Arch Argent Pediatr. 2026;e202510941

Picky eating: Narrative review of a common challenge in pediatrics

Carola Saure[1], *Mabel Carosella*[2], *Luciana N. Zonis*[3]

ABSTRACT

Among the eating difficulties that can arise during childhood, picky eating has gained prominence in scientific literature due to its high prevalence and potential repercussions on nutritional status, psychosocial development, and family dynamics. It has been observed that picky eaters consume less of certain food groups and may have a lower intake of some macro- and micronutrients.

Given the relevance of the topic, this narrative review aims to address the definition of picky eating in pediatrics, assessment criteria, risk factors, nutritional and psychosocial impacts, and the main evidence-based intervention strategies. An early, comprehensive, and interdisciplinary approach centered on the family is essential for managing picky eating, promoting healthy eating habits, and preventing nutritional and psychosocial consequences.

Keywords: *eating behavior; child; nutritional status; growth.*

doi: http://dx.doi.org/10.5546/aap.2025-10941.eng

To cite: Saure C, Carosella M, Zonis LN. Picky eating: Narrative review of a common challenge in pediatrics. *Arch Argent Pediatr.* 2026;e202510941. Online ahead of print 2-APR-2026.

[1] *Hospital de Pediatría S.A.M.I.C. Prof. Dr. Juan P. Garrahan, Autonomous City of Buenos Aires, Argentina;* [2] *Grupo Pediátrico Belgrano R, Autonomous City of Buenos Aires, Argentina;* [3] *Institute for Scientific Cooperation in Environment and Health (ICCAS), Autonomous City of Buenos Aires, Argentina.*

Correspondence to *Carola Saure: gocarola@icloud.com*

Funding*: This work has received funding from Nutricia Bagó S.A., which facilitated meetings for its development. The funder has not been involved in the writing of the manuscript, nor has it had any influence on the planning or decision to publish.*

Conflict of interest*: The authors declare that they have received fees from Nutricia Bagó S.A. for the preparation of the manuscript.*

Received*: 10-25-2025*
Accepted*: 1-12-2026*

INTRODUCTION

Childhood is a critical stage for acquiring healthy eating habits. During the early years, children undergo rapid changes in their eating patterns, influenced by biological, environmental, family, and cultural factors. Among the difficulties that may arise at this stage, picky eating has gained prominence in scientific literature due to its high prevalence and potential impact on nutritional status, psychosocial development, and family dynamics.

The term "picky eater" refers to limited and selective food intake characterized by the rejection of both new and familiar foods, as well as rigid behaviors regarding food preparation, presentation, or consumption context.[1,2]

The tools used to assess and diagnose picky eating are diverse, leading to a wide range of prevalence rates.[3]

In a cross-sectional study conducted in Spain with 4018 children under the age of 6, Cardona Cano *et al*. reported a prevalence of selective eating behaviors of 25.1%, more frequent in boys, children with low birth weight, children of non-European mothers, and in families with low socioeconomic status.[4]

The persistence of picky eating beyond the age of 5 is associated with lower dietary diversity and, in cases of extreme restriction, with a negative impact on growth and nutritional status.[5,6]

In clinical practice, picky eating is a frequent reason for pediatric and nutritional consultations and is a source of great concern among caregivers. In this context, an accurate clinical evaluation enables us to distinguish between a benign selective pattern and a condition requiring specialized treatment.

This article aims to review the current evidence on picky eating in pediatrics, addressing its definition, assessment criteria, risk factors, nutritional and psychosocial impacts, and the main evidence-based intervention strategies, to provide useful tools for health professionals.

MATERIALS AND METHODS

A narrative review of the literature was conducted using PubMed, Scopus, and ScienceDirect, selecting articles published between 2014 and 2025. Articles dated before the search period were included when considered relevant. The search strategy included the English terms "picky eating", "selective eating", "feeding difficulties", and "food neophobia". Studies in the pediatric population, systematic reviews, observational studies, and relevant clinical trials were prioritized. The selection of studies was based on their clinical relevance, methodological quality, and applicability in healthcare settings.

DEFINITION OF PICKY EATER

The term "picky eater" describes children who refuse to eat a wide variety of foods, with diets that are restricted in both quantity and variety. However, there is still no universal definition or standardized diagnostic criteria, which makes it difficult to compare studies and develop uniform clinical guidelines.[7]

Definitions vary. Dovey *et al*. describe it as a restricted diet based on a few accepted foods, with resistance to trying new foods; Carruth *et al*. add low variety and the need for special preparation; and Zickgraf and Elkins incorporate sensory aspects as part of the behavioral phenotype.[1,8,9]

It is important to note that picky eating is usually a temporary behavior in early childhood. Still, some children develop a subtype called persistent picky eating (PPE), which persists beyond age.[5] PPE is characterized by sustained food selectivity, rejection of entire food groups (especially fruits, vegetables, and meats), and an increased risk of insufficient intake of certain micronutrients.[3,5,6]

Methodologically, picky eaters are identified using parental questionnaires such as the Children's Eating Behavior Questionnaire (CEBQ) or the Child Feeding Questionnaire (CFQ), single questions ("Do you consider your child to be selective about food?"), and scales such as the Picky Eating Questionnaire (PEQ) or the Food Fussiness subscale of the CEBQ. However, their clinical application is still limited.[5]

In clinical assessment, it is important to differentiate picky eating from avoidant/restrictive food intake disorder (ARFID), an entity included in the DSM-5, which has more serious organic, nutritional, and emotional consequences.[10] Some authors propose considering persistent picky eating as a subclinical manifestation of ARFID, especially when sensory traits or anticipatory anxiety coexist.[11] It is also important to differentiate it from the concept of "food neophobia", in which children reject novel or unfamiliar foods, but this is resolved with repeated exposure.[10]

From a developmental perspective, it is considered adaptive behavior between the ages of 2 and 5, associated with autonomy and self-

assertion, but its persistence beyond this stage warrants a clinical evaluation.[12-14]

EVALUATION OF THE PICKY EATER

1. Risk factors and predictors of persistence

Early identification of risk factors is essential for anticipating the onset and progression of picky eating. Its origin is due to the interaction between intrinsic variables (temperament, perception of hunger and satiety, sensory preferences) and extrinsic factors, such as the family environment and parenting style, which generate complex dynamics in the caregiver-child relationship.[10]

A higher risk of persistence beyond age 5 has been reported among only children and those whose parents express great concern about eating. The ALSPAC (Avon Longitudinal Study of Parents and Children) longitudinal study identified delayed introduction of solids, early weaning, and feeding difficulties in early childhood as additional predictors.[4,15] These factors allow children to be clinically stratified into low, moderate, or high risk of developing a persistent restrictive pattern. Low risk is considered when selective behaviors are transient and not associated with early history or family impact; moderate risk when one or two risk factors coexist with sustained selectivity; and high risk when multiple early predictors, high parental concern, and sustained dietary restriction affecting dietary variety and family dynamics are observed.[5,16]

Several studies have highlighted the influence of maternal factors, such as advanced age, higher educational attainment, and the presence of anxiety or depression during pregnancy. However, these determinants appear to have a limited impact once childhood feeding practices are taken into account (parental feeding style, use of pressure or restriction during meals, repeated exposure to new foods, and caregiver modeling of eating behaviors).[16,17] On the other hand, genetic predisposition also plays an important role: food neophobia has an estimated heritability of 78% in twin studies[18]. At the same time, increased sensitivity to bitter tastes is associated with lower acceptance of vegetables.[19]

2. Dietary background and sensory development

During the first two years of life, children undergo a critical dietary transition from breastfeeding to a family diet. This process occurs in a learning context in which parenting practices determine what, how, and when food is offered. Exclusive breastfeeding until 6 months of age, in addition to its nutritional benefits, can promote the acceptance of later foods by exposing the infant to different flavors present in breast milk, which has been termed the “flavor bridge”.[12,20,21]

A history of early feeding difficulties (refusal to eat solids, traumatic experiences with certain foods, vomiting when faced with new textures, or late introduction of lumpy foods after 9 to 10 months) significantly increases the risk of restrictive behaviors,[7] while early exposure to vegetables is associated with less selectivity at age 4.[17,22] Frequent consumption of ready-to-eat processed foods is also linked to greater selectivity later on.[16]

Some children have tactile, gustatory, or olfactory sensory hypersensitivity that causes them to reject certain textures (lumpy purées or stringy meats), bitter flavors, or mixed preparations on the same plate.[9,23] Although these characteristics do not equate to a sensory processing disorder, their detection helps in designing individualized strategies for gradual exposure.[24]

3. Mealtime environment: family dynamics and place of consumption

The environment in which feeding occurs has a decisive influence on food selectivity. In an observational study of 50 children aged 3 to 5 years, Luchini *et al*. reported greater dietary variety and less avoidance in childcare centers than at home, suggesting the positive effects of peer modeling and a more structured environment.[13]

In contrast, the absence of daily routines, the presence of distractions such as screens, unappealing food presentation, messiness at the table, parental anxiety, or the absence of the primary caregiver during meals reinforces selective behavior.[25,26]

4. Parenting behavior and style

Parental feeding style is one of the most influential determinants. Strategies such as positive modeling, repeated exposure, and environmental structuring encourage the acceptance of new foods. Conversely, coercive practices such as pressure, bribery, punishment, or food withdrawal increase aversion and perpetuate selectivity.[27-29]

Perceptive parenting styles, characterized by consistent limits combined with emotional support, are associated with less selectivity and better

dietary adaptation.[30] Excessive concern about growth and intake often leads to compensatory practices, such as offering only "safe foods" or allowing snacking outside mealtimes, which further reduce variety.[5]

Finally, the model proposed by Kerzner *et al*. emphasizes that even mild cases can have consequences if caregivers, motivated by anxiety, apply inappropriate practices. This classification distinguishes three main patterns of parental concern (limited appetite, selective eating, and fear of feeding). It integrates caregiver feeding styles (perceptive, controlling, indulgent, and neglectful) as central factors in the evolution and clinical approach to feeding difficulties.[10]

The assessment of picky eating is highly heterogeneous and poorly standardized, which limits its clinical application and reinforces the need for a comprehensive clinical approach that considers the multiple dimensions of the problem,[5] as summarized in *Table 2.*

INTERVENTION APPROACH FOR PICKY EATERS

Interventions for picky eating should be individualized, considering behavioral, nutritional, and family factors. Early pediatrician intervention, as the first point of reference, promotes dietary diversity and prevents chronicity. Timely referral influences the child's development and family anxiety.[16,28]

Zucker et al. proposed classifying picky eaters into subtypes (sensory, low appetite, and neophobic) to personalize the approach. The first requires specific sensory interventions; the second benefits from appetite structuring and reduced snacking; and the third benefits from programs of gradual exposure to new foods.[31]

Given that many children go through a transitional phase of picky eating, it is challenging to define when to intervene (*Figure 1*).

Caregivers should receive clear, consistent messages: picky eating is often a normal developmental stage, and, in most cases, timely intervention does not compromise long-term development.

A multicomponent intervention for children with picky eating combines sensory, nutritional, parental, and environmental strategies in a coordinated manner, tailored to the child and their family, to address the multifactorial nature of the problem and improve eating behavior and food acceptance.[32]

1. Individualized nutritional approach

In most children with picky eating, weight and height growth remain within normal ranges, although diet quality deficiencies are frequently observed. Reduced consumption of fruits, vegetables, meats, and whole grains has been documented, with a predominance of soft, sweet, or micronutrient-poor foods.[7] The most frequently reported deficiencies include iron, zinc, fiber, vitamin D, and vitamin A.[3,6] Nutritional assessment should combine food records (24 hours or 3 days), frequency surveys, and serial anthropometry. In selected cases, it is useful to incorporate biochemical indicators such as ferritin, serum zinc, vitamin D, and complete blood count.[7] The goal is to diversify the diet without resorting to invasive or coercive strategies. Planning balanced meals, gradually introducing foods that are not readily accepted, and repeated exposure in a pressure-free environment are fundamental pillars. Respecting individual acceptance times is key to achieving sustained adherence.[5]

2. Supplementation: indications and limits

Supplementation should not be considered a systematic measure, but rather a specific resource in cases of very restrictive diets or when there are clinical, anthropometric, or biochemical signs of deficiency. Among the most used supplements are multivitamins (with iron, zinc, and fat-soluble vitamins), liquid polymeric preparations, and nutritionally complete formulas.[33,34] Supplements should not be used as a substitute for dietary expansion, as they may reinforce a preference for homogeneous textures or artificial flavors. Furthermore, their acceptance is not always good due to their organoleptic characteristics.[31]

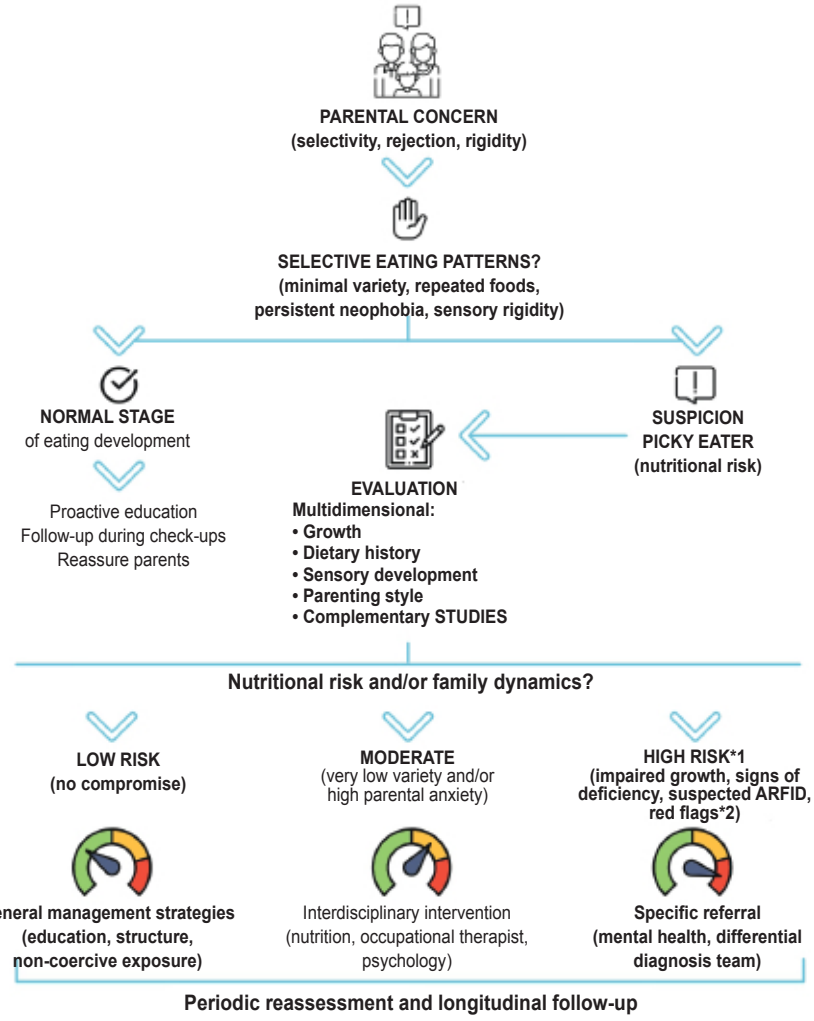
In children with low birth weight, high nutritional risk, or persistent rejection of entire food groups such as meat, dairy, or vegetables, supplementation with complete or high-calorie formulas without sucrose may be necessary, always with periodic reassessment.[35]

3. Behavioral guidelines for professionals and caregivers

Behavioral strategies are at the core of the approach to picky eating, as they seek to modify the child's interaction with food and their family environment.[20,28,31]

Table 1 summarizes the main behavioral strategies for managing picky eating, highlighting positive practices that promote food acceptance and negative practices to avoid. These should

Figure 1. Diagnosis and intervention flowchart



**1 Also consider significant sensory compromises or difficulties associated with neurodevelopmental disorders.*
**2 Organic and/or psychosocial red flags include: weight loss, growth arrest, clinical signs of malnutrition, absolute refusal of oral feeding, acceptance of fewer than 10 foods, coughing, vomiting, gagging, or persistent crying when eating, prolonged retention of food in the mouth, meals lasting >30 minutes, failure to transition to solids after one year of age, or medical history (prematurity, neurological disorders, chronic digestive diseases, or prolonged dependence on nutritional support), excessive parental anxiety, persistent conflicts around food, avoidance of social situations due to feeding difficulties, feeding only with distractions (screens), dysfunctional family dynamics, use of coercion or persecution, and lack of autonomy for the child in the act of eating.*
ARFID: avoidant/restrictive food intake disorder.

be communicated to the family in a clear, consistent manner, avoiding contradictions among caregivers.

SHORT- AND LONG-TERM CONSEQUENCES WITHOUT TIMELY INTERVENTION

Selective eating behavior in childhood can have consequences in key areas of physical, cognitive, and social development. Early detection and a timely, comprehensive approach are essential to prevent it from becoming chronic and to minimize its long-term impact on the child's health and the environment.

Although picky eating is a temporary and benign behavior, some studies have linked it to significant clinical consequences.

A higher prevalence of deficiencies in micronutrients essential for neurological development and proper immune function has been documented. These deficiencies may contribute to increased susceptibility to recurrent infections.

Table 1. Behavioral strategies for managing picky eating

Positive practices (promote acceptance)	Negative practices (reinforce selectivity)
Structure meals with regular schedules, without screens or distractions.	Offer immediate alternatives if the child refuses food.
Keep mealtimes to 20-30 minutes.	Do not prolong the meal excessively or insist that they finish the entire plate.
Repeated non-coercive exposure (10-15 times), multisensory rejections.	Force the child to try foods, or stop offering them after a few attempts (smell, touch, cook, shop as a family), gradually.
Offer a variety of flavors and textures.	Monotonous diet.
Positive parental modeling: sharing healthy foods, avoiding negative comments.	Negative modeling: frequent consumption of snacks and drinks, sugary drinks by the family.
Allow active participation: serving oneself, choosing healthy choices, and cooking together.	Use of bribes, food rewards, or punishments for refusal.
Praise the attempt with non-food reinforcements.	Examples: "If you don't eat your vegetables, you won't get any dessert", "If you don't finish your plate, you won't go to soccer practice". These phrases reinforce resistance and generate more rejection.
	Condition reinforcement for the amount ingested.
Respect hunger and satiety cues.	Forcing food intake, ignoring signs of fullness.
Family meals and positive social experiences.	Isolating the child or making mealtimes a source of tension.

Table 2. Clinical assessment of picky eating

Component	Key aspects	Common tools
Behavioral	Rejection, rigidity, disruptive behaviors	Interview, CEBQ*, CFNS**, meal observation
Sensory	Textures, flavors, smells	Food history; observation of responses, sensory profile
Nutritional	Variety, macro- and micronutrients, growth	Anthropometry, records, and laboratory
Parental	Practices, anxiety, parental perception	Interview with caregivers
Environmental	Routines, eating environment, use of distractors	Analysis of the environment

***CEBQ** (Children's Eating Behavior Questionnaire): validated parental questionnaire that assesses children's eating behaviors; the Food Fussiness subscale measures food selectivity and rejection.*
****CFNS** (Child Food Neophobia Scale): brief parental scale that quantifies food neophobia in children.*

Observational studies link iron deficiency anemia with lower school performance, attention problems, and cognitive and behavioral issues. Children with selective eating habits obtained lower total IQ scores (verbal and performance).[36,37]

The consequences can also be observed in the long term. Picky eating can persist beyond childhood, with a dietary pattern of lower consumption of fruits, vegetables, and fiber in adolescence and early adulthood, altering gut microbiota characteristics and increasing the risk of future noncommunicable diseases.[16]

The psychosocial impact must be considered. This behavior often causes significant stress, affecting home dynamics, social outings, and vacations, with negative consequences for the entire family's quality of life.[38] Likewise, an association has been observed between picky eating and emotional disorders such as anxiety, depression, low self-esteem, and difficulties in social interactions, both in the pediatric population and in adults who persist with these behaviors.[9,39,40]

CONCLUSION

Picky eating is a common concern in pediatric practice, with repercussions that go beyond nutrition and affect the child's emotional well-being and family dynamics. Although it is usually temporary, its persistence can lead to nutritional deficiencies, growth disorders, and increased tension in the family environment.

The pediatrician plays a key role in early detection, containment, and guidance for families. Accurate identification of the picky eater, along with the use of simple assessment tools during the consultation, allows for timely intervention to avoid inappropriate parenting practices and promote effective management.

Evidence-based strategies, such as repeated exposure without pressure, positive modeling, and structuring the eating environment, are pillars of treatment. A comprehensive, interdisciplinary, family-centered approach is the best way to reverse selective behaviors, strengthen a healthy relationship with food, and prevent progression to clinically relevant eating disorders. ■

REFERENCES

1. Dovey TM, Staples PA, Gibson EL, Halford JCG. Food neophobia and 'picky/fussy' eating in children: A review. *Appetite*. 2008;50(2-3):181-93. doi: 10.1016/j.appet.2007.09.009.
2. Zickgraf HF, Franklin ME, Rozin P. Adult picky eaters with symptoms of avoidant/restrictive food intake disorder: comparable distress and comorbidity but different eating behaviors compared to those with disordered eating symptoms. *J Eat Disord*. 2016;4:26. doi:10.1186/s4033701601106.
3. Taylor CM, Wernimont SM, Northstone K, Emmett PM. Picky/fussy eating in children: review of definitions, assessment, prevalence and dietary intakes. *Appetite*. 2015;95:349-59. doi: 10.1016/j.appet.2015.07.026.
4. Cardona Cano S, Tiemeier H, Van Hoeken D, Tharner A, Jaddoe VWV, Hofman A, et al. Trajectories of picky eating during childhood: a general population study. *Int J Eat Disord.* 2015;48(6):570-9. doi: 10.1002/eat.22384.
5. Emmett PM, Taylor CM. Being inspired: what we have learned about picky eating in childhood from using questionnaires on feeding practices and behaviors in a longitudinal birth cohort. *Curr Res Psychiatry*. 2021;1(4):48-51. doi:10.46439/Psychiatry.1.016.
6. Mascola AJ, Bryson SW, Agras WS. Picky eating during childhood: a longitudinal study to age 11 years. *Eat Behav.* 2010;11(4):25-37. doi: 10.1016/j.eatbeh.2010.05.006.
7. Taylor CM, Emmett PM. Picky eating in children: causes and consequences. *Proc Nutr Soc.* 2019;78(2):161-9. doi:10.1017/S0029665118002586.
8. Carruth BR, Ziegler PJ, Gordon A, Barr SI. Prevalence of picky eaters among infants and toddlers and their caregivers' decisions about offering a new food. *J Am Diet Assoc.* 2004;104(1 Suppl 1):S57-64. doi:10.1016/j.jada.2003.10.024.
9. Zickgraf HF, Elkins A. Sensory sensitivity mediates the relationship between anxiety and picky eating in children/adolescents ages 8–17, and in college undergraduates: a replication and age-upward extension. *Appetite*. 2018;128:333-9. doi:10.1016/j.appet.2018.06.023.
10. Kerzner B, Milano K, MacLean WC Jr, Berall G, Stuart S, Chatoor I. A practical approach to classifying and managing feeding difficulties. *Pediatrics*. 2015;135(2):344-53. doi:10.1542/peds.20141630.
11. Zickgraf HF, Murray HB, Kratz HE, Franklin ME. Characteristics of outpatients diagnosed with the selective/neophobic presentation of avoidant/restrictive food intake disorder. *Int J Eat Disord.* 2019;52(4):36777. doi:10.1002/eat.23013.
12. Birch LL. Development of food preferences. *Annu Rev Nutr.* 1999;19:41-62. doi:10.1146/annurev.nutr.19.1.41.
13. Luchini V, Musaad S, Lee SY, Donovan SM. Observed differences in child picky eating behavior between home and childcare locations. *Appetite.* 2017;116:123-31. doi:10.1016/j.appet.2017.04.021.
14. Luchini V, Musaad SM, Donovan SM, Lee SY. Differences and agreement in perception of child picky eating among center and homebased childcare providers and parents and its impact on utilized mealtime strategies. *Nutr Metab Insights.* 2017;10:1178638816684830. doi: 10.1177/1178638816684830.
15. Fraser A, MacdonaldWallis C, Tilling K, Boyd A, Golding J, Davey Smith G, et al. Cohort profile: the Avon Longitudinal Study of Parents and Children: ALSPAC mothers cohort. *Int J Epidemiol.* 2013;42(1):97-110. doi:10.1093/ije/dys066.
16. Emmett PM, Hays NP, Taylor CM. Antecedents of picky eating behaviour in young children. *Appetite.* 2018;130:163-73. doi: 10.1016/j.appet.2018.07.032.
17. De Barse LM, Cardona Cano S, Jansen PW, Jaddoe VVW, Verhulst FC, Franco OH, et al. Are parent´s anxiety and depression related to child fussy eating? *Arch Dis Child*. 2016;101(6):533-8. doi: 10.1136/archdischild-2015-309101.
18. Cooke LJ, Haworth CM, Wardle J. Genetic and environmental influences on children's food neophobia. *Am J Clin Nutr.* 2007;86(2):428-33. doi:10.1093/ajcn/86.2.428.
19. Bell KI, Tepper BJ. Short-term vegetable intake by young children classified by 6-n-propylthiouracil bitter-taste phenotype. *Am J Clin Nutr.* 2006;84(1):245-51. doi:10.1093/ajcn/84.1.245.
20. Ventura AK, Birch LL. Does parenting affect children's eating and weight status? *Int J Behav Nutr Phys Act.* 2008;5:15. doi:10.1186/14795868515.
21. Mennella JA, Beauchamp GK. Understanding the origin of flavor preferences. *Chem Senses.* 2005;30(Suppl 1):i242-3. doi:10.1093/chemse/bjh204.
22. Taylor CM, Northstone K, Wernimont SM, Emmett PM. Picky eating in preschool children: associations with dietary fibre intakes and stool hardness. *Appetite.* 2016;100:263-71. doi:10.1016/j.appet.2016.02.021.
23. Zickgraf HF, Ellis JM. Initial validation of the Nine Item Avoidant/Restrictive Food Intake Disorder screen (NIAS): a measure of three restrictive eating patterns. *Appetite.* 2018;123:32-42. doi:10.1016/j.appet.2017.11.111.
24. LaneLoney SE, Zickgraf HF, Ornstein RM, Mahr F, Essayli JH. A cognitive-behavioral family-based protocol for the primary presentations of avoidant/restrictive food intake disorder (ARFID): case examples and clinical research findings. *Cogn Behav Pract.* 2022;29(2):318-34. doi:10.1016/j.cbpra.2020.06.010.
25. Daniels LA. Feeding practices and parenting: a pathway to child health and family happiness. *Ann Nutr Metab.* 2019;74(Suppl 2):29-42. doi: 10.1159/000499145.
26. Supthanasup A, Banwell C, Kelly M, Yiengprugsawan VS, Davis JL. Child feeding practices and concerns: thematic content analysis of Thai virtual communities. *Matern Child Nutr.* 2021;17(2):e13095. doi: 10.1111/mcn.13095.
27. Galloway AT, Fiorito LM, Francis LA, Birch LL. "Finish your soup": counterproductive effects of pressuring children to eat on intake and affect. *Appetite.* 2006;46(3):318-23. doi: 10.1016/j.appet.2006.01.019.
28. Chilman LB, Meredith PJ, KennedyBehr A, Campbell G, Frakking T, Swanepoel L, et al. Picky eating in children: current clinical trends, practices, and observations within the Australian health-care context. *Aust Occup Ther J.* 2023;70(4):471-86. doi: 10.1111/1440-1630.12869.
29. Van der Horst K, Sleddens EFC. Parenting styles, feeding styles and food-related parenting practices in relation to toddlers' eating styles: a cluster-analytic approach. *PLoS One.* 2017;12(5):e0178149. doi:10.1371/journal.pone.0178149.
30. Blissett J, Haycraft E. Are parenting style and controlling feeding practices related? *Appetite.* 2008;50(2-3):477-85. doi: 10.1016/j.appet.2007.10.003.
31. Zucker N, Copeland W, Franz L, Carpenter K, Keeling L, Angold A, et al. Psychological and psychosocial impairment in preschoolers with selective eating. *Pediatrics.* 2015;136(3):e58290. doi: 10.1542/peds.2014-2386.
32. Kamarudin MS, Shahril MR, Haron H, Kadar M, Safii NS, Hamzaid NH. Interventions for picky eaters among typically developed children: a scoping review. *Nutrients*. 2023;15(1):242. doi:10.3390/nu15010242.
33. An R, Shen J, Zhang Z, Lim MT, Huynh DTT. Effect of oral nutritional supplementation on health-related outcomes and nutritional biomarkers in children and adolescents with undernutrition: a systematic review and meta-analysis.

Nutrients. 2024;16(17):2970. doi:10.3390/nu16172970.
34. Nogueira-de-Almeida CA, Del Ciampo LA, Martinez EZ, Contini AA, Nogueira-de-Almeida ME, Ferraz IS, et al. Clinical evolution of preschool picky eater children receiving oral nutritional supplementation during six months: a prospective controlled clinical trial. *Children (Basel).* 2023;10(3):495. doi:10.3390/children10030495.
35. Khanna D, Yalawar M, Saibaba PV, Bhatnagar S, Ghosh A, Jog P, et al. Oral nutritional supplementation improves growth in children at malnutrition risk and with picky eating behaviors. *Nutrients*. 2021;13(10):3590. doi:10.3390/nu13103590.
36. Xue Y, Zhao A, Cai L, Yang B, Szeto IM, Ma D, et al. Growth and development in Chinese pre-schoolers with picky eating behaviour: a cross-sectional study. *PLoS One.* 2015;10(4):e0123664. doi:10.1371/journal.pone.0123664.
37. McCann JC, Ames BN. An overview of evidence for a causal relation between iron deficiency during development and deficits in cognitive or behavioral function. *Am J Clin Nutr.* 2007;85(4):931-45. doi:10.1093/ajcn/85.4.931.
38. Cole NC, An R, Lee SY, Donovan SM. Correlates of picky eating and food neophobia in young children: a systematic review and meta-analysis. *Nutr Rev.* 2017;75(7):516-32. doi:10.1093/nutrit/nux024.
39. Fox G, Coulthard H, Williamson I, Aldridge V. How multiple threats to safety affects quality of life for picky eating adults: a new explanatory model. *Appetite.* 2023;181:106396.doi:10.1016/j.appet.2022.106396.
40. Wildes JE, Zucker N, Marcus MD. Picky eating in adults: results of a web-based survey. *Int J Eat Disord.* 2012;45(4):575-82. doi:10.1002/eat.20975.