Psychological and Sociological Influences Contributing to Avoidant Restrictive Food Intake Disorder (ARFID) Across Age Groups and Gender

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Abstract
This review depicts the epidemiology of avoidant restrictive food intake disorder (ARFID), a relatively new eating disorder characterized by persistent food restriction leading to weight loss or nutritional deficiencies. The prevalence of ARFID varies, with the disorder occurring in both children and adults, although rates may be higher among females. Psychopathological, medical, neurodevelopmental, family, genetic, and cultural factors may contribute to the development of ARFID. The media can significantly impact the development and persistence of ARFID, both positively and negatively. This review also...

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discusses diagnostic criteria and differential diagnosis of ARFID. Assessment tools and evaluation protocols are described, such as clinical, physical, psychiatric, psychological, and functional magnetic resonance imaging (fMRI). Finally, the review covers various treatment options for ARFID, like cognitive-behavioral therapy (CBT), nutritional interventions, family-based therapy (FBT), and pharmacotherapy. The challenges in the diagnosis and treatment of ARFID are also highlighted, including overlapping symptomatology with other mental health disorders and heterogeneous manifestations of the disorder.

**Keywords:** Cognitive-Behavioral Therapy, Family-Based Therapy, Nutritional Deficiency, Nutritional Interventions, Persistent Food Restriction.

**Abbreviations:** ADHD: Attention Deficit Hyperactivity Disorder; ARFID: Avoidant Restrictive Food Intake Disorder; BMI: Body Mass Index; CBT: Cognitive Behavioral Therapy; DSM-5: Diagnostic and Statistical Manual of Mental Disorders, 5th Edition; EDE-Q: Eating Disorder Examination Questionnaire; FBT: Family-Based Therapy; fMRI: Functional Magnetic Resonance Imaging; OCD: Obsessive-Compulsive Disorder; VR: Virtual Reality


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**Introduction**

Avoidant restrictive food intake disorder (ARFID) is a relatively newly-defined eating disorder characterized by failure to meet nutritional or energy needs due to limited consumption or avoidance of specific foods due to sensory characteristics of those foods, lack of interest in eating or food, or fear of adverse consequences such as choking or vomiting. Avoidance or restriction of food intake of ARFID distinguishes it from other eating disorders, such as anorexia and bulimia nervosa, where food intake is often restricted in terms of calories or quantity (Seetharaman & Fields, 2020).

The concept of ARFID has roots in early medical literature. However, it was only in 2013 that ARFID was recognized as a distinct category of feeding or eating disorders in the Diagnostic and Statistical Manual of Mental Disorders, 5th Edition (DSM-5; Bourne, Bryant-Waugh, Cook, & Mandy, 2020). Since then, the field of ARFID-related research has undergone significant expansion, but gaps and limitations in understanding and treatment have been identified (Bourne et al., 2020; Kennedy, Hitchman, Pettie, Bulik, & Jordan, 2023).

Over time, research on ARFID has significantly expanded, particularly in addressing its diagnostic criteria, medical complications, and treatment methods. These methods often entail multidisciplinary approaches. Furthermore, additional studies have explored prevalent comorbidities, differential diagnoses, and risk factors for the development of the disorder. However, it is essential to note that the diagnostic validity of ARFID and its symptom count are still areas of ongoing research (Eddy et al., 2019; Grubb, 2021; Nitsch, Knopf, Manwaring, & Mehler, 2021).
Discussion

Epidemiology of Avoidant Restrictive Food Intake Disorder (ARFID)

Epidemiological studies have highlighted varying prevalence rates of ARFID, which are influenced by factors such as age, sex, and specific population characteristics.

**Children and Adolescents**

In children and adolescents, the reported prevalence rates of ARFID range from as low as 0.3% to as high as 15.5% (Sanchez-Cerezo, Nagularaj, Gledhill, & Nicholls, 2022).

Recent data indicate that the disorder is not gender-linked and may present across diverse demographics (MacDonald, Liebman, & Trottier, 2024).

**Young Adults**

ARFID constitutes a significant portion of patients with eating disorders among young adults. According to a research study by Białek-Dratwa et al. (2022), it impacts approximately 9.2% of the evaluated group, with a higher prevalence among women than men.

Preliminary studies indicate that ARFID is widespread across educational levels and exhibits a heightened occurrence among younger individuals, as well as non-White, Hispanic, and lower-income adults in the United States (D’Adamo et al., 2023; Van Buuren et al., 2023).

Some individuals may encounter constraints in the quantity and variety of food they consume. These constraints are caused by an intrinsic apprehension about eating or the sensory characteristics of food. Others may eat a typical range of foods but in insufficient quantities to meet their nutritional and energy needs (Bourne et al., 2020; Kennedy et al., 2023).

**Adults**

Research on ARFID in adults is comparatively scarce compared to that conducted in children and adolescents. As such, the prevalence rate of ARFID among adults is not well established. However, according to Guarda (2023), ARFID was identified in up to 5% of adult patients.

The prevalence of all eating disorders, including ARFID, was lower in adults than in adolescents, with fewer cases found in older populations.

**Risk Factors for the Development of ARFID**

Psychopathological, medical, neurodevelopmental, family, genetic, and cultural factors may contribute to the development of the disorder (Table 1).

**Psychopathological Factors:**

Individuals with ARFID may have comorbid psychiatric conditions, such as anxiety or depression, that contribute to the development of the disorder. Trauma, particularly early childhood trauma, has also been associated with an increased risk of developing ARFID (Kambanis et al., 2019).

**Medical Factors:**

Certain medical conditions, such as gastrointestinal disorders, food allergies, or feeding tube dependency, can contribute to ARFID (Kozak et al., 2023). In these cases, food restriction is related to avoiding discomfort or pain related to the condition or food aversions resulting from treatment.

**Neurodevelopmental Factors**

Individuals with neurodevelopmental conditions such as autism spectrum disorder or attention deficit hyperactivity disorder (ADHD) are at increased risk for ARFID (Dinkler et al., 2022). The food restriction may be related to sensory issues or rigid eating habits associated with these disorders.
Family Factors:
Family factors such as parental feeding practices, family mealtime dynamics, or adverse life events can contribute to ARFID. Family members' enmeshment or over-involvement in the child's eating habits and mealtime routines may lead to food restriction and avoidant behaviors (Godfrey, Rhodes, & Hunt, 2013).

Genetic Factors:
Research on the genetic factors linked to ARFID is limited. Nonetheless, a genetic predisposition may contribute to the disorder, particularly in individuals with a family history of eating disorders (Kennedy, Dinkler, Kennedy, Bulik, & Jordan, 2022).

Cultural Factors:
Cultural attitudes towards food, body image, and eating behavior can influence an individual's relationship with food and contribute to developing disordered eating behaviors. For instance, in some cultures, the pressure to conform to thinness standards is exceptionally high, leading to body dissatisfaction (Blowers, Loxton, Grady-Flesser, Occhipinti, & Dawe, 2003). Also, some cultural practices can perpetuate disordered eating patterns. Avoidance of certain foods or food groups may be dictated by cultural or religious beliefs (Chouraqui et al., 2020). These beliefs, influences, and factors can lead to inadequate nutrient intake and malnutrition, resulting in moderate to severe health consequences.

Table 1. Risk Factors for ARFID

<table>
<thead>
<tr>
<th>Risk Factors</th>
<th>Description</th>
</tr>
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<tbody>
<tr>
<td>Psychopathological</td>
<td>- Comorbid psychiatric conditions such as anxiety or depression</td>
</tr>
<tr>
<td></td>
<td>- Trauma, especially early childhood trauma</td>
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<tr>
<td>Medical</td>
<td>- Gastrointestinal disorders</td>
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<tr>
<td></td>
<td>- Food allergies</td>
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<td></td>
<td>- Feeding tube dependency</td>
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<tr>
<td>Neurodevelopmental</td>
<td>- Autism spectrum disorder</td>
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<tr>
<td></td>
<td>- Attention deficit hyperactivity disorder (ADHD)</td>
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<tr>
<td>Family</td>
<td>- Parental feeding practices</td>
</tr>
<tr>
<td></td>
<td>- Family mealtime dynamics</td>
</tr>
<tr>
<td></td>
<td>- Adverse life events</td>
</tr>
<tr>
<td>Genetic</td>
<td>- Limited research but potential genetic predisposition, especially in individuals with a family history of eating disorders</td>
</tr>
<tr>
<td>Cultural</td>
<td>- Cultural attitudes towards food, body image, and eating behavior</td>
</tr>
<tr>
<td></td>
<td>- Pressure to conform to thinness standards</td>
</tr>
<tr>
<td></td>
<td>- Cultural practices perpetuating disordered eating patterns</td>
</tr>
<tr>
<td></td>
<td>- Avoidance of certain foods or food groups dictated by cultural or religious beliefs</td>
</tr>
<tr>
<td></td>
<td>- Influence on inadequate nutrient intake and malnutrition</td>
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</table>

Effects of Media on ARFID
Media can significantly impact the development and persistence of ARFID.
Exposure to media that promotes idealized body standards and thinness can contribute to body dissatisfaction and a negative relationship with food, precipitating disordered eating behaviors. Social media sites often feature images of food and food challenges, which can increase the pressure to follow restrictive eating patterns (Jiotsa, Naccache, Duval, Rocher, & Grall-Bronnec, 2021).

The media can also shape food preferences and aversions, especially in children. Exposure to advertising of unhealthy food choices can foster unhealthy eating habits (Tschantaridou et al., 2023). Furthermore, the media can disseminate misinformation, endorsing fad diets or unproven “miracle foods” that may trigger disordered eating behaviors (Suárez-Lledó & Álvarez-Gálvez, 2021).
Contrarily, the media can play a positive role in treating ARFID. Online support groups and forums can provide community and support for individuals with ARFID and their families (McCormack, 2010). Additionally, online resources can educate individuals and caregivers about healthy eating practices and provide accurate information about nutrition and food.

**Effects of Food Challenges and Games on the Media**

Media may propagate food challenges and games that negatively influence individuals to partake in similar eating behaviors.

However, the media can also positively improve food acceptance among individuals with ARFID. Food exposure therapy involves gradual exposure to feared or avoided foods, and media can play a role in this process. For example, virtual reality (VR) technology can create a safe environment for individuals with ARFID to experience new foods (Riva, Malighetti, & Serino, 2021). Similarly, video modeling and role-playing eating scenarios may be used to prepare individuals with ARFID for new experiences with food (Murray et al., 2022).

Commonly exposed effects of media on ARFID are summarized in Table 2.

<table>
<thead>
<tr>
<th>Negative Effects</th>
<th>Positive Effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Promotion of idealized body standards and thinness</td>
<td>Online support groups and forums provide community and support</td>
</tr>
<tr>
<td>Contribution to body dissatisfaction and negative relationship with food</td>
<td>Education about healthy eating practices and nutrition</td>
</tr>
<tr>
<td>Pressure to follow restrictive eating patterns due to food challenges on social media</td>
<td>Accurate information about nutrition and food</td>
</tr>
<tr>
<td>Shaping of food preferences and aversions, especially in children</td>
<td>Utilization of media in food exposure therapy</td>
</tr>
<tr>
<td>Dissemination of misinformation endorsing fad diets or unproven &quot;miracle foods&quot;</td>
<td>VR technology creates safe environment for food exposure</td>
</tr>
<tr>
<td>Propagation of food challenges and games in media</td>
<td>Video modeling and role-playing prepare for new food experiences</td>
</tr>
</tbody>
</table>

**Assessment Tools and Evaluations**

Assessing and evaluating individuals with ARFID comprises clinical, physical, psychiatric, psychological, eating behavior, parental, and fMRI assessments.

**Clinical Interview:**

The clinical interview is the cornerstone of the assessment of ARFID—providing relevant history, including the duration and severity of the symptoms, comorbid psychiatric or medical conditions, and the individual's psychosocial functioning (Kambanis & Thomas, 2023).

**Physical Examination:**

The physical examination can identify signs of malnutrition, weight loss, or dehydration. Laboratory tests, including a complete blood count, electrolyte panel, and liver function tests, can aid in assessing the individual's nutritional status and identify accompanying medical conditions (Bharadwaj et al., 2016).

**Psychiatric Evaluation:**

The psychiatric evaluation can identify comorbid psychiatric conditions such as anxiety disorders or depression. The evaluation may include a mental status examination and an assessment of the individual's cognitive functioning (Seetharaman & Fields, 2020).
**Psychological Assessments:**

Psychological assessments, such as cognitive and behavioral analyses, can reveal an individual's food-related behaviors and identify cognitive or behavioral factors contributing to the disorder (Wehling & Lusher, 2019).

**Eating Behavior Questionnaires:**

Eating behavior questionnaires, such as the Eating Disorder Examination Questionnaire (EDE-Q), can assess an individual's eating behaviors, including the foods avoided and motives for food restriction (Kambanis & Thomas, 2023).

**Parental Assessment:**

For children with ARFID, parental evaluation can offer insights into the child's developmental history, eating behaviors, and any comorbid conditions (Białek-Dratwa et al., 2022; Dovey, Kumari, & Blissett, 2019).

**Functional Magnetic Resonance Imaging (fMRI):**

fMRI can be used to study the neural circuits involved in eating behaviors and food-related reward processing, further identifying any underlying neurobiological factors contributing to ARFID (Frank, Shott, & DeGuzman, 2019).

Table 3 summarizes the various assessment tools and evaluation protocols.

<table>
<thead>
<tr>
<th>Assessment Tool</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clinical Interview</td>
<td>- Gather relevant history&lt;br&gt;- Assess duration and severity of symptoms&lt;br&gt;- Identify comorbid psychiatric or medical conditions&lt;br&gt;- Evaluate psychosocial functioning</td>
</tr>
<tr>
<td>Physical Examination</td>
<td>- Identify signs of malnutrition, weight loss, or dehydration&lt;br&gt;- Assess nutritional status&lt;br&gt;- Identify associated medical conditions&lt;br&gt;- Conduct laboratory tests (e.g., complete blood count, electrolyte panel, liver function tests)</td>
</tr>
<tr>
<td>Psychiatric Evaluation</td>
<td>- Identify comorbid psychiatric conditions&lt;br&gt;- Conduct mental status examination&lt;br&gt;- Assess cognitive functioning</td>
</tr>
<tr>
<td>Psychological Assessments</td>
<td>- Understand food-related behaviors&lt;br&gt;- Assess cognitive and behavioral factors contributing to the disorder</td>
</tr>
<tr>
<td>Eating Behavior Questionnaires</td>
<td>- Assess eating behaviors&lt;br&gt;- Identify types of foods avoided&lt;br&gt;- Explore reasons for food restriction</td>
</tr>
<tr>
<td>Parental Assessment</td>
<td>- Provide information about developmental history, eating behaviors, and comorbid conditions</td>
</tr>
<tr>
<td>Functional MRI (fMRI)</td>
<td>- Study neural circuits involved in eating behaviors and food-related reward processing&lt;br&gt;- Identify underlying neurobiological factors contributing to ARFID</td>
</tr>
</tbody>
</table>

**Diagnostic Criteria for ARFID**

The diagnostic criteria for ARFID were established in the fifth edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-5). The criteria focus on persistent food intake avoidance or restriction, resulting in weight loss or nutritional deficiency. According to the American Psychiatric Association (2013), the diagnostic criteria are as follows:

- **Criterion A:** Eating or feeding disturbances manifested by persistent failure to meet appropriate nutritional and/or energy needs.
• Criterion B: The eating disturbance is not better explained by a lack of food availability or an associated culturally sanctioned practice.
• Criterion C: The eating disturbance is not due to a concurrent medical condition or is not better explained by another mental disorder.
• Criterion D: If the disturbance occurs in the context of another condition or disorder, the severity of the eating disturbance exceeds that routinely associated with the condition.
• Criterion E: The eating disturbance is not attributable to a substance or another medical condition.

The ARFID diagnosis must have one or more of the following:
• Significant weight loss or failure to achieve expected weight gain or growth in children
• Nutritional deficiency
• Dependence on oral nutritional supplements or enteral feeding
• Marked interference with psychosocial functioning

Additionally, the DSM-5 provides further specifiers for ARFID diagnosis, including:
• Specifier (P) – Persistent: The eating disturbance has persisted for an extended duration (e.g., 6 months or more).
• Specifier (E) – Episodic: The eating disturbance occurs intermittently, typically in response to stressful life events and/or other situational factors.
• Specifier (R) – Remission status: Specifies if an individual previously met criteria for ARFID but currently no longer does.

In summary, the diagnostic criteria for ARFID, as per DSM-5, entail persistent failure to meet nutritional needs not explained by culture or medical conditions, with further specifiers for duration and remission status.

Clinical Symptoms and Presentations of ARFID

**Physical**

Individuals with ARFID may present with a range of physical symptoms such as emaciation, dehydration, weakness, and fatigue. Lowe et al. (2019) found that individuals with ARFID had significantly lower weight and body mass index (BMI) than healthy controls. Nutritional deficiencies such as iron deficiency anemia and vitamin deficiencies may also be present, and close monitoring of these parameters is essential to prevent further complications.

ARFID may present with a range of gastrointestinal symptoms (e.g., abdominal pain, bloating, constipation, and reflux). In a study by Lin, Woods, and Bern (2021), individuals with ARFID had significantly higher rates of gastrointestinal symptoms than healthy controls.

A thorough medical evaluation, including a physical exam, laboratory tests, and imaging studies as indicated, is essential in diagnosing ARFID. Growth charts and BMI-for-age percentiles can help monitor growth and development in children and adolescents with ARFID.

**Psychological**

Individuals with ARFID may experience food apprehension, which can manifest as avoidance or extreme selectivity in food choices. Białek-Dratwa et al. (2022) found that individuals with ARFID had higher
rates of anxiety symptoms compared to healthy controls. Such distress can result in substantial limitations in everyday tasks and familial, social, academic, and occupational activities.

Depressive symptoms may be present in individuals with ARFID. Lowe et al. (2019) reported that individuals with ARFID had higher rates of depressive symptoms compared to those with other eating disorders.

Seetharaman and Fields (2020) reported higher rates of comorbid anxiety and developmental disorders in cases of ARFID compared to individuals with other eating disorders.

Individuals with ARFID may experience social isolation and difficulty with relationships. They may have difficulties in school or work due to their restrictive eating patterns (Białek-Dratwa et al., 2022).

**Differential Diagnosis**

The differential diagnosis of ARFID involves ruling out other causes of restrictive food intake, weight loss, or nutritional deficiencies. The following conditions should be considered.

**Anorexia Nervosa:**

Anorexia nervosa is characterized by restrictive food intake, fear of weight gain, and body dysmorphia, leading to significant weight loss. However, individuals with anorexia may have a distorted body image and a drive for thinness, which are not evident in ARFID (American Psychiatric Association, 2013).

**Bulimia Nervosa:**

Bulimia nervosa is characterized by recurrent episodes of binge eating followed by compensatory behavior such as purging or fasting. Individuals with ARFID do not exhibit binge eating episodes, and compensatory behaviors are absent (Robatto, De Magalhães Cunha, & Moreira, 2023).

**Gastrointestinal Disorders:**

Gastrointestinal conditions (e.g., celiac disease, inflammatory bowel disease, and gastroparesis) can lead to restrictive food intake and weight loss. A medical evaluation, including laboratory tests and imaging studies, can help rule out these conditions (American Psychiatric Association, 2013; Fikree & Byrne, 2021).

**Neurological Disorders:**

Neurological disorders (e.g., autism spectrum disorder, intellectual disability, and epilepsy) can be associated with food restriction. In these cases, the food restriction is related to sensory issues, rigid eating habits, or medication side effects. A thorough evaluation should be conducted to rule out these conditions (American Psychiatric Association, 2013).

**Anxiety Disorders:**

Anxiety disorders (e.g., generalized anxiety disorder and social anxiety disorder) can present with avoidance of food and dining scenarios. However, individuals with ARFID do not exhibit distorted body image or fear of weight gain, which are typical features of anxiety disorders (American Psychiatric Association, 2013).

**Pharmacological Side Effects:**

Medications (e.g., appetite suppressants) can cause a decrease in appetite, leading to weight loss. A medication review can help rule out these causes (Pennell, Couturier, Grant, & Johnson, 2016).

The differential diagnosis of ARFID requires ruling out other causes of restrictive food intake and weight loss or nutritional deficiencies, including anorexia nervosa, bulimia nervosa, gastrointestinal disorders, neurological disorders, anxiety disorders, and pharmacological side effects (Table 4).
Table 4. Key Features and Distinguishing Factors for Differential Diagnosis

<table>
<thead>
<tr>
<th>Condition</th>
<th>Key Features</th>
<th>Distinguishing Features from ARFID</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anorexia Nervosa</td>
<td>- Restrictive food intake</td>
<td>- Distorted body image</td>
</tr>
<tr>
<td></td>
<td>- Fear of weight gain</td>
<td>- Drive for thinness</td>
</tr>
<tr>
<td></td>
<td>- Body dysmorphia</td>
<td></td>
</tr>
<tr>
<td>Bulimia Nervosa</td>
<td>- Recurrent binge eating followed by compensatory behaviors (purging, fasting)</td>
<td>- Absence of binge eating episodes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Lack of compensatory behaviors</td>
</tr>
<tr>
<td>Gastrointestinal</td>
<td>- Celiac disease</td>
<td>- Presence of gastrointestinal symptoms</td>
</tr>
<tr>
<td>Disorders</td>
<td>- Inflammatory bowel disease</td>
<td>- Abnormal laboratory tests (e.g., serological markers for celiac disease, inflammatory markers)</td>
</tr>
<tr>
<td></td>
<td>- Gastroparesis</td>
<td>- Imaging findings consistent with gastrointestinal pathology (e.g., endoscopy, abdominal ultrasound)</td>
</tr>
<tr>
<td>Neurological Disorders</td>
<td>- Autism spectrum disorder</td>
<td>- Food restriction related to sensory issues</td>
</tr>
<tr>
<td></td>
<td>- Intellectual disability</td>
<td>- Rigid eating habits</td>
</tr>
<tr>
<td></td>
<td>- Epilepsy</td>
<td>- Medication side effects (e.g., antiepileptic drugs)</td>
</tr>
<tr>
<td>Anxiety Disorders</td>
<td>- Generalized anxiety disorder</td>
<td>- Absence of distorted body image</td>
</tr>
<tr>
<td></td>
<td>- Social anxiety disorder</td>
<td>- Absence of fear of weight gain</td>
</tr>
<tr>
<td>Pharmacological Side</td>
<td>- Appetite suppressants</td>
<td>- Use of medications that have appetite suppressing effects</td>
</tr>
<tr>
<td>Effects</td>
<td></td>
<td></td>
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</tbody>
</table>

Challenges in Identifying and Addressing Comorbidities

Identifying and addressing comorbidities in individuals with ARFID poses challenges due to overlapping symptomatology with other mental health disorders, such as anxiety, depression, and obsessive-compulsive disorder (OCD; American Psychiatric Association, 2013; Kambanis et al., 2019).

Individuals with ARFID are more likely to have comorbid mental health disorders such as anxiety, depression, and OCD compared to individuals without the disorder (Kambanis et al., 2019; Seetharaman & Fields, 2020). Hence, a comprehensive clinical assessment of individuals with ARFID is integral to identifying comorbid conditions.

A constructive strategy for managing comorbidities in individuals with ARFID entails applying a multidisciplinary approach to comprehensively address the patient’s medical and psychiatric requirements (Norris et al., 2021).

Treatments

ARFID treatment integrates a multidisciplinary approach comprising behavioral, nutritional, and pharmacotherapy interventions. The following treatment options have shown efficacy in managing individuals with ARFID.

**Behavioral Interventions:**

Cognitive Behavioral Therapy (CBT) can help identify and modify dysfunctional thoughts and behaviors related to food and eating. Exposure therapy, utilizing gradual exposure to feared or avoided foods, can also help increase food acceptance and reduce food-related anxiety (Kambanis & Thomas, 2023).

**Nutritional Interventions:**

Nutritional interventions for ARFID individuals involve oral nutritional supplements or enteral feeding to ensure adequate nutrient intake. In severe nutritional depletion, hospitalization with nasogastric or gastrostomy tube feeding may be indicative (Bialek-Dratwa et al., 2022; Di Cara et al., 2023).

**Family-Based Interventions:**

Family-based therapy (FBT) is supportive in treating ARFID in children and adolescents. FBT involves working with the family to provide behavioral and nutritional interventions and address any family dynamics contributing to the disorder (Van Wye et al., 2023).
**Sensory-Based Interventions:**
Sensory-based interventions, such as oral motor exercises, taste and smell therapies, and texture manipulation, aim to gradually increase acceptance of a wider variety of foods (Reche-Olmedo, Torres-Collado, Compañ-Gabucio, & García-de-la-Hera, 2021).

**Group Therapy:**
According to Di Cara et al. (2023) and Shimshoni and Lebowitz (2020), group therapy can benefit individuals with this condition by providing support and a sense of community. However, there are limited controlled studies evaluating group therapy specifically for ARFID.

**Pharmacotherapy:**
No pharmacological treatments are currently approved specifically for treating ARFID. Nonetheless, medications (e.g., antipsychotics, antidepressants, and appetite stimulants) may be prescribed to alleviate associated symptoms, including anxiety, depression, and decreased appetite (Di Cara et al., 2023; Sangroula, Jyotsana, Shah, & Donnelly, 2021).

**Challenges in Diagnosis and Treatment**
The diagnosis and treatment of ARFID present complex challenges. Discriminating ARFID from other feeding and eating disorders, as well as medical or gastrointestinal conditions with similar symptoms, necessitates discernment and comprehensive evaluation (American Psychiatric Association, 2013; Kozak et al., 2023). Differential diagnostic criteria offer a framework for this distinction but often require considerable clinical judgment and meticulous assessment.

A lack of validated diagnostic tools and treatment protocols complicates the management of ARFID. Existing methods, such as the EDE-Q, may not adequately distinguish the distinctive characteristics of ARFID (e.g., sensory sensitivity or food intolerance; Kambanis & Thomas, 2023).

Treatment efforts face additional impediments due to the disorder’s heterogeneous nature (Bourne et al., 2020). Personalized interventions, considering underlying medical conditions, food aversions, and eating-related anxiety, prove advantageous in addressing the diverse presentations of ARFID. Moreover, certain cases may call for interventions beyond conventional eating disorder treatments, including sensory integration therapy, occupational therapy, or exposure therapy (Di Cara et al., 2023; Reche-Olmedo et al., 2021; Riva et al., 2021).

**Conclusion**
Avoidant restrictive food intake disorder (ARFID) is a newly recognized eating disorder characterized by persistent food restriction leading to weight loss or nutritional deficiencies. The prevalence of ARFID varies, affecting both children and adults, although rates may be higher among females. Psychopathological, medical, neurodevelopmental, family, genetic, and cultural factors may contribute to the development of ARFID. The media can play a significant role in the development and persistence of ARFID, both positively and negatively.

ARFID is diagnosed using criteria such as the DSM-5, including lack of interest in eating, avoidance based on its sensory characteristics, and/or extreme anxiety. Differential diagnosis of ARFID can be difficult as it often overlaps with other mental health disorders such as anorexia nervosa, bulimia nervosa, and obsessive-compulsive disorder.

Assessment tools such as clinical, physical, psychiatric, psychological, and functional magnetic resonance imaging can be used to evaluate the disorder. The treatment of ARFID includes cognitive-behavioral therapy (CBT), nutritional interventions, family-based therapy (FBT), and pharmacotherapy. ARFID diagnosis and treatment are challenging due to the overlap of symptomatology with other mental health disorders and heterogeneous manifestations of the disorder.
Conflict of Interest Statement

The authors declare that this paper was written without any commercial or financial relationship that could be construed as a potential conflict of interest.

References

American Psychiatric Association. (2013). *Diagnostic and Statistical Manual of Mental Disorders* (5th ed.).


McCormack, A. (2010). Individuals with eating disorders and the use of online support groups as a form of social support. *Computers, Informatics, Nursing, 28*(1), 12–19. https://doi.org/10.1097/ncn.0b013e3181c04b06


