on their own with time.



Conversely, children with ARFID typically have a small appetite and suboptimal energy intake, may refuse to eat certain foods based on sensory qualities, and experience either weight loss, slowed or no weight gain and slowed growth, or growth interruption. Moreover, individuals with ARFID exhibit problems with food that persist for a long period of time and require intensive medical and psychological support and treatment.

In summary, a diagnosis of ARFID is intended to identify only those patients with clinically significant restrictive or avoidant eating problems and not those with uncomplicated ‘picky eating’ behaviours.

### **What types of complications can occur with ARFID?**

Children and adolescents with ARFID are at risk of becoming malnourished and therefore are at risk for similar medical complications (such as low bone mineral density) that have been reported in children and adolescents with AN.<sup>3</sup> The degree of malnutrition (% mean body weight) in patients with ARFID has been found to be either similar to that of patients with AN<sup>6</sup> or somewhere between those with AN and BN.<sup>4</sup> Further, children and adolescents with ARFID have been found to have a greater dependence on nutritional supplements.<sup>6</sup> Significant weight loss or lack of weight gain, impaired growth and development, nutritional deficiencies (i.e., iron deficiency anemia or delayed bone age), and the associated medical complications should be assessed in a similar way as they are assessed in children and adolescents with AN. A thorough history from the patient and parent(s)/guardian(s), a complete physical examination and screening blood work should be completed on a child or adolescent who presents with avoidant or restrictive food intake that results in malnutrition.

In addition, children and adolescents with ARFID often struggle with comorbid mental health diagnoses, with anxiety disorders being the most common.<sup>3,4</sup> Further, patients often relay histories of difficulties participating in normal social activities, such as eating with friends and family members and maintaining relationships with others, as a result of their nutritional disturbances.

### **What types of treatment exist for ARFID?**

At present, there are no evidence-based treatment recommendations for ARFID. Clinicians have incorporated family-based therapy along with other psychological interventions, including exposure therapy, food chaining, and cognitive behavioural therapy (CBT). Exposure therapy involves bringing children in contact with a food they may be avoiding or may feel fearful of in a safe context so that they may overcome their negative feelings towards it. Food chaining is another method, which involves introducing new foods that are similar to those already preferred, so that children are more likely to try them. For someone with severe anxiety that affects feeding, CBT and other treatments for the underlying condition may be an effective approach for treatment of the eating disorder. CBT is goal-oriented psychotherapy treatment that is designed to help children change patterns of thinking or behaviour that fuel their mental health difficulties. This is an area that requires further study.

### **What is the course of the disorder for children and adolescents who develop ARFID?**

At present, there is no data on the course of illness. Researchers and clinicians have wondered whether these young people are more at risk of developing another eating



***Avoidant/restrictive food intake disorder: Introducing a new DSM-5 eating disorder (continued)***

disorder such as AN or BN. One study found that 12% of children and adolescents in a tertiary care eating disorder program who met criteria for ARFID were later diagnosed as having AN.<sup>3</sup> Long-term follow-up studies evaluating medical and psychological outcomes are needed to answer this question.

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RESOURCES



## Quiz

- 1. How do patients with ARFID differ from children and adolescents with anorexia nervosa and bulimia nervosa?**
  - a. Children and adolescents with ARFID are more likely to be older at age of onset.
  - b. Children and adolescents with ARFID do not experience fears about gaining weight.
  - c. Children and adolescents with ARFID do not experience medical complications secondary to their eating disorders.
  - d. Children and adolescents with ARFID lack available food.
- 2. What is the most critical diagnostic criteria in the DSM-5 definition of ARFID?**
  - a. Persistent failure to meet appropriate nutritional and/or energy needs
  - b. Impaired ability to eat with family members
  - c. Body image-related concerns, including abnormal perception of body weight, shape and size
  - d. Fear of weight gain
- 3. What is the course of illness in children and adolescents with ARFID?**
  - a. There is no available data to answer this question.
  - b. The majority of children and adolescents with ARFID develop anorexia nervosa.
  - c. These young people have lifelong problems with impaired social functioning.
  - d. The majority of children and adolescents with ARFID get better.
- 4. Which of the following mental health diagnoses is most likely to be associated with ARFID?**
  - a. Major depressive episode
  - b. Anxiety disorder
  - c. Schizophrenia
  - d. Post-traumatic stress disorder
- 5. Which of the following characteristics best describes children and adolescents with ARFID?**
  - a. Children and adolescents with ARFID tend to be older than patients with anorexia nervosa.
  - b. Children and adolescents who have a normal growth trajectory should not be diagnosed with ARFID.
  - c. ARFID should not be diagnosed in children and adolescents who have a condition that can be better explained by a concurrent medical diagnosis.
  - d. Children and adolescents with ARFID, or their families, often give a history of the disorder that includes a brief period of nutritional impairment prior to diagnosis.

Answers: 1-b, 2-a, 3-a, 4-b, 5-c