

Picky (Selective) vs. Problem Eating in Children/Youth: Information for Primary Care



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Summary: Parents are often concerned that their child/youth is a picky eater. Although frustrating, fortunately most of the time it is not a medically serious concern. The good news is that there are various strategies that primary care providers can provide to parents to improve their child/youth's eating. If however, the child/youth is so picky that there are problems with growth, and nutritional deficiencies, then further assessment can be done. Address any medical, behavioural, or developmental issues. If issues persist, then consider referring to a dietitian, occupational therapist (OT) or pediatrician.

Case

You are seeing 8-yo Caleb in your primary care practice. He is brought to you by his parents due to problems with his eating. "Every mealtime is a struggle. All he wants to eat is chicken nuggets! You have to do something!"

What is a Picky Eater?

On one hand, it is good to be picky enough about the foods we eat. It would not be good to be indiscriminate and eat anything and everything.

In picky eaters however, their limited food choices are sufficient to cause stress with parents. Studies on picky eaters show the following themes:

- Reduced intake of
 - Vegetables and fruits
 - Whole-grain products, fish and seafood, meat, and unsweetened cereals
- Increased intake of
 - Junk food, sweet cereals and French fries
 - Processed foods
 - Dairy products

When a child has a very restricted range of foods they will eat, then it becomes 'problem eating', which can cause issues such as

- Growth problems,
- Nutritional deficiencies,
- Dental decay,

- Dehydration,
- Constipation

How Common is “Picky Eating”?

Prevalence: About 25-40% of parents report feeding problems in their infants and toddlers (Reauy, 1996.)

What Causes Picky Eating?

There are various issues that can contribute such as

Developmental Issues	Autism spectrum disorder (ASD) Global developmental delay (GDD), Sensory/motor issues
Behavioural issues	A negative ‘cycle of feeding conflict’ can become set up where 1) the concerned parent pressuring the child to eat, which leads to 2) the child resisting, which leads to less intake, which leading back to 1).
Medical issues	Constipation Gastroesophageal reflux Pain or discomfort from an underlying medical condition, Immature swallowing skills, Sensory processing problems, cognitive delays Nutritional disorders.

Assessment / History

Developmental issues

Autism spectrum disorder (ASD)	Are there signs of problems with reciprocal social interactions?
Global developmental delay (GDD)	Is the child delayed across many domains of development?
Sensory issues	Are there problems with sensory sensitivities, e.g. sound, light, touch?

Behavioural

Feeding conflict	Does the parent feel they have to pressure the child to eat? Does the child resist?
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Medical

Dental	How is your child’s oral hygiene? Any dental problems? Is child seeing a dentist every 6-12 months? Any pain in child’s mouth?
Constipation	Does child have stools that are usually hard, dry, small in size, difficult to eliminate?.

Gastroesophageal reflux	Gagging or Vomiting? Food Refusal (especially in the morning) Grazing throughout the day Excessive milk intake Wakes frequently at night Chronic Bad Breath Complaining of stomach pain Arching the back during or after eating Hiccough, burp, multiple swallows at meal times Saliva bubbles around the mouth Excessive drooling
Pain or discomfort from an underlying medical condition	Are there other medical issues? Any pain or discomfort?
Oral motor difficulties, e.g. immature swallowing skills	Are there troubles swallowing? Choking on food? Does the child tend to not chew? Does the child cough or choke with food/drink? Recurrent pneumonia? Problems transitioning from liquids to purees to solids? Take excessively long time to drink or eat?
Sensory processing problems	Any sensitivities to sound or loud noises? Any sensitivities to being touched?
Cognitive delays	Any troubles with learning compared to his/her peers?
Nutritional disorders	Any signs of low folate, B12, iron, zinc or other nutritional deficiencies such as: ● Fatigue, weakness, ● Lack of appetite, ● Delay in growth or developmental delays, ● Irritability or mood issues ● Brittle or dry hair or nails ● Mouth ulcers or sores at corners of the mouth
Food or environmental allergies	Family history of allergies? Try removing certain foods to see if the child improves Blood work Allergist referral

Food Diary

Consider asking families to provide a food diary prior to the next visit, which would include information such as 1) Day of the week, 2) Date and 2) What was eaten.

Differential Diagnosis of Picky vs. Problem Eating

Picky Eating	Problem Eating
Eat fewer than 30 foods Eat at least one food from almost all textures Eat the same food everyday (food jag)	Eat fewer than 20 different foods Restricted range or variety of foods and textures
Foods lost to food jags are re-acquired	Foods lost to food jags are NOT re-acquired

Tolerate new foods on their plate
 Willing to touch or taste new foods
 Willing to eat new foods after repeated exposure 15-25 times

Cries and “falls apart” when presented with new foods
 Not willing to touch or taste new foods
 Adds new foods in more than 25 times

Investigations

Consider:

- CBC, Hemoglobin,
- Serum ferritin, iron
- Vitamin A
- Vitamin D (25- OH) Note that although Vitamin D is recommended by certain guidelines, testing is may be discouraged by certain provincial Ministries of Health.
- Folate
- Vitamin B12.
- Calcium, zinc
- Thyroid function
- Celiac testing

Management / Treatment of Children

Nutritional supplements and vitamins

Studies confirm that picky eaters generally still get enough macronutrients (e.g. protein, carbohydrates, fats), but that they may struggle to get enough micronutrients (e.g. vitamin, zinc, calcium) (Taylor, 2016).

Supplements

- Omega-3s
- Pediatric nutritional supplements
- Infant cereal (for increased iron intake)
- Stage 2 formulas (6-18 months)
- Fer-N-Sol (if low iron levels and prescribed by doctor)
- Children’s complete multivitamin (with iron and without)
- Boost Juice

Multivitamins

- Aim for a children’s complete multivitamin with iron, calcium, vitamin D

Address underlying developmental, medical and/or behavioural contributors

In general, underlying issues need to be managed before a child can be expected to change their eating behaviour and accept new foods and beverages.

Address underlying developmental, medical and/or behavioural contributors

Developmental issues

Autism spectrum disorder	Refer to developmental services
Global developmental delay (GDD)	Refer to developmental services

Sensory issues	Approaches include <ul style="list-style-type: none"> ● Food play ● Sequential Oral Sensory (SOS) approach, commonly used by OTs. Consider referral to developmental services; occupational therapy (OT)
Medical issues	Manage and refer as necessary
Behavioural issues	Provide parent education (see below)

Parent Education about Picky / Problem Eating

Principles

- Try to make changes gradually
- Try to make only 1 change at a time.

Do's

- Do have consistent mealtime routines
- Ensure family meals
 - Eat meals at a table as a family, in the kitchen or dining room if possible.
 - Limit distractions to encourage your child to use all of his/her senses to experiment with new food. I.e. no watching TV, no electronics at the table.
 - Thank your child for good mealtime behaviours, e.g. trying new foods, etc.
 - Be a good role model for your child by eating the same healthy foods. Human beings are wired to imitate each other.
 - Ensure appropriate food portions for children, i.e. portion size for children is $\frac{1}{4}$ to $\frac{1}{2}$ of an adult portion.
 - Remove unfinished food within 20 to 30 minutes of serving
- Encourage fluid intake.
 - Age 2 years: 2% milk
 - Ideally 2 cups of milk at meals; (less than) $\frac{1}{2}$ cup of juice (may be diluted with water); 2 to 3 cups of water per day. If milk is not a favorite beverage, consider adding it to fruit or yogurt smoothies.
- Food chaining.
 - Place a non-preferred food next to the child's preferred food to change the appearance of their meal. Having a favorite food on her plate will help attract his/her attention to her plate. Remember it can take up to 20 positive exposures to a food before a child accepts to eat it.
 - For more information (<http://www.cheo.on.ca/en/Foodchaining>)
- Between meals
 - Limit meal and snack times. Offer 3 meals and 2 snacks per day. There should be two hours between each meal and snack with nothing in between (except water) to ensure that your child is hungry.
 - Food play. Allow your child to explore new foods, such as 'food play activities'. Give your child a chance to see, touch and smell a variety of foods. There should be no expectation of eating during the times set aside for food play. It can take up to 15 or more positive food experiences for a child to accept a new food.
- Do try to stimulate the various senses:

Sight

- Help unpack vegetables/fruits and place them in a bowl or sort them by color, etc
- Bring your child grocery shopping and encourage them to feel the fresh produce
- Have your child help serve the food; build a rainbow of colours on the dinner plates
- Find books and games with pictures of food and introduce them to your child
- Describe the color, taste and shape of a food
- Encourage your child to participate in meal preparation, children love to stir!

Touch

- Have your child help arrange cut vegetables or fruits on a plate
- Have your child wash fruits and vegetables in the sink
- Ask your child to add fruit to a fruit smoothie
- Use raw or cooked foods during craft activities:
 - Spaghetti can become a road for cars, or hair for a happy face
 - Cucumber slices can become wheels for a car or eyes for a happy face
 - Bread or carrot sticks can be used to make a fence
 - An orange slice can become a sun
 - Finger paint with pudding or pureed food, and make Jell-O gigglers
 - Use peas, cherry tomatoes, orange slices, crackers or other food for a counting or stacking activities
 - A potato or other firm fruit can be used to make a stencil
 - Dried fruits can be used to make a walking path
 - A cucumber can be used as a rolling pin
 - Rub foods on hands, arms and progress to cheeks and mouth area. As child builds acceptance to touch, you can rub tastes along the lips and encourage your child to lick the food.

Smell

- Expose your child to a variety of scents (vanilla, lemon, spices) and discuss whether they like/do not like that smell. Make a graph with pictures of “Nice Smells” vs. “Not-so-Nice Smells”.

Hear

- Game: What noise does this food make?
- Exaggerate the sounds of biting, chewing, and swallowing.

Don'ts

- Don't reward eating foods, e.g. don't reward with screen time, don't reward with dessert, etc. You might say that “After we finish eating, then it will be time for ____”. As opposed to saying, “If you eat ___, then you will get ___.”
- Don't allow other food unless it's a planned mealtime or snacktime, i.e. don't graze constantly throughout the day.

Advice for Parents of Teens

Ellyn Satter (Feeding with Love and Good Sense: 12 Through 18 Years) recommends a collaborative approach, and gives a sample script for a parent to say:

“You know, we've been trying to get you to _____ (eat your vegetables, eat less, eat more, not snack, put your feeding tactic here). You don't like it, and I don't like fighting with you about it.

From now on:

- *I will plan and prepare meals.*
- *I will include a food or two at each meal that you generally eat. This way, you can decide whether and how much you will eat of the foods I have included in the meal.*
- *I will expect you to show up for dinner on time and hungry. Comments? Criticisms?”*

Prevention of Picky Eating

During pregnancy and while breastfeeding, mothers can try to eat at least one new, unusually flavored or bitter food a few times a week such as:

- Cruciferous vegetables (cauliflower, cabbage, garden cress, bok choy, broccoli, Brussels sprouts)

- Spicy cuisine
- Fermented foods (e.g. kimchi)

Exposure to foods in the mother's diet will improve the child's eventual willingness to try new foods.

- At 4-6-months, when starting to introduce solid foods to the baby, include pureed vegetables, iron-fortified cereals and meats first and then offer fruits.
- At age 8-mos. to 10-mos., most babies can handle small portions of finely chopped finger foods, such as soft fruits, vegetables, pasta, cheese, well-cooked meat, baby crackers and dry cereal. Include foods that are bitter, spiced or have interesting flavors; eventually, introduce different textures

When and Where to Refer

Is there...

- Difficulty swallowing/chewing
- Pouching food in their cheeks
- Strong aversions to textures/tastes
- Being touched in the head/face area.
- Oral motor and/or sensory integration difficulties

If YES to the above then → Occupational therapy (OT) and/or Speech language therapy (SLP)

Is there...

- Picky/problem eating at any time

If YES then → Dietitian.

Where to Refer (in Canada)?

Private occupational therapist (OT)

- The Canadian Association of Occupational Therapists (CAOT) has a directory of OTs across Canada <https://www.caot.ca/site/findot>

Registered dietitian

- Dietitians of Canada has a directory of dietitians across Canada <https://www.dietitians.ca/Your-Health/Find-A-Dietitian/Find-a-Dietitian.aspx>

Recommended Readings for Parents

Websites

- Feeding Questionnaire www.feedingmatters.org
- For Parents with Babies <https://www.ottawapublichealth.ca/en/publichealth-topics/resources/Documents/Feeding-Your-Baby-Brochure-Starting-Solids-2018-v2--EN.pdf>
- Food Chaining Handout from CHEO <http://www.cheo.on.ca/en/Foodchaining>
- Eat Right Ontario <http://www.ohpe.ca/node/13558>
- Canada's Food Guide: <https://www.canada.ca/en/healthcanada/services/canada-food-guides.html>

Books

- Food Chaining: The Proven 6-Step Plan to Stop Picky Eating, Solve Feeding Problems, and Expand Your Child's Diet. Fraker, C., Fishbein, M., Cox, S., Walbert, L. (2007). Da CapoPress
- Just Take a Bite: Easy, Effective Answers to Feeding, Ernspurger, L., Stegen-Hanson, T. (2004).USA: Future Horizons.
- Feeding With Love and Good Sense: 12 Through 18-years, by Ellyn Satter

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About this Document

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