Avoidant Restrictive Food Intake Disorder

Debra K. Katzman, MD, FRCPC\textsuperscript{a,*}, Mark L. Norris, MD, FRCPC\textsuperscript{b}, Nancy Zucker, PhD\textsuperscript{c}

KEYWORDS

- Avoidant restrictive food intake disorder (ARFID)
- Diagnostic and Statistical Manual of Mental Disorders [fifth edition] (DSM-5)
- Feeding and eating disorders • Food avoidance • Food restriction

KEY POINTS

- Avoidant restrictive food intake disorder (ARFID) is a newly classified disorder in the "Feeding and Eating Disorders" section of the Diagnostic and Statistical Manual of Mental Disorders (fifth edition).
- The prevalence of ARFID among children and adolescents ranges from 1.5% to 23% among eating disorder day treatment and inpatient treatment settings.
- Children and adolescents with ARFID are younger, include a greater proportion of boys (although still predominantly girls), and have a longer duration of illness compared with patients with anorexia nervosa (AN).
- Patients with ARFID compared with those with AN have a greater likelihood of comorbid medical and/or psychiatric illness.
- Currently, there are no empirically validated treatments for ARFID.

DIAGNOSTIC CRITERIA AND CONTEXT

Avoidant restrictive food intake disorder (ARFID) is a newly classified disorder in the “Feeding and Eating Disorders” section of the Diagnostic and Statistical Manual of Mental Disorders (fifth edition) (DSM-5).\textsuperscript{1} ARFID is a feeding or eating disturbance

The authors do not have any relationships with commercial or financial company that has a direct financial interest in subject matter or materials discussed in this article or with a company making a competing product. D.K. Katzman has research funding from National Institutes of Health (NIH) and funding from Wolters Kluwer as Senior Associate Editor of Adolescent and Young Adult Health Care. N. Zucker has research funding from NIH.

\textsuperscript{a} Division of Adolescent Medicine, Department of Pediatrics, The Hospital for Sick Children and University of Toronto, 555 University Avenue, Toronto, Ontario M5G 1X8, Canada; \textsuperscript{b} Division of Adolescent Medicine, Department of Pediatrics, The Children’s Hospital of Eastern Ontario (CHEO), University of Ottawa, CHEO Research Institute, 401 Smyth Road, Ottawa, Ontario K1H 8L1, Canada; \textsuperscript{c} Department of Psychiatry and Behavioral Sciences, Duke School of Medicine, Duke University, Duke Center for Eating Disorders, PO Box 3454, Durham, NC 27710, USA

* Corresponding author.

\textit{E-mail address:} debra.katzman@sickkids.ca

https://doi.org/10.1016/j.psc.2018.10.003
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that includes a heterogeneous clinical presentation that can result in significant weight loss, nutritional deficiency, dependence on enteral feeding or nutritional supplements, and/or marked interference in psychosocial functioning. Individuals with ARFID can only be diagnosed in the absence of weight or shape concerns. Furthermore, the feeding or eating disturbance cannot be explained by lack of available food or by an associated culturally sanctioned practice. The eating disturbance cannot occur exclusively during the course of anorexia nervosa (AN) or bulimia nervosa (BN), nor can it be attributable to a concurrent medical condition or be better explained by another mental disorder. If the eating disturbance occurs in the context of another condition or disorder, the severity of the eating disturbance must exceed that routinely associated with the condition or disorder and requires additional clinical attention.

The emergence of ARFID as a diagnostic category in the DSM-5 resulted from several gaps recognized in the DSM-IV diagnostic category Feeding or Eating Disorders of Infancy and Early Childhood (FEDIC). Among the most significant gap was the fact that patients with FEDIC could only be diagnosed in children up until the age of 6 years. Evolving research suggested the presence of an older cohort of individuals that lacked body image concerns but exhibited significant feeding disturbances. An additional concern was that the impairment resulting from significant food avoidance and/or restriction may be broader than encapsulated in the FEDIC diagnosis. FEDIC only captured eating or feeding issues that resulted in weight loss and/or growth impairment. In some cases, other documented nutritional and psychosocial consequences caused impairment secondary to inadequate or poor nutrition. For example, research on food selectivity revealed that often entire food groups were avoided (eg, protein) without influence on growth trajectory. Likewise, the child’s limited food variety may be such that it severely limits the family’s mobility, adds to family conflict, and/or increases strain on the family system. These impairing consequences were not captured with FEDIC. Finally, the diagnosis of FEDIC was rarely used and studied, and as such, there was limited information on the characteristics, course, and outcome of these children.

As a result, the FEDIC diagnosis was replaced with ARFID in the DSM-5 as a means of capturing patients across the lifespan who have avoidant or restrictive eating that leads to significant medical or psychosocial problems and lack the body image concerns seen in individuals with AN and BN.

EPIDEMIOLOGY

Currently, there is a paucity of epidemiologic data on patients with ARFID over the lifespan.

Before the establishment of ARFID as a diagnosis, 3 separate prospective pediatric surveillance studies were conducted to determine the incidence and age-specific presentation of early-onset restrictive eating disorders (EDs) in children in Australia, Canada, and the United Kingdom. A latent class analysis of the total sample revealed 2 distinct clinical clusters, both of which presented with food avoidance. Cluster 1 included 56% of the cases who presented with symptoms of weight preoccupation, fear of being fat, body image distortion, and overexercising. Cluster 2 included 25% of the cases and was more likely to present with a comorbid psychiatric disorder. Clusters 1 and 2 closely resembled the DSM-5 criteria for AN and ARFID, respectively.

After the diagnostic category of ARFID was established, the prevalence of this disorder in North American pediatric tertiary care ED programs was noted to be 5% to 14%. In contrast, the prevalence of ARFID in a pediatric ED day treatment program was reported to be 23%. One study looking at ARFID in a pediatric gastroenterology
clinic found a prevalence rate of 1.5% of children and adolescents between 8 and 18 years. One or more ARFID symptoms were present in another 2.4% but a diagnosis could not definitely be made. One community-based sample, using a self-report screening tool in 8 to 13 year olds, demonstrated features of ARFID in 3.2% of the study population.

Most studies in patients with ARFID have been in pediatric samples. The inclusion of adults among those who can be diagnosed with ARFID has necessitated a new approach in conceptualizing this disorder. This new conceptualization of ARFID may in part explain why there are so few studies on the epidemiology of ARFID in adults. There are, however, a few case reports that have described the disorder in adolescents and adults. A retrospective chart review in a Japanese sample of women with feeding and EDs ages 14 to 50 years identified 11% of patients who met the DSM-5 criteria for ARFID. The ARFID group had significantly shorter duration of illness, lower rates of admission history, and less severe psychopathology when compared with patients with AN. Finally, a community-based survey of individuals 15 years and older in South Australia found the 3-month prevalence of ARFID to be 0.3%.

CLINICAL MANIFESTATIONS OF AVOIDANT RESTRICTIVE FOOD INTAKE DISORDER

A picture of the phenomenology of ARFID is emerging. Central to this understanding is the recognition that ARFID, being broad in its scope, captures various manifestations of food avoidance/restriction that may be distinct in pathophysiology and thus may necessitate diverse treatment approaches. The DSM-5 suggests motivations that may contribute to food avoidance/restriction: avoidance of foods due to their sensory properties (ie, taste, texture, smell), low appetite or disinterest in food, or fear of negative consequences from eating (ie, fear of choking or vomiting). As with any example provided in a diagnostic document, there is a danger that these examples become reified and exclusive, thus other motivations for food avoidance become neglected. Notwithstanding, Norris and colleagues reported that among a sample of 75 individuals who met criteria for ARFID, 3 subgroups could be identified corresponding to these distinct motivations for food avoidance, each with distinct associated features: (1) those with limited intake that were associated with lack of interest in eating/poor appetite; (2) those with limited variety associated with the sensory features of eating; and (3) those whose avoidance of eating had occurred in response to a specific event. Findings revealed that those with the limited variety/sensory aversion subtype had the longest length of illness (18% of the sample), whereas those who had experienced an aversive event (43%) were more likely to be admitted to a tertiary care center. Approximately 22% of this sample had a mixed presentation. Similar groups were reported when a developed measurement tool for ARFID was subject to factor analysis and included those with insufficient food quantity; those with insufficient variety; and those with avoidance after a traumatic event. In a proposed model of the neurobiology of ARFID, Thomas and colleagues suggest that although these motivations may have a distinct pathophysiology, the degree of these motivations may co-occur within an individual and thus may necessitate a blending of distinct approaches.

In addition, there also seems to be some common elements when examining cases of ARFID, particularly as the disorder becomes more severe. For example, Cooney and colleagues completed a retrospective chart review of 31 individuals with ARFID presenting to a tertiary care center. Of these, 96.4% had experienced weight loss or failure to make expected gains, and 3.6% were dependent on nutritional supplements. All of these individuals had 2 or more physical symptoms with more than 50%
reporting abdominal pain. A history of nausea and early satiety were also present in most of the sample. Of interest, 71.4% described a triggering event for the avoidance despite a pattern of food avoidance that had been of long duration. Thus, for some, the diagnosis of ARFID may represent a worsening of food avoidance that crosses a threshold of impairment against a backdrop in which adequate intake or intake of optimal quality had been substandard for a long duration. Notably, most of the children had seen another specialist before presenting to a specialized ED program, suggesting challenges in the early recognition of ARFID.

An alternative strategy to understanding the clinical presentation of individuals with ARFID has been to compare cases of ARFID to cases of AN or BN. In general, populations of children and adolescents with ARFID compared with those with AN or BN were found to have a greater proportion of boys (although still predominantly girls) were younger and had a longer duration of illness. Furthermore, patients with ARFID were found to have a greater likelihood of comorbid medical and/or psychiatric illness compared with patients with AN.17–19 Patients with ARFID have higher rates of obsessive compulsive disorder,18,19 generalized anxiety,7,18–20 autism spectrum disorder,18 attention-deficit/hyperactivity disorder,18,21 learning disorders,18 and cognitive impairment.18

EVALUATION OF PATIENTS WITH AVOIDANT RESTRICTIVE FOOD INTAKE DISORDER

History

The goal of the initial history is to develop rapport between the patient and clinician, to establish a diagnosis, and to determine an appropriate treatment setting. Pediatric assessments usually entail direct interviews with the child and parents, both together and separately. A full comprehensive history usually requires gathering data from the patient’s parents/caregivers, partner, and/or referring clinician.

Parental or family concerns regarding feeding issues and eating behaviors with or without weight loss should be assessed carefully by clinicians regardless of the age of the patient. Evolving evidence suggests that children and adolescents with ARFID have contact with multiple pediatric providers before a formal ED assessment takes place and are less likely to self-refer to an ED program as compared with those with AN or BN.7,19,20 As such, patients with ARFID often present with complex and long-standing histories that include psychiatric, medical, psychological, and sociocultural influences. Consequently, a multidisciplinary team is often essential to establishing a diagnosis and addressing treatment needs. The multidisciplinary team can include, but is not limited to, physicians, mental health professionals, dietitians, speech language pathologists, and occupational therapists. Ultimately, the structure of the multidisciplinary team will depend on the geographic location and availability of skilled health care professionals.

To make a diagnosis of ARFID, a thorough developmental, feeding, nutritional, and psychosocial history is critical to fully understand how a patient’s presentation impacts their current physical and psychological well-being. The clinician will first want to get a good understanding of why the patient and family have engaged the health care system at this particular time. The clinician should attempt to determine when the feeding issues were first identified as a concern and clarify the range, variety, type, and sensory characteristics (tastes, textures, smells) of acceptable foods. The patient’s appetite signaling and indifference to food intake should also be explored. Furthermore, the clinician should determine the extent to which developmental (ie, early feeding experiences), intrinsic (ie, the presence of anxiety), as well as extrinsic (ie, a traumatic feeding–related event such as a choking) factors contribute to energy
intake and therefore affect physical and sexual growth and development. It is not uncommon for caregivers to report high levels of distress and impairment as a result of feeding-related experiences. It is important to understand how this influences the feeding experience. For example, bullying, severe or repeated self-limiting illnesses, or feeding-specific traumatic events (ie, vomiting or choking) can result in restrictive nutritional intake. The clinician will want to understand how the patient has tolerated and progressed both physically and psychologically with respect to adding foods at varying developmental stages. In addition, it is important to explore how the individual’s sociocultural factors and ethnic values may influence the expression of their eating behaviors. The risk and/or presence of nutritional deficiency can be screened for using an assessment of dietary intake. A 24-hour dietary recall by the individual and/or family member should include types of foods and beverages, portion sizes, specific foods or food groups, foods intentionally avoided, dietary calcium intake, and other complementary or alternative medicines or supplements. The diverse presentation of ARFID can lead to specific micronutrient malnutrition or protein-energy malnutrition. Furthermore, the clinician should inquire about whether the patient depends on enteral feeding or nutritional supplements to sustain adequate intake. Finally, the clinician must also determine the extent to which the eating disturbance causes marked interference with psychosocial functioning, such as eating with others, attending school or age-appropriate social situations, or sustaining relationships.

It is important to keep in mind that the motivation that drives the feeding disturbances in patients with ARFID must not be related to cognitive concerns regarding the effects of food on shape, weight, or size. In fact, patients with ARFID may report being upset or distressed by being too thin and want to gain weight.

For girls, a complete menstrual history is important to assess for primary or secondary amenorrhea, which can be a result of weight loss or a chronic health condition. A thorough and careful review of systems is essential to determine a differential diagnosis, to help identify potential or underlying comorbid medical and psychiatric disorders, and to recognize medical complications resulting from a diagnosis of ARFID.

Finally, it is important to ask about family medical and mental illness. Parents may provide history suggestive of similar feeding challenges in other family members. This information will not only lend weight to the patient’s diagnosis but will also provide information about the patient’s background.

Physical Examination

In addition to the history, a complete physical examination should be performed at the initial assessment. The physical examination should include measurements of the patient’s height and weight, and determination of body mass index (BMI = weight [kg]/height [m²]). Previous heights and weights are also helpful. Weights and heights should be plotted on an age-appropriate growth curve for children and adolescents. This information is necessary to help determine the patient’s treatment goal weight (TGW) and to detect compromised growth and development. In addition, orthostatic heart rate and blood pressure should be checked as well as an oral temperature. A full and detailed physical examination, including sexual maturity rating, is necessary to help rule out medical causes of weight loss and/or growth impairment. Finally, the clinician should look for clinical findings consistent with nutritional deficiencies.

Laboratory Investigations

Laboratory assessment, including markers of nutritional deficiency, is an important component of a comprehensive workup. Laboratory assessments to consider in
patients suspected of having a diagnosis of ARFID include complete blood count with differential, serum electrolytes, blood urea nitrogen and creatinine, liver function tests, thyroid-stimulating hormone, electrocardiogram (ECG), and dual x-ray absorptiometry. For girls who present with amenorrhea, a pregnancy test (human chorionic gonadotropin) should be performed. A history that suggests inadequate nutritional intake may prompt the need for further diagnostic workup; in such cases, dietary deficiencies (ie, iron, calcium, vitamin B12, vitamin D, folate) should be explored. Depending on the history, erythrocyte sedimentation rate or C-reactive protein may help detect inflammation. Further diagnostic evaluation, such as a more extensive laboratory assessment, brain imaging, or procedural investigations (ie, endoscopy, barium swallow), may be indicated to exclude other suspected medical or psychiatric diagnoses that could present with signs and symptoms of ARFID.

PSYCHOLOGICAL INSTRUMENTS

The epidemiology, psychopathology, course, and outcome of patients with ARFID are limited by the lack of validated instruments. Diagnostic instruments are currently under development. A recent retrospective chart review on patients less than 18 years of age who were clinically diagnosed with ARFID found that commonly used pediatric ED psychometric measures lacked sensitivity in making a diagnosis of ARFID. The results from this study however, do not refute the inclusion of ED-specific measures during a pediatric ED assessment because they can be helpful in the diagnosis of children and adolescents with AN.

The Eating Disturbances in Youth-Questionnaire is a 14-item, self-report measure originally developed to screen for early-onset restrictive eating disturbances in nonclinical populations. A Swiss population-based study of 8 to 13 year olds demonstrated good psychometric properties, including adequate discriminant and convergent validity of this tool. A more recent principal component analysis (Zickgraf HF, 2018, personal communication) revealed a 4-factor structure, covering the 3 different restrictive eating disturbances and weight problems proposed in the *DSM-5* ARFID diagnostic category.

The Pica, ARFID, Rumination Disorder Interview (PARDI) is a structured, multi-informant interview (parent version for 2–3 year olds; parent version for children aged 4 and over; self version for 8–13 year olds; and self version for those aged 14 years and older) that is being evaluated for the diagnosis of ARFID. The PARDI provides details on the overall severity of ARFID and assessment of the 3 motivations outlined in *DSM-5*.

More recently, the 9-item ARFID screen (NIAS), a brief multidimensional instrument to measure ARFID-associated eating behaviors, was validated (for individuals 18 years and older) for 4 structures (picky eating, appetite, fear of negative consequences, and psychopathology) using exploratory and confirmatory factor analyses. Currently, a parent-report version of the NIAS for children 5 to 17 years old is being tested (Zickgraf HF, 2018, personal communication).

Ultimately, a clinical interview with the patient and family by a mental health professional is the tool that will help make an accurate diagnosis of ARFID.

MEDICAL COMPLICATIONS

Patients with ARFID are at risk of medical complications secondary to malnutrition. Previous studies have demonstrated that outpatients with ARFID exhibit similar rates of weight loss and malnutrition as patients with AN. Given the preponderance of low-weight patients with ARFID, it stands to reason that this group would also be at risk for the acute and chronic effects of malnutrition. There is evidence that patients with ARFID are susceptible to develop bradycardia, prolonged QT interval on ECG,
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and electrolyte abnormalities. In fact, patients with ARFID have presented with rates of electrolyte abnormalities that are more than doubled those observed in AN. In addition, patients with ARFID are at risk of menstrual irregularities and amenorrhea. Although there are no prospective studies examining the impact of ARFID on bone mineral density (BMD), one retrospective study demonstrated that 77% of patients with ARFID had BMD scores at least one standard deviation from the mean, with 25% reported to be in the osteoporotic range. BMD was significantly lower in the ARFID group compared with patients with AN (Norris, 2014). Most studies in children and adolescents with EDs have shown that the ARFID cohort is younger than the non-ARFID cohort. As such, the reported malnutrition described in the patients with ARFID has the potential to impact physical and sexual growth and development.

Studies have shown that patients with ARFID are less likely to be hospitalized than those with AN due to medical instability. However, a recent study that looked at the utility of ARFID subtype assignments demonstrated that patients with traumatic feeding-related experiences were admitted into tertiary care centers more frequently than patients with primary sensory difficulties or low appetite/indifference to eating. This observation suggests potential differences in the degree of medical morbidity among ARFID subtypes at first presentation.

TREATMENT

To date, there is a lack of empirically validated treatments for patients with ARFID across each level of care. Because the treatment needs of patients with ARFID are diverse, the multidisciplinary team should approach treatment in a way that best meets the patient’s medical, nutritional, mental health, and feeding-specific needs while at the same time mitigating distress and impairment. Similar to the treatment approach in patients with AN, patients with ARFID that are malnourished, underweight, and/or growth impaired should be placed on adequate nutrition to reestablish weight restoration to the patient’s TGW as quickly as possible. Given the anxiety, food restrictions, and aversions present in many patients with ARFID, a thoughtful and compassionate approach to treatment is critical.

A current consideration is whether patients with ARFID require a unique and specialized therapeutic milieu and treatment program separate from other ED patients. For example, patients with ARFID and AN may have different nutritional requirements with respect to diet quality and quantity, which may make it challenging to have the same milieu structure apply to both groups. In addition, individuals with ARFID may view the “safe” foods of those with AN as “disgusting,” whereas patients with AN may find the food and eating behaviors of those with ARFID “triggering.” The risk is that these differences make the treatment milieu feel unsafe for patients, which is an important consideration. Furthermore, patients with ARFID may feel misunderstood by groups that emphasize body image. On the other hand, having different types of EDs treated in the same specialized day treatment program or inpatient unit assures a skilled ED staff, a safe and supportive environment that is sensitive to the needs of patients with EDs and may be more financially efficient. These issues need further study.

Medical Inpatient Treatment

Currently, many clinicians use the criteria for medical instability delineated for patients with restrictive EDs for their patients with ARFID. Patients found to be medically unstable will require hospitalization. In such cases, a refeeding protocol is
recommended. Peebles and colleagues\textsuperscript{33} described an aggressive pediatric inpatient renourishment program that resulted in similar rates of weight gain and need for referral to higher levels of care in patients with ARFID and AN. Of note, individuals with ARFID were more likely to require use of nasogastric tube (NGT) feedings to restore nutrition and at younger ages relative to other ED diagnoses. The protocol included a meal plan with embedded “exposures” to increase the approach to feared foods in AN. However, the more frequent use of NGT feedings in children with ARFID suggested that the typical hospital meal plan was viewed as more challenging in this group.

The more frequent use of NGT feedings in ARFID raises some clinical concerns. Although NGT feedings may at times be a medical necessity, there is a potential danger that this treatment could be iatrogenic in that the aversive oral sensations of tube feedings in individuals who are already sensitive to oral sensations may lead to further conditioned food avoidance. Thus, although some ED programs may use this strategy as a routine technique when an individual fails to consume all or part of their prescribed meal, its use should be used more cautiously in individuals with ARFID.

**Day Hospital Treatment**

Day hospital or partial hospital programs provide an intermediate level of care between inpatient and outpatient treatment. One study compared the outcomes of patients with ARFID to those with other EDs in a day treatment setting.\textsuperscript{21} They found that patients with ARFID had higher rates of NGT feedings and spent significantly fewer weeks in a program than those with AN. However, patients with ARFID experienced similar increases in % mean BMI as patients with AN and other specified/unspecified feeding and EDs. All patients exhibited significant improvements in eating attitudes and behaviors over the course of treatment, suggesting that patients with ARFID can be successfully treated among children with other EDs in the same day hospital setting.

**Outpatient Psychological Treatment**

There have been several single-case studies, nonrandomized group trials, and a limited number of randomized controlled trials investigating the efficacy of behavioral management approaches to increase food consumption in childhood feeding and EDs.\textsuperscript{34,35} In general, thoughtful behavioral approaches can improve acute intake or eating behaviors across a variety of feeding and ED presentations as evidenced in rigorous single-case designs.\textsuperscript{36} In one review, most interventions used escape extinction (ie, not removing the spoon until a bite is taken) with differential reinforcement of a behavior that is desired to be increased. Many of these strategies were examined in children with developmental disabilities or neurodevelopmental disorders. Although basic behavioral learning principles apply to everyone, what is rewarding, relieving, or punishing varies greatly across individuals based on nuanced considerations, including developmental capacities for learning. Furthermore, addressing caregiver burden and acceptability is crucial. Sharp and colleagues\textsuperscript{37} used a multidisciplinary intervention that included graduated weaning of supplement feeds, escape extinction, reinforcement procedures, and a formalized meal structure over a 5-day interval among 1 to 6 year olds with ARFID. Acceptability and feasibility ratings by parents were extremely high, and the amount of food consumption was significantly improved relative to a waitlist control group. Other notable outpatient treatment examples include a pilot study that used appetite manipulation via medication, tube weaning, and pain management resulting in 100% of individuals weaned from tube feeding in
a 14-week intervention.38 This intervention may have decreased the aversive experiences of eating via pain management while increasing the rewarding value of food by increasing appetite. Knowledge of the relative effectiveness of these approaches will help to personalize interventions because some may be more suitable to patient or caregiver features or resources.

Although behavioral approaches can improve acute mealtime behaviors, less is known about how such approaches change attitudes or associations with the eating context generally, or enjoyment of food, in particular. Children with feeding difficulties and their caregivers have often had extended histories in which eating has been associated with pain37; anticipated or experienced dangerous outcomes (eg, exposure to a food allergen); and associations with unpleasant tastes and smells. Negative associations with the social context of eating (eg, parents yelling or nagging) on the part of the child and fatigue on the part of the caregiver are important considerations in the feeding/eating environment. Although the important proximal goal is to increase the mental and physical health of the child, interventions that deliberately attempt to create pleasant associations with the family eating environments and that attempt to decrease caregiver burden and distress are critical components of intervention strategies.37

Emerging treatment options for ARFID are currently under development. One psychological treatment being tested at the Massachusetts General Hospital involves cognitive-behavioral therapy for ARFID. This treatment is designed for individuals who are 10 years and older, medically stable, and not using NGT feedings. The treatment consists of 20 to 30 outpatient sessions delivered in an individual or family-supported format and starts with supporting the underweight patient to eat to increase their energy intake resulting in weight restoration. Dietary variety is then increased using structured in-session exposure focusing on the maintaining mechanisms (sensory sensitivity, fear of consequences, or lack of interest in food) of the disorder.28

Another novel approach attempts to address eating by helping young children to be less fearful of or less disgusted by bodily and sensory sensations in general, including those involved in eating. Feeling and Body Investigators–ARFID Division uses playful characters (eg, Gassy Gus, Victor Vomit); exercises that intentionally evoke aversive sensations in a playful context (eg, what makes me more nauseous: spinning in a chair for 30 seconds or running in a circle for 30 seconds); and a decision-tree worksheet to help children link body sensations to meaning and actions (I feel gut butterflies: I am nervous, I will go hold someone’s hand). The intervention intends to help children be curious investigators of what goes on inside their bodies and what they experience with their senses, rather than fearful. In the context of ARFID, this includes increasing awareness of hunger and fullness and becoming less fearful of vomiting, constipation, and abdominal pain. This intervention has shown preliminary effectiveness in decreasing abdominal pain and anxiety in young children with functional abdominal pain and is being adapted for ARFID.4

Box 1 suggests guidelines and future directions for treatment.

Psychiatric medications
There are no evidence-based pharmacologic treatments indicated for the treatment of patients with ARFID. A limited number of reports have described the use of psychotropic medications in both posttraumatic feeding disorders and children and adolescents with ARFID.39–42 One case series described the use of low-dose olanzapine as an adjunctive treatment to other treatment modalities resulting in reduced anxiety and cognitive features in patients with ARFID.41 One must consider that patients with ARFID may be better able to metabolize pharmacologic agents because they present...
with higher weights than patients with AN. However, little is known about the benefits and efficacy of these medications in this population, and thus, future randomized, placebo-controlled studies are warranted.

SUMMARY

In the last 5 years, research on ARFID has yielded important new knowledge. Additional epidemiologic studies of ARFID throughout the lifespan are needed. Exploration of risks factors and pathophysiology are critical for developing effective treatment strategies. At present, little is known about how patients with ARFID are best treated across the lifespan. Investigating novel and developmentally-appropriate treatment options and evaluating the efficacy of these options at different levels of care are needed. Furthermore, the development of psychometrically valid measures is essential to help screen for the disorder and evaluate treatment outcomes. More information is needed on ARFID and its associated comorbid medical and mental illnesses, and how this might impact treatment. Other challenging issues confronting the field include the subcategorization of ARFID and the implications of these subcategories on diagnosis and treatment. Emerging evidence holds promise for significantly advancing the understanding of ARFID and the care of patients with this complex disorder.

Box 1
General guidelines for approaching the management of children with avoidant restrictive food intake disorder

1. Place special emphasis on validating the child and parents’ learning history. Given the often extended duration of ARFID, the caregiver/child system may be quite emotionally and physically depleted.

2. Emphasize getting mealtimes back or establishing mealtimes as a safe space. Family mealtimes have often become associated with conflict and distress in families with ARFID. Given the importance of family mealtimes for improving support, communication, manners, teamwork, and other important developmental skills, individuals should consider attempting food challenges at snack times and focusing on consumption of safe foods at mealtimes.

3. If needed, have a comprehensive oral-motor function evaluation so parents and providers feel confident in the types of food that are safe for exposures.

4. Train to confidence in the use of approaches to guarantee safety in the event that exposures trigger an unwanted or potentially dangerous event (eg, accidental exposure to allergen; vomiting; gagging).

5. Facilitate caregiver support.

6. Perform a comprehensive analysis (ie, supervised family meals, or video recordings of mealtimes in the home) to form hypotheses about child and caregiver behaviors that may be reinforcing avoidance of eating and those that increase food approach.

7. Reward the child for engaging in behaviors that increase food approach.


9. Consider interventions that address a fear of somatic symptoms in the child, beyond those associated with eating.

Outlined here are suggested guidelines for approaching the management of individuals with ARFID. These are predicated on supporting the underweight and/or growth impaired individual to achieve the rapid restoration of physical health.
REFERENCES


