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Abstract

Objective: Although patients with avoidant/restrictive food intake disorder (ARFID) often consult general pediatric services initially, existing literature mostly concentrated on intensive eating disorder treatment settings. This cross-sectional study sought to describe symptoms of ARFID and their associations with eating disorder psychopathology, quality of life, anthropometry, and physical comorbidities in a general pediatric sample.

Methods: In $N = 111$ patients (8-18 years) seeking treatment for physical diseases, prevalence of ARFID-related restrictive eating behaviors was estimated by self-report and compared to population-based data ($N = 799$). Using self-report and medical record data, further ARFID diagnostic criteria were evaluated. Patients with versus without symptoms of ARFID based on self-report and medical records were compared in diverse clinical variables.

Results: The prevalence of self-reported symptoms of ARFID was not higher in the inpatient than population-based sample. Only picky eating and shape concern were more common in the inpatient than population-based sample. Although 69% of the inpatient sample reported any restrictive eating behaviors, only 7.2% of patients showed symptoms of ARFID based on medical records in addition to self-report, particularly those with underweight, without significant effects for age, sex, and medical diagnoses.

Discussion: The study revealed the importance of considering ARFID within the treatment of children and adolescents with physical diseases, especially for those with underweight. Further research is needed to replicate the findings with interview-based measures and to investigate the direction of effects in ARFID and its physical correlates.

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Highlights

50 · Prevalence of ARFID-related restrictive eating behaviors was not higher in a general
51 pediatric inpatient setting compared to a general population sample, but only in
52 combination with objectively measured underweight.

53 · Prevalence of symptoms of ARFID based on self-report and medical records was 7.2% in
54 a general pediatric sample, without differences between diverse medical diagnoses.

55

56 Key words: food avoidance, selective eating, ARFID, comorbidity, prevalence

58 In the fifth edition of the Diagnostic and Statistical Manual for Mental Disorders
59 (DSM-5; American Psychiatric Association [APA], 2013), “avoidant/restrictive food intake
60 disorder” (ARFID) was introduced as a new diagnostic entity to replace and extend the DSM-
61 IV diagnosis of feeding disorder of infancy or early childhood (APA, 2000) and is applicable
62 not only to children but also to adolescents and adults (Eddy et al., 2015; Zimmerman &
63 Fisher, 2017). ARFID is characterized by food avoidance or restriction resulting in significant
64 nutritional deficiency, substantial weight loss or failure to gain weight as expected,
65 dependence on oral nutritional supplementation or enteral feeding, and/or marked interference
66 with psychosocial functioning (APA, 2013). Although patients with ARFID may have similar
67 physical symptoms as those with anorexia nervosa (AN), an eating disorder with substantial
68 restriction of food intake as well (APA, 2013), such as thin appearance, interrupted growth
69 and pubertal progression, the motives behind the disorders differ (Mammel & Ornstein,
70 2017). In contrast to AN, patients with ARFID lack shape concerns, body image
71 preoccupation, and drive for thinness (Norris, Spettigue, & Katzman, 2016; Schmidt, Vogel,
72 Hiemisch, Kiess, & Hilbert, 2018). Instead, they often have a narrow range of accepted foods
73 based on taste, texture, color, appearance, or odor, a fear of swallowing, choking or vomiting,
74 and/or a lack of interest in food or disgust (Harris et al., 2019; Mammel & Ornstein, 2017;
75 Norris et al., 2018; Reilly, Brown, Gray, Kaye, & Menzel, 2019; Zickgraf, Lane-Loney,
76 Essayli, & Ornstein, 2019). Generally, ARFID has a higher prevalence in younger children
77 and boys than other eating disorders and is frequently associated with concurrent physical and
78 psychological symptoms, and lower quality of life (Fisher et al., 2014; Krom et al., 2019;
79 Nicely, Lane-Loney, Masciulli, Hollenbeak, & Ornstein, 2014).

80 Because in many cases physical symptoms like low weight and slow growth become
81 visible before disturbed eating habits attract attention, patients presenting with symptoms of
82 ARFID or their caregiver often consult general pediatric, endocrinologic, or gastrointestinal

83 (GI) services initially (Cooney, Lieberman, Guimond, & Katzman, 2018; Eddy et al., 2015).
84 Regarding physical symptomatology in ARFID, common clinical signs are failure to thrive,
85 gastroesophageal reflux, constipation, nausea, early satiety, abdominal pain, and global
86 developmental delay (Cooney et al., 2018; Eddy et al., 2015). Particularly for AN, ARFID and
87 other restrictive eating disorders, specific nutritional deficiencies, such as the lack of vitamin
88 C, B1, B6, B9, B12, D, or protein-calorie malnutrition and frequent vomiting can cause
89 inflammation, atrophy of the GI system, and immune dysfunction, resulting in medical
90 complications in the digestive system (Benezech, Hartmann, Morfin, Bertrand, & Domenech,
91 2020; Bern & O'Brien, 2013; Bern, Woods, & Rodriguez, 2016; Hadley & Walsh, 2003;
92 Johansson, Norring, Unell, & Johansson, 2012; Lelli et al., 2014; Reas, Zipfel, & Rø, 2014;
93 Tomita et al., 2014). Thereby, restrictive eating disorders can be confused with GI diseases –
94 suggesting that the diagnosis of ARFID is easily overlooked and the specific clinical
95 consequences can be missed (Bern & O'Brien, 2013). This may be detrimental as eating
96 disorders among children and adolescents are likely to co-occur with physical illnesses like
97 type 1 diabetes mellitus (Colton et al., 2015; Jones, Lawson, Daneman, Olmsted, & Rodin,
98 2000; Kelly, Howe, Hendler, & Lipman, 2005; Peducci et al., 2019; Young et al., 2013),
99 diseases of the digestive system, autoimmune diseases, and seizures (Leffler, Dennis,
100 Edwards George, & Kelly, 2007; Makhzoumi et al., 2019; Santonicola et al., 2019; Tegethoff,
101 Belardi, Stalujanis, & Meinschmidt, 2015; Zerwas et al., 2017). The refusal to eat may be
102 conditioned to avoid food-induced symptoms of these diseases (Carlson, Moore, Tsai,
103 Shulman, & Chumpitazi, 2014; Gerasimidis, McGrogan, & Edwards, 2011).

104 Notably, existing literature on ARFID is concentrating mostly on specialized eating
105 disorder treatment settings (Bern et al., 2016; Nicely et al., 2014; Norris et al., 2014; Ornstein,
106 Essayli, Nicely, Masciulli, & Lane-Loney, 2017). Evidence on ARFID from the general
107 pediatric perspective is largely missing (Bryant-Waugh, 2013; Katzman, Norris, & Zucker,
108 2019). With more knowledge about the prevalence and presentation of symptoms of ARFID,

109 ARFID may come more into focus of clinicians, especially in the presence of non-specific
110 physical symptoms. Therefore, this study sought to approach common pediatric symptoms,
111 such as underweight or GI discomfort, in a general pediatric setting from a psychological
112 perspective for the purpose of specifying diagnostic options and improving treatment options.

113 In this context, first, we investigated the prevalence of ARFID-related restrictive
114 eating behaviors in a clinical sample of 8-18-year-old inpatient children and adolescents at a
115 general pediatric hospital. The results of self-reported symptoms of ARFID will be compared
116 to a population-based sample (Schmidt et al., 2018). We hypothesized that the prevalence of
117 ARFID-related restrictive eating behaviors in the absence of weight and shape concerns,
118 especially coupled with objective underweight, would be higher in inpatient children and
119 adolescents at a pediatric hospital compared with the general population. Second, based on a
120 review of inpatients' medical records in addition to self-report, we evaluated the proportion of
121 children and adolescents showing further ARFID criteria and whether these were associated
122 with sociodemographic, anthropometric, and clinical characteristics including general and
123 eating disorder psychopathology, and medical illness of the children and adolescents. We
124 hypothesized that symptoms of ARFID would be associated with male versus female sex,
125 would be negatively associated with child age and weight status, quality of life, and eating
126 disorder psychopathology, but positively associated with health complaints. Regarding
127 medical diagnosis, we hypothesized that diseases of the digestive system and neurological
128 disorders would be more common in those with symptoms of ARFID than other diseases.

129 **Methods**

130 **Procedure**

131 Children and adolescents were recruited and assessed 1-2 days after their admission at
132 the general and neuropsychiatric clinic of a University Hospital where patients with a wide
133 range of different pediatric diseases are treated. Included were all inpatient children and
134 adolescents aged 8-18 years with adequate language skills between June 2018 and May 2019.

135 Informed assent and consent to participate were gathered from children and adolescents as
136 well as their parents. The study was approved by the local Ethics Committee (Reg. No.
137 031/14-ff).

138 The inpatient sample included children and adolescents who were admitted via the
139 emergency room, via referral from the pediatrician, or who were scheduled for intervention
140 (e.g., operation, medical adjustment) of an already known disease. Therefore, children
141 received a comprehensive medical check-up first. Possible mental disorders, including eating
142 disorders, were only examined later during the hospital stay. To capture symptoms of ARFID
143 and associated physical and mental sequelae internationally established questionnaires were
144 handed out to inpatient children and adolescents across a broad range of weight and
145 comorbidity. Information on ARFID-related restrictive eating behaviors and associated
146 psychopathology was provided by child self-report, while sociodemographic data on child and
147 parental age, sex, education (see below) were based on parent-report. Anthropometric data,
148 physical complaints, medical diagnoses, and diagnostic criteria for ARFID were extracted
149 from medical records. Out of 208 handed-out questionnaires, 130 participants (63%) filled out
150 the survey. Due to short inpatient stay, reasons for study non-participation could not be
151 gathered systematically. All participants with missing consent form ($n = 13$, 10%) and/or
152 invalid responses ($n = 6$, 5%) were excluded from the analysis.

153 **Participants**

154 **Inpatient general pediatric sample.** An a priori power analysis revealed that
155 assuming to detect a difference in ARFID symptom prevalence of medium effect (Cramér's V
156 = .30) between the general pediatric and population-based sample with adequate statistical
157 power ($1-\beta = .85$, $\alpha = .05$, $df = 1$), $N = 100$ children and adolescents had to be included.

158 The final sample consisted of $N = 111$ children and adolescents between 8 and 18
159 years ($M = 13.03$ years, $SD = 2.94$). The majority of the sample were girls ($n = 70$, 63.1%)
160 and went either to primary ($n = 25$, 22.5%) or high school ($n = 53$, 47.7%). Of those parents

161 providing information on maternal ($n = 109$) and paternal ($n = 97$) highest education, most
162 had completed less than 12 years at school ($n = 78$, 71.6%, and $n = 68$, 70.1%). Parental age
163 ranged from 29-68 years with a mothers' mean age of 41.1 years ($SD = 6.4$, $n = 110$) and a
164 fathers' mean age of 45.2 years ($SD = 7.1$, $n = 103$).

165 Objectively measured height and weight were used to determine participant's BMI-
166 standard deviation score (BMI-SDS) based on German age- and sex-specific reference data
167 (Kromeyer-Hauschild et al., 2001). Weight categories (underweight, normal weight,
168 overweight) were determined using the $< 10^{\text{th}}$, $10^{\text{th}} - 90^{\text{th}}$, and $> 90^{\text{th}}$ BMI percentiles,
169 respectively. The sample's mean BMI-SDS was 0.15 ($SD = 1.39$, range -5.88 – 3.53) with
170 14.4% ($n = 16$) of the children and adolescents having underweight, 63.1% ($n = 70$) having
171 normal weight, and 22.5% ($n = 25$) having overweight.

172 Medical records showed that indication for admission was due to headache in 18.0%
173 ($n = 20$), medical adjustment for type 1 diabetes mellitus in 16.2% ($n = 18$), initial
174 manifestation of type 1 diabetes mellitus in 15.3% ($n = 17$), seizures in 13.5% ($n = 15$),
175 gastrointestinal problems, such as acute abdominal pain or diarrhea, in 11.7% ($n = 13$),
176 infections in 4.5% ($n = 5$), other neurological complaints in 4.5% ($n = 5$), such as acute
177 hemiparesis or reduced visual acuity, and diverse complaints, such as hypertensive crisis or
178 leg weakness, in 16.2% ($n = 18$). Out of all 111 children and adolescents, 38.7% ($n = 43$) had
179 neurological disorders, 33.3% ($n = 37$) had type 1 diabetes mellitus, 17.1% ($n = 19$) had
180 gastrointestinal diseases, and 10.8% ($n = 12$) had other diseases as their main diagnosis.

181 **General population-based sample.** The comparison sample of children and
182 adolescents from the population consisted of $N = 799$ children and adolescents ($n = 431$ girls,
183 53.9%) between 7 to 14 years ($M = 10.50$ years, $SD = 2.02$). Calculated from objectively
184 measured weight and height, the mean BMI-SDS was 0.14 ($SD = 1.13$, range -3.23 – 3.47),
185 with $n = 67$ (8.4%) children and adolescents having underweight, $n = 595$ (74.4%) having

186 normal weight and $n = 137$ (17.3%) having overweight. Detailed descriptions of the sample
187 can be found in Schmidt et al. (2018).

188 **Measures**

189 *Symptoms of ARFID in the inpatient and general population-based sample*

190 **Eating Disorders in Youth-Questionnaire.** The EDY-Q (Van Dyck & Hilbert, 2016)
191 is a self-report instrument assessing early-onset restrictive eating disturbances in children and
192 adolescents older than 7 years. The 14-item questionnaire contains 8 items on selective eating,
193 emotional food avoidance, and functional dysphagia to cover the central variants of ARFID,
194 two items on underweight problems, indicating the failure to meet adequate energy needs, and
195 two items on weight and shape concern as exclusion criteria of ARFID. The two additional
196 items on pica and rumination disorder were not included in this study's analysis. All items
197 were rated on a 7-point scale ranging from 0 = *never* to 6 = *always*.

198 As previously described (Kurz, van Dyck, Dremmel, Munsch, & Hilbert, 2015, 2016;
199 Schmidt et al., 2018), children and adolescents had to meet specific criteria to document the
200 presence of symptoms of ARFID. The diagnostic coding proposed by Kurz et al. (2015, 2016)
201 required the following EDY-Q items to be reported at least often (≥ 4): (disinterest in food OR
202 sensory food avoidance OR fear of choking) and underweight problems, while weight and
203 shape concern had to be reported less than sometimes (< 3). In addition, a broad symptom
204 definition by Schmidt et al. (2018) was reported in the Supplement due to the fact that ARFID
205 was found to be characterized by other restrictive eating behaviors as well (APA, 2013;
206 Strand, von Hausswolff-Juhlin, & Welch, 2019). This latter definition of broad symptoms of
207 ARFID additionally considered that general or emotional food avoidance, picky eating,
208 avoidance to try new foods, or fear of swallowing could be reported at least often (≥ 4). Both
209 diagnostic codings of the EDY-Q were shown to have discriminant validity in children > 7
210 years for weight status and groups with varying levels of restrictive eating (Kurz et al., 2015;
211 Schmidt et al., 2018) and Kurz et al. (2015) provided evidence for divergent validity and, for

212 items on exclusion criteria, convergent validity. Since ARFID can be associated with
213 underweight, but does not have to be (APA, 2013), symptoms of ARFID were separately
214 presented in conjunction with objectively measured underweight and without self-reported
215 underweight being present, for informative purposes (see Table S1). On item level, all EDY-Q
216 items reported at least often (≥ 4) were used to analyze the frequency of single ARFID-related
217 restrictive eating behaviors.

218 *Symptoms of ARFID in the inpatient sample only*

219 **Self-report plus medical record data.** In addition to self-report on restrictive eating
220 behaviors and weight and shape concern (EDY-Q), DSM-5 diagnostic criteria for ARFID
221 were extracted from medical records including patients' height, weight, and BMI-SDS at
222 initial consultation, routinely assessed blood tests, psychosocial anamnesis, presenting
223 complaints, and medical diagnoses, in order to evaluate whether the following DSM-5 criteria
224 for ARFID were met: (A1-4) presence of weight loss or faltering growth, nutritional
225 deficiency, enteral or supplemental feeding, and/or psychosocial impairment, (B) absence of
226 culturally accepted behavior or lack of available food, (C) absence of anorexia nervosa,
227 bulimia nervosa, and body image disturbance, (D) absence of medical or mental diagnoses
228 that exclusively explain eating disturbances, or the eating disturbance warrants independent
229 clinical attention (APA, 2013). Table S2 gives an overview on the operationalization of
230 ARFID diagnostic criteria based on self-report and medical records.

231 Based on predefined criteria (Eddy et al., 2015; Eddy & Thomas, 2019; Table S2), two
232 coders (Hannah Schöffel, Ricarda Schmidt) separately screened electronic medical records
233 of patients, who reported at least one ARFID-related restrictive eating behavior at least often
234 (EDY-Q items ≥ 4). As ARFID was not used as a formal diagnosis by clinicians due to the use
235 of the International Statistical Classification of diseases and related health problems (ICD-10,
236 World Health Organization, 1993) that did not include any ARFID diagnosis so far, all
237 diagnostic criteria were separately extracted. Each coder independently screened all eligible

238 cases. Inter-rater agreement for evaluating the presence or absence of ARFID diagnostic
239 criteria was $0.46 \leq \kappa \leq 1.00$ ($89 \leq \% \text{ agreement} \leq 100$) for diagnostic criteria and $\kappa = 0.86$
240 (97% agreement) for a probable diagnosis, overall indicating moderate to excellent agreement
241 (Landis & Koch, 1977). In case of discrepant ratings, the case was jointly reviewed and a
242 decision was made by consensus. Since no clinical interview was conducted to deduce ARFID
243 diagnosis, but only a review of the medical records, no definite ARFID diagnosis could be
244 made.

245 *Eating disorder psychopathology*

246 **Eating Disorder Examination-Questionnaire for Children 8.** The ChEDE-Q8
247 (Kliem et al., 2017) is an 8-item short-form of the Eating Disorder Examination-Questionnaire
248 adapted to children (Goldschmidt, Doyle, & Wilfley, 2007) to assess children's global eating
249 disorder psychopathology during the past 28 days by self-report. The items covering restraint,
250 eating concern, weight concern, and shape concern are answered on a 7-point scale ranging
251 from 0 = *feature was absent* to 6 = *feature was present every day or to an extreme degree*
252 with higher values indicating greater psychopathology. The global mean score was used for
253 analysis ($\alpha = .94$ for this study). The ChEDE-Q8 was found to show high correlation with the
254 ChEDE-Q global score and to have divergent and discriminant validity in children and
255 adolescents aged 8-18 years (Kliem et al., 2017; Schlüter, Schmidt, Kittel, Tetzlaff, & Hilbert,
256 2016).

257 **Eating Disorder Inventory for Children.** The EDI-C (Eklund, Paavonen, &
258 Almqvist, 2005), the child version of the EDI-2 (Kappel et al., 2012), was used to measure
259 specific aspects of eating disorder psychopathology. Out of the 11 EDI-C subscales, only the
260 subscales drive for thinness (7 items), bulimia (7 items), and body dissatisfaction (9 items)
261 were administered. Each item was rated on a 6-point scale ranging from 0 = *never* to 5 =
262 *always* with higher values indicating greater psychopathology. Subscale sum scores were
263 calculated ($.85 \leq \alpha \leq .92$ for this study). The EDI-C was found to have convergent and

264 discriminant validity in children aged 10-18 years (Salbach-Andrae et al., 2010; Thiels &
265 Pätel, 2008).

266 ***Quality of life***

267 The KINDL-R (Bullinger, 1994) is a German self-report questionnaire to measure
268 health-related quality of life in children and adolescents over the past week. In this study, the
269 two subscales physical and emotional well-being with 4 items each were used. Responses on
270 all items were given on a 5-point Likert scale ranging from 1 = *never* to 5 = *always*. Subscale
271 sum scores were calculated with higher values indicating better physical ($\alpha = .80$ for this
272 study) or mental ($\alpha = .68$ for this study) quality of life. The KINDL-R was found to have
273 convergent, divergent, and discriminant validity in children 7-18 years (Ravens-Sieberer &
274 Bullinger, 2000).

275 ***Health complaints***

276 The Health Behavior in School-aged Children Symptom Checklist (HBSC-SCL;
277 Ravens-Sieberer et al., 2008) is an 8-item self-report questionnaire to measure children's
278 health complaints such as headache, stomach ache, or feeling nervous over the previous 6
279 months. All items were rated on a 5-point scale ranging from 0 = *rarely or never* to 4 = *about*
280 *every day*. A total sum score was calculated ($\alpha = .69$ for this study). The HBSC-SCL was
281 found to be a unidimensional measure with convergent and divergent validity in children 8-18
282 years (Garipey, McKinnon, Sentenac, & Elgar, 2016; Ravens-Sieberer et al., 2008; Ravens-
283 Sieberer et al., 2010).

284 **Statistical Analysis**

285 First, the prevalence of self-reported symptoms of ARFID based on the EDY-Q was
286 descriptively presented for the inpatient general pediatric and the population-based sample.
287 For the comparison of prevalence data of symptoms of ARFID under consideration of
288 patients' weight status (self-reported underweight, objectively measured underweight) and

289 specific ARFID-related restrictive eating behaviors between both samples, Fisher's Exact
290 Tests were used.

291 Second, the prevalence of symptoms of ARFID based on self-report plus medical
292 record data was presented for the inpatient sample. To evaluate group differences between
293 those with versus without symptoms of ARFID based on self-report and medical records in
294 sex, weight status (underweight, normal weight, overweight), medical diagnoses, restrictive
295 eating behaviors reported at least often (EDY-Q items ≥ 4), and clinically relevant scores in
296 the ChEDE-Q8 and EDI-C ($> 90^{\text{th}}$ percentile), Fisher's Exact Tests were conducted, while
297 Mann-Whitney *U* tests were used for continuous variables (participant's and parental age,
298 child BMI-SDS, and KINDL subscale scores, and the HBSC-SCL total score) due to small
299 group size and non-normally distributed data. To control for multiple testing on eating
300 disorder psychopathology, an adjusted significance level of $.05/4 = .0125$ was used for
301 analyses using the ChEDE-Q8 and EDI-C.

302 All statistical analyses were performed with a two-tailed $\alpha < .05$ using IBM SPSS
303 Statistics version 24.0. Effect sizes for between-group differences were estimated using
304 Hedges *g* for continuous variables and Cramer's *V* for categorical variables, which can be
305 interpreted as small ($g \geq 0.2$, $V[df = 1] \geq 0.1$, $V[df = 2] \geq 0.07$), medium ($g \geq 0.5$, $V[df = 1] \geq$
306 0.3 , $V[df = 2] \geq 0.21$), or large ($g \geq 0.8$, $V[df = 1] \geq 0.5$, $V[df = 2] \geq 0.35$), respectively
307 (Cohen, 1988).

308 Results

309 Symptoms of ARFID based on the EDY-Q

310 **Prevalence.** In the inpatient sample, the prevalence of self-reported symptoms of
311 ARFID was 0.9% ($n = 1$), see Table 1. Broad symptoms of ARFID were present in 7.2% ($n =$
312 8 ; Table S1). After additionally considering objectively measured underweight, these rates
313 amounted to 0.9 ($n = 1$) and 4.5% ($n = 5$). ARFID-related eating behaviors without self-

314 reported underweight were more common (9.9 and 28.8%), as shown in the Supplement
315 (Table S1).

316 ---Please include Table 1 here---

317 **Inpatient Sample versus General Population Sample.** Compared to boys and girls
318 of the general population, symptoms of ARFID were not significantly more common in the
319 inpatient sample, $p > .05$, based on any EDY-Q classification, except when considering
320 objectively measured underweight (Supplement, Table S1). Significantly more children and
321 adolescents from the inpatient sample met the broad EDY-Q criteria coupled with objectively
322 measured underweight than those of the general population (4.5 versus 1.4%), $p < .05$, with
323 small effect.

324 Regarding the prevalence of single restrictive eating behaviors, significantly more
325 children and adolescents of the inpatient sample reported overvaluation of weight and shape
326 as well as selective eating compared to children and adolescents from the population, $ps < .05$,
327 small effects. No significant group differences were found for any of the other items.

328 **Symptoms of ARFID based on Self-Report plus Medical Record Data**

329 **Prevalence.** Based on self-report and medical records, of those reporting any
330 restrictive eating behaviors in the EDY-Q ($n = 76$, 69%), $n = 16$ (21%) met ARFID diagnostic
331 criterion A1, 6 (8%) patients met criterion A2, while criteria A3 and A4 were met by $n = 1$
332 (1%) each. Any A criterion was met by $n = 21$ (28%). Of those, all patients met ARFID
333 diagnostic criterion B, $n = 20$ (95%) patients met diagnostic criterion C, while only $n = 9$
334 (43%) patients met criterion D. In total, $n = 12$ patients had a medical diagnosis that
335 exclusively accounted for ARFID-related eating behaviors and related physical symptoms.
336 These diagnoses were initial manifestation of type 1 diabetes mellitus in 8 patients, complex
337 GI syndromes in 3 patients, and a neurological disorder in 1 patient. In sum, 7.2% ($n = 8$) of
338 the total sample showed symptoms of ARFID based on self-report and medical records (Table
339 S2). Supplemental Table S4 provides an overview on case descriptions.

391 self-reported underweight, absence of weight and shape concern, and specific restrictive
392 eating behaviors, including sensory sensitivity, fear of choking, or lack of interest in eating
393 (Kurz et al., 2015, 2016) as well as a broad inclusion of ARFID-related restrictive eating
394 behaviors (Schmidt et al., 2018), revealed between 0.9 and 7.2% of inpatients showing these
395 symptoms, which was not statistically different from the population-based sample. Notably,
396 only a few patients actually had objectively measured underweight, which may be an indicator
397 of the severity of eating disturbances, in addition to other co-occurring medical or
398 psychosocial aspects (APA, 2013). As expected, compared to boys and girls of the general
399 population, a wide range of self-reported ARFID-related restrictive eating behaviors coupled
400 with objectively measured underweight were significantly more common in the inpatient
401 sample.

402 In contrast to expectations, no significant group differences between children and
403 adolescents of the inpatient sample and the general population were found for the majority of
404 restrictive eating behaviors as depicted by the items of the EDY-Q. Participants in the present
405 sample only reported overvaluation of weight and shape as well as selective eating more often
406 compared to children and adolescents from the population, in line with previous research on
407 the association between disordered eating behavior and organic diseases (Machado, Dias,
408 Lima, Campos, & Gonçalves, 2016; Olmsted, Colton, Daneman, Rydall, & Rodin, 2008).
409 However, the higher overvaluation of weight and shape in the present than population-based
410 sample could be due to the fact that this aspect is more common in girls and older children
411 and adolescents (Hoffmann & Warschburger, 2017), given that the inpatient sample was
412 somewhat older than the population-based sample. The non-significantly different rates of
413 feelings of fatness, which also tap into the concept of weight and shape concern, may have a
414 more pathological value than overvaluation of weight and shape and may thus be more
415 common in eating disorder treatment-seeking settings. Notably, as the effects between the

416 inpatient and population-based samples were very small, the real differences in overvaluation
417 of weight and shape and picky eating may not necessarily be clinically relevant.

418 Based on self-reported ARFID-related restrictive eating behaviors in the absence of
419 weight and shape concern and information derived from patients' medical records, 7.2% of
420 children and adolescents showed symptoms of ARFID. Most commonly, restrictive eating
421 behaviors were coupled with ARFID diagnostic criterion A1 describing underweight, growth
422 failure, or weight loss. Other diagnostic criteria relevant to ARFID, such as nutritional
423 deficiency or enteral feeding, may indicate more severe or longstanding ARFID
424 symptomatology, while weight problems become visible first. Although all children had a
425 medical diagnosis, physical or mental comorbidity did not exclusively explain the restrictive
426 eating behavior in most cases. Notably, Eddy et al. (2015) found a prevalence of only 1.5% of
427 likely ARFID cases in a sample of treatment-seeking children in a pediatric gastroenterology
428 healthcare network, a non-eating disorder sample similar to the present one. They additionally
429 identified 2.4% of possible ARFID cases, where diagnosis could not be made due to missing
430 information or interfering comorbidities. Considering only GI patients, prevalence of
431 symptoms of ARFID based on self-report and medical records in the present sample was
432 slightly higher with 10.5%, although group size was relatively small. Importantly, it is unclear
433 in the present study if all children and adolescents actually met ARFID criteria as there was
434 no clinical interview conducted. In clinical research of patients with eating disorders, 5-23%
435 of presenting children and adolescents had a possible ARFID diagnosis (Fisher et al., 2014;
436 Forman et al., 2014; Nicely et al., 2014; Norris et al., 2014; Ornstein et al., 2013). This higher
437 prevalence is explainable by the fact that only patients who already had an eating disorder
438 were included in these studies.

439 Concerning medical diagnoses, there was no clear pattern for specific associations of
440 GI and neurological diseases with symptoms of ARFID based on self-report and medical
441 records, contrasting expectations. However, there was a trend for a relatively high prevalence

442 of symptoms of ARFID among children and adolescents with GI problems (10.5%), in line
443 with findings linking a strong comorbidity of ARFID and organic diseases of the digestive
444 system (Williams et al., 2015). As reported by Williams et al. (2015), a large proportion of
445 children with symptoms of ARFID may present with medical conditions, particularly GI
446 diseases, which may complicate the diagnostic decisions, as the medical disorders can be both
447 artifact and reason of the diagnosis. In this context, initial manifestation of type 1 diabetes
448 mellitus accounted for heavy weight loss in a substantial proportion of children reporting
449 restrictive eating behaviors, making the diagnosis of ARFID inappropriate. Strikingly, the
450 highest prevalence of symptoms of ARFID was found in children and adolescents with other
451 diseases, including asthma and a urological disorder. Unfortunately, due to the small number
452 of children and adolescents in these medical groups, prevalence rates of symptoms of ARFID
453 must be considered with caution.

454 Unlike hypotheses and other findings showing that patients with ARFID were
455 predominately male (Eddy et al., 2015; Zickgraf, Murray, Kratz, & Franklin, 2019),
456 symptoms of ARFID based on self-report and medical record were equally common in boys
457 and girls in the present sample which corresponds to the DSM-5 (APA, 2013) and other
458 population-based evidence (Hay et al., 2017; Kurz et al., 2015). In contrast to expectations,
459 there were no significant age effects, which is however in line with a school-based study by
460 Kurz et al. (2015). Regarding weight status, as expected, children and adolescents with
461 underweight (44.4%) were more likely to show symptoms of ARFID based on self-report and
462 medical records than children and adolescents with normal weight and overweight (1.4% and
463 0.0%) which is consistent with a wide variety of findings (Bryant-Waugh et al., 2019; Kurz et
464 al., 2015; Schmidt et al., 2018) and to be expected given ARFID's DSM-5 diagnostic criteria,
465 with underweight or weight loss being one of the central features. Restrictive eating disorders
466 should therefore be considered in the case of underweight children and adolescents at every
467 pediatric consultation.

468 Reflecting previous evidence on ARFID in children and adolescents from the
469 population (Kurz et al., 2015, 2016; Nakai et al., 2017; Schmidt et al., 2018; Schmidt, Kirsten,
470 Hiemisch, Kiess, & Hilbert, 2019), children and adolescents with versus without symptoms of
471 ARFID based on self-report and medical records scored higher on EDY-Q items for
472 underweight, wish to gain weight, and selective eating. As expected and in accordance with
473 extant literature (APA, 2013; Becker et al., 2019; Bryant-Waugh et al., 2019; Kurz et al.,
474 2015) individuals with symptoms of ARFID based on self-report and medical records in this
475 study showed very low global, although non-significantly different eating disorder
476 psychopathology relative to children without ARFID, suggesting that the disturbed eating
477 behavior is not driven by body image concern. The low level of eating disorder
478 psychopathology in the population-based sample may explain why the smaller values for
479 children and adolescents with symptoms of ARFID based on self-report and medical records
480 were nevertheless not significantly different (floor effects). Importantly, as no healthy
481 individuals from a community but inpatient children and adolescents from a pediatric hospital
482 with various physical diseases were used as control group, the non-significant differences in
483 quality of life and health complaints may be related to this aspect.

484 The study's strengths include the examination of a non-eating disorder clinical sample
485 and the use of established self-report measures as well as the objective assessment of
486 anthropometrics. DSM-5 criteria for ARFID were carefully inspected in the medical records
487 of inpatient children and adolescents, thus, supplementing self-report data on ARFID. Among
488 the limitations, the number of children and adolescents showing symptoms of ARFID was
489 relatively small, resulting in difficulties to see significant group differences with the expected
490 medium effect size. Due to the self-report nature of measures, only children and adolescents \geq
491 8 years were examined; however, as ARFID may develop at considerably younger ages
492 (Sharp & Stubbs, 2019), it is highly valuable to consider ages of infancy and early childhood
493 in future research. Since the present sample was older than the population-based sample, the

494 results of these comparative analyses may be biased by age effects. Because no standardized
495 clinical interview was conducted to evaluate symptoms of ARFID more deeply, but only a
496 medical record review, no definite conclusion about an actual ARFID diagnosis could be
497 made. Additionally, the cross-sectional study design allows only a current snapshot of
498 symptoms of ARFID and can neither map the development nor the consequences of the
499 disorder.

500 **Conclusions**

501 In summary, our findings revealed that a relatively high proportion of inpatient
502 children and adolescents in a general pediatric hospital showed symptoms of ARFID (7.2%)
503 based on self-report and medical record data highlighting the importance of seriously
504 considering eating disorders as a possible comorbidity in children and adolescents with
505 physical complaints. Pediatricians for whom the new diagnosis of ARFID is still mainly
506 unknown (Katzman, Stevens, & Norris, 2014), especially in countries predominately using the
507 ICD-10 (World Health Organization, 1993), should be taught to have a focus on symptoms of
508 ARFID to securely identify warning signs, such as underweight or abdominal pain. The
509 motivation for ARFID-related restrictive eating behavior and underweight should be
510 examined even in cases without body image concerns in everyday clinical practice.

511 It is a question of future research to further investigate the relation between ARFID
512 and organic diseases and a potential underlying motivation for restrictive eating behaviors in
513 children and adolescents with a physical disorder. Longitudinal studies with larger sample
514 sizes covering a broader age range may help identifying cause-and-effect connections between
515 ARFID and its physical correlates, as it is currently unclear whether physical diseases are
516 followed by ARFID or vice versa. Although self-report is a well-established way to assess
517 children and adolescents at risk for eating disturbances, interview-based assessments (Bryant-
518 Waugh et al., 2019; Schmidt et al., 2019), parent-report, and detailed nutritional information
519 would greatly enhance self-report. With these new insights, researchers may improve existing

520 assessment and treatment options in general pediatric hospitals as well as specialized eating
521 disorder programs.

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Table 1

Prevalence (n, %) of symptoms of ARFID for the inpatient and general population samples based on the Eating Disorders in Youth-Questionnaire

	Inpatient sample (n = 111)	General population sample (n = 799)	p Fisher's exact test	V
Symptoms of ARFID	1 (0.9)	19 (2.4)	.497	.03
EDY-Q items reported at least „often“ (≥ 4)				
1. Food avoidance	7 (6.3)	47 (5.9)	.829	.01
2. Lack of interest in food	9 (8.1)	96 (12.0)	.269	.04
3. Emotional food avoidance	27 (24.3)	228 (28.5)	.429	.03
4. Underweight	19 (17.1)	93 (11.6)	.120	.06
5. Wish to gain weight	11 (9.9)	58 (7.3)	.335	.03
6. Weight concern (feelings of fatness)	21 (18.9)	148 (18.5)	.869	.01
7. Shape concern (overvaluation)	30 (27.0)	135 (16.9)	.012	.09
8. Selective eating behavior	55 (49.5)	293 (36.7)	.009	.09
9. Avoidance to try new foods	34 (30.6)	220 (27.5)	.497	.03
10. Fear of choking	3 (2.7)	36 (4.5)	.614	.03

	Inpatient sample (<i>n</i> = 111)	General population sample (<i>n</i> = 799)	<i>p</i> Fisher's exact test	<i>V</i>
11. Fear of swallowing	2 (1.8)	14 (1.8)	.999	.00
12. Sensory food avoidance	21 (18.9)	121 (15.1)	.326	.04

Note. ARFID Avoidant/Restrictive Food Intake Disorder. EDY-Q Eating Disorders in Youth-Questionnaire.

Table 2

Sociodemographic and anthropometric characteristics for the inpatient sample with and without symptoms of ARFID based on self-report and medical records

	Total sample	Symptoms of ARFID (medical records)		<i>U</i>	<i>p</i>	<i>g or V</i>
	(<i>n</i> = 111)	yes (<i>n</i> = 8)	no (<i>n</i> = 103)			
	<i>M (SD)</i>	<i>M (SD)</i>	<i>M (SD)</i>			
Age, years	13.03 (2.94)	13.39 (2.97)	13.00 (2.95)	376.00	.681	0.13
Sex, <i>n</i> (%)					.464 ^b	0.08
Girls	70 (63.1)	4 (50.0)	66 (64.1)			
Weight status, <i>n</i> (%)				$\chi^2(2) = 37.39$	<.001	0.58
Underweight	16 (14.4)	7 (87.5)	9 (8.7)			
Normal weight	70 (63.1)	1 (12.5)	69 (67.0)			
Overweight	25 (22.5)	0 (0)	25 (24.3)			
BMI-SDS	0.15 (1.39)	-1.65 (1.17)	0.30 (1.24)	85.50	< .001	1.58
Mother's age, years	41.07 (6.41)	42.63 (6.57)	40.95 (6.42)	349.00	.496	0.26
Father's age, years	45.22 (7.13)	46.38 (7.03)	45.13 (7.16)	329.50	.533	0.18

	Total sample	Symptoms of ARFID (medical records)		<i>U</i>	<i>p</i>	<i>g or V</i>
	(<i>n</i> = 111)	yes (<i>n</i> = 8)	no (<i>n</i> = 103)			
	<i>M</i> (<i>SD</i>)	<i>M</i> (<i>SD</i>)	<i>M</i> (<i>SD</i>)			
Maternal education, <i>n</i> (%) ^a					.220 ^b	0.14
< 12 years	78 (71.6)	4 (50.0)	74 (71.8)			
≥12 years	31 (28.4)	4 (50.0)	27 (26.2)			
Paternal education, <i>n</i> (%) ^a					.192 ^b	0.17
< 12 years	68 (70.1)	3 (42.9)	65 (72.3)			
≥12 years	29 (29.9)	4 (57.1)	25 (27.2)			

Note. ARFID Avoidant/Restrictive Food Intake Disorder; BMI-SDS body mass index-standard deviation score.

^aData do not add to 100% due to missing values.

^bFisher's exact test

Table 3

Group differences in clinical variables between children and adolescents with and without symptoms of ARFID based on self-report and medical records

	Symptoms of ARFID (medical records)		Test statistic	<i>p</i> Fisher's Exact Test	<i>V</i>
	yes (<i>n</i> = 8)	no (<i>n</i> = 103)			
	<i>n</i> (%) exceeding cutoff ^a	<i>n</i> (%) exceeding cutoff ^a			
EDY-Q items					
Food avoidance ^b	0 (0)	7 (6.8)		.999	0.07
Lack of interest in food ^b	0 (0)	9 (8.7)		.999	0.08
Emotional food avoidance ^b	2 (25.0)	25 (24.3)		.999	0.00
Underweight	5 (62.5)	14 (13.6)		.004	0.34
Wish to gain weight	3 (37.5)	8 (7.8)		.031	0.26
Weight concern (feelings of fatness) ^b	0 (0)	21 (20.4)		.306	0.49
Shape concern (overvaluation) ^b	3 (37.5)	27 (26.2)		.358	0.21
Selective eating behavior ^b	8 (100.0)	47 (45.6)		.003	0.28
Avoidance to try new foods ^b	4 (50.0)	30 (29.1)		.246	0.12

Symptoms of ARFID (medical records)					
	yes (<i>n</i> = 8)	no (<i>n</i> = 103)	Test statistic	<i>p</i> Fisher's Exact Test	<i>V</i>
	<i>n</i> (%) exceeding cutoff ^a	<i>n</i> (%) exceeding cutoff ^a			
Fear of choking ^b	1 (12.5)	2 (1.9)		.203	0.17
Fear of swallowing ^b	0 (0)	2 (1.9)		.999	0.04
Sensory food avoidance ^b	3 (37.5)	18 (17.5)		.173	0.13
ChEDE-Q8 global score	0 (0)	11 (10.7)		.999	0.10
EDI-C drive for thinness	1 (12.5)	15 (14.6)		.999	0.02
EDI-C bulimia	1 (12.5)	20 (19.4)		.999	0.05
EDI-C body dissatisfaction	0 (0)	9 (8.7)		.999	0.08
	<i>M</i> (<i>SD</i>)	<i>M</i> (<i>SD</i>)	<i>U</i>	<i>p</i>	<i>g</i>
KINDL physical well-being	7.63 (5.37)	9.19 (4.04)	342.50	.426	0.38
KINDL emotional well-being	9.63 (3.25)	11.17 (3.01)	290.50	.163	0.51
HBSC-SCL, <i>M</i> (<i>SD</i>)	23.63 (3.85)	23.53 (5.66)	381.00	.755	0.02

Note. ARFID Avoidant/Restrictive Food Intake Disorder; ChEDE-Q8 Eating Disorder Examination-Questionnaire for Children 8; EDI-C Eating Disorder Inventory for Children; EDY-Q Eating Disorders in Youth-Questionnaire; HBSC-SCL Health Behavior in School-aged Children Symptom Checklist; KINDL KINDL-R questionnaire; *M* mean value; *SD* standard deviation.

^aEDY-Q items ≥ 4 , EDI-C and ChEDE-Q8 $\geq 90^{\text{th}}$ age- and sex-specific percentiles

^bUsed as indicator variables for evaluating presence of symptoms of ARFID in addition to medical records

Supplement to “Characteristics of avoidant/restrictive food intake disorder in a general paediatric inpatient sample” (Schöffel et al.)

Table S1. Comparative overview of EDY-Q categories previously reported in the literature considering objectively measured underweight and related problems for the inpatient ($N = 111$) and population-based samples ($N = 799$).

EDY-Q diagnostic coding	EDY-Q items	Inpatient	Population-	p Fisher's	V
		sample	based sample		
		n (%)	n (%)	exact test	
Symptoms of ARFID ^a without underweight problems	(items 2 or 10 or 12 \geq 4) AND (item 6 < 3 and item 7 < 3)	11 (9.9)	110 (13.8)	.299	.04
Symptoms of ARFID ^a with objectively measured underweight	(items 2 or 10 or 12 \geq 4) AND (item 4 \geq 4) AND (BMI-SDS < -1.28) AND (item 6 < 3 and item 7 < 3)	1 (0.9)	19 (2.4)	.497	.03
Broad symptoms of ARFID ^b	(items 1 or 2 or 3 or 8 or 9 or 10 or 11 or 12 \geq 4) AND (item 4 \geq 4) AND (item 6 < 3 and item 7 < 3)	8 (7.2)	44 (5.5)	.510	.02
Broad symptoms of ARFID ^b without underweight problems	(items 1 or 2 or 3 or 8 or 9 or 10 or 11 or 12 \geq 4) AND (item 6 < 3 and item 7 < 3)	32 (28.8)	285 (35.7)	.168	.05

Broad symptoms of ARFID ^b with	(items 1 or 2 or 3 or 8 or 9 or 10 or 11 or 12 \geq 4)				
objectively measured underweight	AND (item 4 \geq 4) AND (BMI-SDS $<$ -1.28) AND (item 6 $<$ 3 and item 7 $<$ 3)	5 (4.5)	11 (1.4)	.036	.08

Note. BMI-SDS Body Mass Index-Standard Deviation Score; EDY-Q Eating Disorders in Youth-Questionnaire.

^aKurz, S., van Dyck, Z., Dremmel, D., Munsch, S., & Hilbert, A. (2015). Early-onset restrictive eating disturbances in primary school boys and girls. *European Child & Adolescent Psychiatry, 24*, 779–785.

^bSchmidt, R., Vogel, M., Hiemisch, A., Kiess, W., & Hilbert, A. (2018). Pathological and non-pathological variants of restrictive eating behaviors in middle childhood: A latent class analysis. *Appetite, 127*, 257–265.

Table S2. Guideline for self-report and medical record ratings to decide whether diagnostic criteria for ARFID would be met and related frequencies.

Diagnostic criterion	Operationalization	Criterion met	
		Yes <i>n</i> (%)	No <i>n</i> (%)
Criterion A: eating or feeding disturbance manifested by persistent failure to meet appropriate nutritional and/or energy needs	EDY-Q: ≥ 4 for any item on restrictive eating behaviors (1, 2, 3, 8, 9, 10, 11, 12)	76 (68)	35 (32%)
		Further A criteria met	
		Yes <i>n</i> (%)	No <i>n</i> (%)
A1: significant weight loss/faltering growth	Medical records: $< 10^{\text{th}}$ BMI percentile, significant weight loss ($> 5\%$ in 3 months), expected weight gain failed	16 (21)	60 (79)

	Medical records: indication for vitamin		
A2: significant nutritional deficiency	or mineral deficiency by blood samples, physical symptoms of malnutrition due to reduced food intake (e.g., dizziness)	6 (8)	70 (92)
A3: dependence on enteral feeding or oral nutritional supplements	Medical records: any presence of oral nutritional supplements (prescribed vitamins, high-calorie food) or tube feeding unrelated to other physical illness	1 (1)	75 (99)
A4: marked interference with psychosocial functioning	Medical records: reports of psychological symptoms due to restricted food intake (e.g., sadness, aggressiveness, school problems, teasing)	1 (1)	75 (99)
Any A criterion met, <i>n</i> (%) patients:		21 (28)	55 (72)
		Further criteria	
		met	
		Yes	No
		<i>n</i> (%)	<i>n</i> (%)

Criterion B: not better explained by lack of available food or culture	Medical records: no indication of financial reasons, neglect, or culturally accepted eating behaviors	21 (100)	0
Criterion C: criteria for anorexia nervosa or bulimia nervosa not met and no evidence of body image disturbance	Medical records: no diagnosis of anorexia nervosa or bulimia nervosa EDY-Q items on weight and shape concern: < 3	20 (95)	1 (5)
Criterion D: not attributable to a concurrent medical condition or not better explained by another mental disorder, or additional clinical attention	Medical records: no comorbid diagnoses with explicit consequences on eating behaviors or weight loss or, in presence of a comorbidity, ARFID-related eating behavior is deemed to persist when comorbidity remits or gives additional information for treatment	9 (43)	12 (57)
Patients meeting ARFID symptoms based on self-report and medical records	<hr/> 8		

Note. ARFID Avoidant/restrictive food intake disorder; BMI Body Mass Index; EDY-Q Eating Disorders in Youth-Questionnaire.

Table S3. Continuous (*M, SD*) data on eating disorder psychopathology for patients with and without symptoms of ARFID based on self-report and medical records and their reference to community and clinical norms.

	ARFID symptoms (medical records)			No ARFID symptoms (medical records)		
	<i>(n = 8)</i>	Mean reference percentile		<i>(n = 103)</i>	Mean reference percentile	
		<i>M (SD)</i>	Community norms		Clinical norms	<i>M (SD)</i>
ChEDE-Q8 global score	0.42 (0.42)	50	-	0.91 (1.48)	64	-
EDI-C drive for thinness	4.25 (3.69)	< 75	< 10	6.97 (8.77)	< 75	< 25
EDI-C bulimia	6.38 (6.35)	< 90	< 50	5.40 (6.63)	< 75	< 50
EDI-C body dissatisfaction	8.50 (5.53)	< 50	< 10	13.07 (11.95)	< 75	< 25

Note. Continuous mean scores on eating disorder psychopathology were referenced to mean norm rankings based on community-based samples and, for the EDI-C, for clinical samples with eating disorders. ARFID Avoidant/restrictive food intake disorder, ChEDE-Q8 Eating Disorder Examination-Questionnaire for Children 8, EDI-C Eating Disorder Inventory for Children.

Table S4. Descriptive information on children and adolescents with ARFID symptoms based on self-report and medical records.

No.	Sex	Age, y	Height, cm	Weight, kg	BMI- SDS	Medical diagnosis	ARFID A criterion met	EDY-Q items reported at least often	EDI -C DT	EDI-C B	EDIC- BD	ChEDE- Q8
1	f	17	164.10	46.50	-1.77	Focal nephritis	A1: weight loss/underweight/ growth failure	Emotional food avoidance, picky eating, sensory food avoidance	6.00	3.00	17.00	0.50
2	m	17	183.30	57.95	-1.63	Sinusitis	A1: weight loss/underweight/ growth failure	Picky eating	1.00	8.00	8.00	0.25
3	f	16	164.00	46.15	-1.61	Hemiparesis	A1: weight loss/underweight/ growth failure	Picky eating, food neophobia, sensory food avoidance	9.00	3.00	8.00	1.38
4	m	11	164.00	38.75	-1.79	Type 1 diabetes mellitus	A1: weight loss/underweight/ growth failure	Picky eating	3.00	5.00	10.00	0.38

5	m	12	170.50	58.00	0.38	Esophageal varices	A2: nutritional deficiency (vitamin A, selen)	Picky eating, food neophobia	10.00	21.00	5.00	0.25
6	m	9	137.60	26.60	-1.45	Colon polyp	A1: weight loss/underweight/ growth failure	Picky eating, food neophobia, sensory food avoidance	0.00	1.00	5.00	0.00
7	f	13	143.00	25.00	-3.97	Type 1 diabetes mellitus	A1: weight loss/underweight/ growth failure	Picky eating	2.00	7.00	15.00	0.50
8	f	12	148.50	33.30	-1.39	Papilledema	A1: weight loss/underweight/ growth failure	Emotional food avoidance, picky eating, food neophobia, fear of choking	3.00	3.00	0.00	0.13

ARFID Avoidant/restrictive food intake disorder, BMI-SDS Body Mass Index Standard Deviation Score; ChEDE-Q8 Eating Disorder Examination-Questionnaire for Children 8, EDI-C Eating Disorder Inventory for Children, DT Drive for Thinness, B Bulimia, BD Body Dissatisfaction; EDY-Q Eating Disorders in Youth-Questionnaire