

**Supplement Table 1. Instructions to clinicians for notification of potential cases:**

Any child or adolescent aged 5 to 16 (5 to 18 for child and adolescent psychiatrists) years with persistent restriction of quantity and/or range of food intake, associated with one or both of the following:

- Nutritional deficiency that requires additional clinical investigation or treatment (e.g., anaemia, micronutrient deficiency, weight loss or poor growth, reliance on nutritional supplementation) that is not fully accounted for by poverty or neglect, cultural practice or an existing medical condition or another mental disorder\*
- Interference with day-to-day functioning due to eating behaviour (e.g., unable to eat at school or with peers, needs to take preferred foods when out of home, extreme and frequent distress about eating).

Not explained by ANY of the following:

- Lack of available food (e.g., from poverty, famine, or neglect)
- Culturally sanctioned practice (e.g., endorsed religious and cultural practice)
- Other known diagnosis
  - e.g., Allergy to specific food group (e.g., dairy)
  - Gastrointestinal disorder
  - Constipation
  - Swallowing difficulties
  - Other eating disorder e.g., anorexia nervosa, bulimia nervosa
  - Other medical or psychiatric disorder that fully explains food restriction (not requiring additional clinical attention) e.g., depression, anxiety, OCD, malignancy, diabetes mellitus, inflammatory bowel disease, thyroid disease.

\*If the eating disturbance occurs in the context of another condition/disorder, then to meet case definition for ARFID, the severity of eating disturbance should exceed that routinely associated with the particular condition/disorder - and warrant additional clinical attention.

**Supplement Table 2. Analytic criteria for inclusion or exclusion of cases:**

Any child or adolescent aged 5 to 18 years with persistent restriction of quantity and/or range of food intake, associated with one (or more) of the following:

Lack of appetite  
 Lack of interest in food  
 Logistics of feeding/eating behaviour not consistent with age and development (e.g., small bites/slow eating)  
 Limited variety of food intake  
 Rigid eating behaviour (e.g., brand-specific, food items on a plate cannot touch)  
 Unfounded fear of aversive consequences of eating (e.g., fear of choking/vomiting)

And resulting in **ANY** one or more of the following bullet points:

	As evidenced by any one of:
<b>Anthropometric evidence of significant weight loss or growth impairment</b>	<ul style="list-style-type: none"> <li>• Weight-for-age &lt;-2 SD from the international reference median value</li> <li>• Weight-for-height &lt;-2 SD from the international reference median value</li> <li>• Height-for-age &lt;-2 SD from the international reference median value</li> <li>• &gt;10% body mass loss</li> </ul>
<b>Nutritional deficiency</b>	<p>As evidenced by any one of:</p> <ul style="list-style-type: none"> <li>• Absence (or near absence if other criteria definitely present) of entire food groups from diet (fruit and vegetables / carbohydrates and grains / protein / dairy products)</li> <li>• Nutritional blood investigation abnormalities (e.g., anaemia, micronutrient deficiency)</li> <li>• ≥50% daily caloric intake via prescribed nutritional or food supplementation</li> <li>• Use of any tube feeding not required by a concurrent medical condition.</li> </ul>
<b>Interference with psychosocial functioning</b>	<p>As evidenced by any one of:</p> <ul style="list-style-type: none"> <li>• Extreme and frequent distress about eating (tearfulness, tantrums, refusal to eat)</li> </ul>

	<ul style="list-style-type: none"> <li>• Inability to eat except only in certain situations (e.g., only alone/only with family members)</li> <li>• Other impairment of social and emotional development or functioning secondary to eating behaviour (e.g., poor school attendance, limited peer relationships, excessively long mealtimes impacting on self/family)</li> </ul>
Not explained by <b>ANY</b> of the following:	
<b>Lack of available food</b>	e.g., from poverty, famine, or neglect
<b>Culturally sanctioned practice</b>	e.g., endorsed religious and cultural practice
<b>Other known diagnosis*</b>	<ul style="list-style-type: none"> <li>• Allergy to specific food group (e.g., dairy)</li> <li>• Gastrointestinal disorder</li> <li>• Constipation</li> <li>• Swallowing difficulties</li> <li>• Other eating disorder e.g., anorexia nervosa, bulimia nervosa</li> <li>• Other medical or psychiatric disorder that fully explains food restriction (not requiring additional clinical attention) e.g., depression, anxiety, OCD, malignancy, diabetes mellitus, inflammatory bowel disease, thyroid disease.</li> </ul>

\*If the eating disturbance occurs in the context of another condition/disorder, then to meet case definition for ARFID, the severity of eating disturbance should exceed that routinely associated with the particular condition/disorder - and warrant additional clinical attention.

## Sensitivity analysis (excluding $\geq 16$ years old)

### Demographics

Male (paediatrics: 115 [63.9%]; psychiatry: 49 [46.7%]);  $\chi^2[1, N=285]=8.051$ ; **p=.005**

Female (paediatrics: 65 [36.1%]; psychiatry: 56 [53.3%]);  $\chi^2[1, N=285]=8.051$ ; **p=.005**:

Median Age (paediatrics: 9.6 years; IQR 6.4, 13.1; psychiatry: 12.7; IQR 9.8, 14.3);  $U=12489$ ;  $z=4.53$ ; **p<.001**

Age category: 5-9 years (paediatrics: 97 [53.9%]; psychiatry: 29 [27.6%]); 10-14 years (paediatrics: 73 [40.6%]; psychiatry: 66 [62.9%]); 15-18 years (paediatrics: 10 [5.6%]; psychiatry: 10 [9.5%]);  $\chi^2[2, N=285]=18.60$ ; **p<.001**

Ethnicity: White British (paediatrics: 123 [71.5%]; psychiatry: 77 [79.4%]); Other White (paediatrics: 16 [9.3%]; psychiatry: 5 [5.2%]); Mixed ethnicity (paediatrics: 14 [8.1%]; psychiatry: 8 [8.2%]); Asian (paediatrics: 6 [3.5%]; psychiatry: 7 [7.2%]); African, Caribbean, Black British (paediatrics: 7 [4.1%]; psychiatry: 0 [0.0%]); (paediatrics: 6 [3.5%]; psychiatry: 0 [0.0%]);  $\chi^2[5, N=269]=11.00$ ; **p=.051**

Duration of symptoms > 1 year (paediatrics: 127 [79.9%]; psychiatry: 57 [64.0%])  $\chi^2[1, N=248]=7.47$ ; **p=.006**

### Subtype

Combined subtype (paediatrics: 78 [43.3%]; psychiatry: 37 [35.2%]); Sensory subtype (paediatrics: 52 [28.9%]; psychiatry: 34 [32.4%]); Lack of Interest subtype (paediatrics: 45 [25.0%]; psychiatry: 20 [19.0%]); Fear subtype (paediatrics: 5 [2.8%]; psychiatry: 14 [13.3%]);  $\chi^2[3, N=285]=13.46$ ; **p=.004**

## Presentation

Weight status: Obese (paediatrics: 5 [3.9%]; psychiatry: 4 [5.1%]) Overweight (paediatrics: 18 [14.0%]; psychiatry: 2 [2.5%]) Normal weight (paediatrics: 67 [51.9%]; psychiatry: 48 [60.8%]); Thinness (paediatrics: 23 [17.8%]; psychiatry: 10 [12.7%]); Severe thinness (paediatrics: 16 [12.4%]; psychiatry: 15 [19.0%]);  $\chi^2[1, N=208]=9.75$ ; **p=.045**

Weight loss (paediatrics: 110 [63.2%]; psychiatry: 79 [75.2%]);  $\chi^2[1, N=279]=4.33$ ; **p=.037**

Mean BMI z scores (paediatrics: -.92 [1.81]; psychiatry: -1.49 [1.8]);  $t[232]=2.23$ ; **p=.027**

Reliant on nutritional supplements (paediatrics: 89 [50.9%]; psychiatry: 39 [38.2%]);  $\chi^2[1, N=277]=4.13$ ; **p=.042**

Excluding whole food groups (paediatrics: 114 [65.5%]; psychiatry: 48 [49.5%]);  $\chi^2[1, N=271]=6.66$ ; **p=.010**

## Clinical features

Dizziness (paediatrics: 18 [10.0%]; psychiatry: 28 [26.7%]);  $\chi^2[1, N=285]=13.61$ ; **p<.001**

Constipation (paediatrics: 51 [28.3%]; psychiatry: 15 [14.3%]);  $\chi^2[1, N=285]=7.35$ ; **p=.007**

## Mental Health

Anxiety (paediatrics: 70 [49.0%]; psychiatry: 60 [75.0%]);  $\chi^2[1, N=223]=14.32$ ; **p<.001**

Depression (paediatrics: 6 [4.4%]; psychiatry: 16 [21.3%]);  $\chi^2[1, N=210]=14.66$ ; **p<.001**

OCD (paediatrics: 8 [6.2%]; psychiatry: 9 [12.7%]);  $\chi^2[1, N=200]=2.47$ ; **p=.116**

Deliberate self-harm (paediatrics: 11 [8.0%]; psychiatry: 14 [18.9%]);  $\chi^2[1, N=212]=5.55$ ; **p=.018**

ASD (paediatrics: 92 [69.2%]; psychiatry: 34 [50.7%]);  $\chi^2[1, N=200]=6.49$ ; **p=.011**

Intellectual disabilities (paediatrics: 53 [33.8%]; psychiatry: 9 [11.7%]);  $\chi^2[1, N=234]=12.92$ ; **p<.001**

## Management

Median time taken to diagnosis (paediatrics: 1.1 months (IQR 0, 17.2), psychiatry: 0.5 months (IQR 0, 2.7));  $U=5518$ ;  $z=-2.22$ ; **p=.027**

Dietetic advice (paediatrics: 149 [82.8%]; psychiatry: 76 [72.4%]);  $\chi^2[1, N=285]=4.31$ ; **p=.038**

Medical monitoring patients (paediatrics: 133 [73.9%]; psychiatry: 55 [52.4%]);  $\chi^2[1, N=285]=13.66$ ; **p<.001**

Nutritional supplements (paediatrics: 88 [48.9%]; psychiatry: 31 [29.5%]);  $\chi^2[1, N=285]=10.23$ ; **p=.001**

Input from other health professionals (paediatrics: 65 [36.1%]; psychiatry: 27 [25.7%]);  $\chi^2[1, N=285]=3.28$ ; **p=.070**

Psychoeducation (paediatrics: 71 [39.4%]; psychiatry: 72 [68.6%]);  $\chi^2[1, N=285]=22.51$ ;  **$p<.001$**

Individual psychological therapy (paediatrics: 28 [15.6%]; psychiatry: 37 [35.2%]);  $\chi^2[1, N=285]=14.59$ ;  **$p<.001$**

## Outcomes

	Paediatrics			Child and Adolescent Psychiatry		
	Baseline	Follow-up	<i>p</i> value	Baseline	Follow-up	<i>p</i> value
	n (%)			n (%)		
Absence of food groups	<b>114 (65.5)</b>	<b>47 (49.0)</b>	<b>.008</b>	<b>48 (49.5)</b>	<b>14 (21.9)</b>	<b>.014</b>
Nutritional deficiency	<b>86 (53.1)</b>	<b>30 (31.6)</b>	<b>.001</b>	<b>44 (49.4)</b>	<b>16 (26.2)</b>	<b>.015</b>
Tube feeding	22 (12.2)	15 (14.4)	.999	12 (11.5)	4 (5.8)	.480
Distress with eating	130 (77.4)	66 (68.8)	.281	<b>80 (79.2)</b>	<b>26 (41.9)</b>	<b>.001</b>
Reported weight loss	<b>110 (63.2)</b>	<b>40 (40.8)</b>	<b>&lt;.001</b>	<b>79 (75.2)</b>	<b>22 (37.3)</b>	<b>&lt;.001</b>
Inability to eat with others	92 (59.0)	44 (55.0)	.999	<b>50 (57.5)</b>	<b>20 (35.7)</b>	<b>.010</b>
Avoidance of social	96 (68.6)	47 (62.7)	.332	<b>62 (73.8)</b>	<b>25 (48.1)</b>	<b>.002</b>
Lack of appetite	83 (51.9)	41 (45.6)	.281	<b>43 (45.7)</b>	<b>11 (22.0)</b>	<b>.039</b>
Lack of interest	127 (76.5)	67 (73.6)	.999	61 (59.8)	18 (34.6)	.061
Difficulty with logistics	88 (55.3)	35 (47.3)	.453	<b>41 (43.6)</b>	<b>7 (14.3)</b>	<b>.001</b>
Sensory characteristics	130 (78.8)	70 (81.4)	.606	<b>72 (75.8)</b>	<b>24 (48.0)</b>	<b>.006</b>
Fear of consequences	43 (30.9)	16 (22.9)	.190	<b>50 (51.5)</b>	<b>11 (21.6)</b>	<b>.006</b>
Rigid eating	119 (72.1)	57 (69.5)	.502	<b>62 (68.9)</b>	<b>14 (29.8)</b>	<b>&lt;.001</b>
	Mean (SD)		<i>p</i> value	Mean (SD)		<i>p</i> value
SDS Height	-.31 (1.65)	-.39 (1.59)	.393	-.22 (1.24)	-.31 (1.28)	.103
SDS Weight	-.90 (1.83)	-.79 (1.92)	.086	-1.45 (1.31)	-1.34 (1.29)	.087
BMI	<b>16.11 (3.53)</b>	<b>16.83 (3.93)</b>	<b>.001</b>	<b>15.24 (2.64)</b>	<b>15.77 (2.71)</b>	<b>.007</b>
SDS BMI	<b>-1.02 (1.74)</b>	<b>-.75 (1.90)</b>	<b>.015</b>	<b>-2.04 (1.64)</b>	<b>-1.76 (1.65)</b>	<b>.005</b>

Overall clinical impression: improvement (paediatrics: 50 [53.8%]; psychiatry: 48 [81.4%]); changed presentation (paediatrics: 1 [1.1%]; psychiatry: 3 [5.1%]); persisted unchanged (paediatrics: 36 [38.7%]; psychiatry: 8 [13.6%]); worsened (paediatrics: 6 [6.5%]; psychiatry: 0 [0.0%]);  $\chi^2[3, N=152]=18.16$ ;  **$p<.001$**