Unpicking Picky Eating

Simple Steps NUTRITION

A Little About Me

Gina Stear

- APD, BSc Nutrition and Dietetics, M Nutr (paediatric nutrition and food allergies)
- Work experience in Tertiary Care Specialist and children's hospitals
- Certified fertility, prenatal and postnatal dietitian
- Internationally certified lifestyle medicine professional
- Evidence-based nutrition, non-diet approach to food
- Mum of two

What we'll chat about

- Why does correct nutrition matter
- The art of eating
- How to discern normal vs problematic picky eating
- When Picky Eating becomes a problem
- What health care professionals can do

Why does correct nutrition matter?

And how it makes such a difference to a child's development

Improved overall nutrition with regular, structured & balanced meals improve ability to learn, process information & manage emotions

So, how are children in Australia doing?

Only 6% Children aged 2 – 17 years meet the vegetable recommendation.

4.1% eat no vegetables at all!

Iron intake is low and

a third of children

eat no meat or meat substitutes

A third eat the recommended serves of wholegrains, cereals and grains

Over 50% of Aussie kids don’t meet daily fibre targets

75% eat the recommended serves of fruit

Approximately **1 in 4 children** aged 2–6 years are considered overweight or obese

7% children consume sugar sweetened beverages daily

Over a third of a child's energy intake comes from discretionary foods

In Summary...

Our young children are generally consuming foods with minimal diversity

Diversity in taste

Diversity in texture

Diversity in nutrition (protein, fibre, iron)

The Art of Eating

A complex skill requiring patience and practice

There are 8 different sensory systems at play

Sight

Touch

Sound

Smell

Taste

Proprioception
(position/ location and movement of body)

Vestibular
(balance and orientation of body)

Interoception
(ability to read internal signals/ cues – hunger and satiety)

Children can over or under respond to 1+ of these systems

Key stages in Normal Development of eating and drinking

0-3 months

Oral Motor Skills

- Rhythmical suckle with up and down jaw movements
- Sensitive gag reflex

Food-related Play

- Sucks well, calm, watches mother

3-6 months

Oral Motor Skills

- Touch of spoon elicits suck
- Spits out food with forward-backward tongue movements

Food-related Play

- Takes things to mouth
- Blows bubbles with saliva
- Pats bottle

6-9 months

Oral Motor Skills

- Jaw begins to stabilise
- Bites on cup
- Tongue tip up, munching, gag reduces

Food-related Play

- Holds food and toys
- Desire for some control, messy, plays with food

Key stages in Normal Development of eating and drinking

9-12 months

Oral Motor Skills

- Tongues moves food from side to side
- Stabilisation of jaw
- Chewing, closes lips on spoon, spills drink

Food-related Play

- Enjoys playing with food
- Can hold a spoon, poor control
- Squeezes toys and food

12-18 months

Oral Motor Skills

- Uses a controlled bite on a biscuit
- Chews efficiently with rotary tongue and jaw movement

Food-related Play

- Pretends to feed self, large teddy or person
- Demands food

18-24 months

Oral Motor Skills

- Chews with lips closed
- Up and down sucking pattern on cup

Food-related Play

- Lifts cup to mouth
- Pretends to feed dolls
- Self-feeds, still messy

How do we discern normal versus problematic Picky Eating?

And what we can do to encourage a healthy relationship with food

PARENTS need to know they AREN'T ALONE!

Some form of picky eating affects between **25% - 33%** of all children

Nearly **85% of households** with children aged one to ten have a child the parent/s identify as ‘picky’ or an unpredictable eater

Smith B, et al. Appetite. 2020;150:104643,
Abbott U&A Research 2022

Q: How many times should a new food be offered for it to become familiar?

15 - 20!!

Normal development of young children and toddlers

- More common after 12 months - Children can naturally become more selective around 18-24 months
- Normal part of growth and development – affects 10-50% of children
- Gagging is normal (different to choking)
- Generally, resolves so as a parent we need to remain calm!
- Understanding normal development can be the first step in reassuring a parent their child's behaviour is acceptable

What happening to our kids?

After 2 Years

Growth rates slow down

BUT children become more active

AND have increased intellectual and social abilities

- It is a time of growing independence
- Increased fascination in the wonderful world around them
- Lose interest in food
- Eating is an intrusion into the main business of life – Playing!!!
- Appetites fluctuate
- Stomach capacity remains small
- Start to express individual preferences in food

When Picky Eating becomes a problem

And eating behaviour is further impacted by complexities

Let's talk definitions....

Picky Eater *vs* Problem Feeder *vs* ARFID

Picky Eater

"Children who demonstrate either transient or more extended challenges (up to 2 years) with feeding/eating patterns characterized by:

1. Strong preferences regarding liked and disliked foods.
2. Limited variety of foods but generally at least 30. Eats at least 1 food from most texture or nutrition groups.
3. Avoid new foods. But can usually tolerate them on plate.
4. Struggle more with parents about food/eating than peers.
5. More likely to be served a special meal."

¼ to **⅓** of kids experiences some type of picky eating

Problem Feeder

"Children who demonstrate significant at often extended challenge with feeding/eating patterns characterized by:

1. Long duration of feeding difficulties (›2 years) and/or
2. Severity of feeding difficulties which exceed that of a picky eater
   - Has a very restricted food range (<20 foods)
   - Has a very strong food likes and dislikes
   - Refusal to try new foods (cries/tantrums)
   - Likely growth and/or nutrition problems
   - Some skill deficit (i.e. oral/motor)
   - Usually eats different foods from the family and often eats alone."

About **6.1%** of children are "problem feeders"

Problem Feeder = Paediatric Feeding Disorder

Impaired oral intake that is not age-appropriate and associated with medical, nutritional, feeding skills and/ or psycho-social dysfunction

Early identification of PFD may prevent the development of conditions that negatively impact a child's cognitive, physical, emotional and social development as well as the relationship with food.

Goday P et al. Pediatric Feeding Disorder - Consensus Definition and Conceptual Framework. Journal of Pediatric Gastroenterology and Nutrition 68(1):p 124-129, January 2019.

Silverman AH, Kristoffer BS, Linn C, et al. Psychometric Properties of the Infant and Child Feeding Questionnaire. Journal of Pediatrics. 2020 August;223:81-86.e2. DOI: 10.1016/j.jpeds.2020.04.040

Feedingmatters.org

What about ARFID?

DSM v: 307.59: Avoidant/Restrictive Food Intake Disorder

An eating or feeding disturbance as manifested by persistent failure to meet appropriate nutritional and/or energy needs associated with one (or more) of the following:

1. Significant weight loss
2. Significant nutritional deficiency
3. Dependence on enteral feedings or oral supplements
4. Marked interference with psychosocial functioning

The eating disturbance is not attributable to a concurrent medical condition or not better explained by another mental disorder.

Underlying causes for picky eating are multifactorial

- Developmental stage
- Medical
- Oro-motor
- Sensory
- Broken Division of Responsibility (DoR)

Developmental stage and broken division of responsibility are almost always present in picky eaters

Things we as Health Professionals can do

And identifying red flags

1

Explore underlying causes

2

Discourage pressure tactics

3

Understand normal growth

4

Work on LT not ST

5

Set realistic expectations

1

Explore underlying causes

2

Discourage pressure tactics

3

Understand normal growth

4

Work on LT not ST

5

Set realistic expectations

Medical causes contributing to poor appetite

- Illness
- Reflux
- Enlarged tonsils and adenoids
- Constipation
- Allergies/ intolerances
- Low zinc and iron status
- Medications
- Chronic disabilities
- Attention Deficit Hyperactivity Disorder (ADHD)
- Autism Spectrum Disorder (ASD)

Smith B, et al. Appetite. 2020;150:104643.
Margari L, et al. Neuropsychiatr Dis Treat. 2020;16:2083-2102.
Drechsler R, et al. 2020;51(5):315-335.

Oro-motor & sensory causes contributing to poor appetite

- Tongue tie
- History of poor feeding practices
- Negative past food experience
- Sensory sensitivity (sound, touch, texture, visual, smell)

Children need to feel safe and in control to enjoy eating

THE INFANT AND CHILD FEEDING QUESTIONNAIRE SCREENING TOOL to promote early identification of PFD

6 Question Subset

Does your baby / child let you know when they are hungry?	YES		NO
Do you think your baby / child eats enough?	YES		NO
How many minutes does it usually take to feed your baby / child?	<5	5-30	>30
Do you have to do anything special to help your baby / child eat?	YES		NO
Does your baby / child let you know when they are full?	YES		NO
Based on the questions above, do you have concerns about your baby / child's feeding?	YES		NO

Red flag answers are in **Pink**

Feedingmatters.org

Problem? Consider involving other team members

Medical

- Primary Care Physician
- Developmental Paediatrician
- Paediatric Surgeon
- Allergist/Immunologist
- Cardiologist
- Dentist
- Endocrinologist
- Gastroenterologist
- Geneticist
- Neurologist
- Nurse Practitioner
- Otolaryngologist (ENT)
- Pulmonologist
- Radiologist

Allied Health

Nutrition

- Accredited Practicing Dietitian & Nutritionist

Feeding Skill

- Occupational Therapist
- Speech Language Pathologist

Psychosocial

- Psychologist
- Behaviour Analyst
- Counsellor
- Social Worker

Early detection, referral and treatment of pediatric feeding disorder across all four domains is critical to the long-term health and well-being of affected children

Signs and Symptoms requiring Allied Health involvement

Nutrition

- Unable to eat or drink enough for optimal growth or stay hydrated
- Insufficient or too rapid of a change in weight or height
- Lack of a certain nutrient, i.e., Iron, calcium
- Need for nutritional supplements
- Food allergy & intolerance
- Reliance on a particular food for nutrition
- Need for enteral feeds for nutrition (NGT, GT, TPN)
- Constipation
- Limited dietary diversity for age (too few fruits and/or vegetables , limited or no protein source, too few foods eaten on a regular basis)
- Poor meal distribution, constant grazing
- Large dependence on liquids

Feeding Skill

- Labored, noisy breathing or gasping
- Coughing, choking, gagging or retching
- Gurgles or wet breaths
- Loud and/or hard swallows or gulping
- Unable to eat or drink enough for optimal growth
- Excessively short mealtimes (< 5 minutes) excessively long mealtimes (> 30 minutes)
- Need for thickened liquids
- Need for special food or modified food texture
- Need for special strategies, positioning or equipment

Psychosocial

- Unable to come to or stay with the family at meals
- Refusal to eat what is offered or to eat at all
- Disruptive mealtime behaviors
- Unable to eat with others present at mealtimes
- Child exhibits stress, worry or fear during meals
- Caregiver stress, worry or fear when feeding child
- Presence of bribes, threats, yelling at mealtimes
- Need for distraction and/or rewards for eating
- Unpleasant mealtime interactions between caregiver and child

Make use of Chronic Disease Management Plans and Team Care Arrangements

1. **GP Management Plans (GPMP)** – chronic medical condition present for 6 months or longer

2. **Team Care Arrangements (TCAs)** - complex care needs that require multidisciplinary care input (GP + 2 or more collaborating health care providers)

- There is **no list** of eligible conditions
- Designed for patients who require a **structured approach** and to enable GPs to plan and coordinate the care of patients with complex conditions requiring ongoing care from a **multidisciplinary care team**.
- The **GP determine** whether a plan is appropriate
- A **GPMP and TCAs prepared by a GP** allows patients to benefit from Medicare rebates for specific individual allied health services identified as part of the care.
- A patient is eligible to **receive 5 individual Allied Health support services** each calendar year

Chronic conditions that will require on going and long term nutritional support

Food allergies

Coeliac disease, inflammatory bowel disease and other Digestive conditions

Nutrient deficiencies e.g. Iron deficiency anemia

Failure to thrive, premature babies

Complex feeding and swallowing difficulties

Picky eating, Paediatric Feeding Disorder, Constipation, ASD

Vegetarian and vegan families

1

Explore underlying causes

2

Discourage pressure tactics

3

Understand normal growth

4

Work on LT not ST

5

Set realistic expectations

Pressure tactics and food intake

Pressure can take many forms:

- Praise and reward
- Comparison
- Guilt
- Bribes
- Force
- Threats
- Nutrition education

Pressure can reduce a child's innate ability to self-regulate appetite

Freitas A et al. Appetite-Related Eating Behaviours: An Overview of Assessment Methods, Determinants and Effects on Children's Weight. Ann Nutr Metab (2018) 73 (1): 19–29.

Cooke L. The importance of exposure for healthy eating in childhood: A Review. J of Human Nutr & Dietetics. 2007;20(4), 294-301

Mura Paroche M, Caton SJ, Vereijken CMJL et al. How infants and young children learn about food. A systematic review. Frontiers in Psychology. 2017;8:1046.

Harrison M, Norris M, Obeid N et al. Systematic review of the effects of family meal frequency on psychosocial outcomes in youth. Canadian Family Physician. 2015;61, e96-e-106

What does the research say?

66

studies

- Higher levels of **parental pressure** associated with children eating less, weighing less and having higher levels of pickiness
- The most important determinant of a child's liking for a particular food is the extent to which it is **familiar**
- When we **label foods as forbidden** and then restrict their intake kids eat more of them when they get the chance and are more overweight than they would be otherwise
- **Positive role modelling** is the strongest predictor of lower food pickiness, children's fruit and vegetable intake and the likelihood to try new foods - greater than parenting style and socio-economic status
- There is a positive relationship between the frequency of **family meals** and increased self esteem and school success, reduced disordered eating and eating disorders in adolescents

What, how and when we feed our kids has an impact on their long term relationship with food

Children consumed **more food, specifically vegetables,** when they weren't pressured to eat & made **fewer negative comments about the food**

1

Explore underlying causes

2

Discourage pressure tactics

3

Understand normal growth

4

Work on LT not ST

5

Set realistic expectations

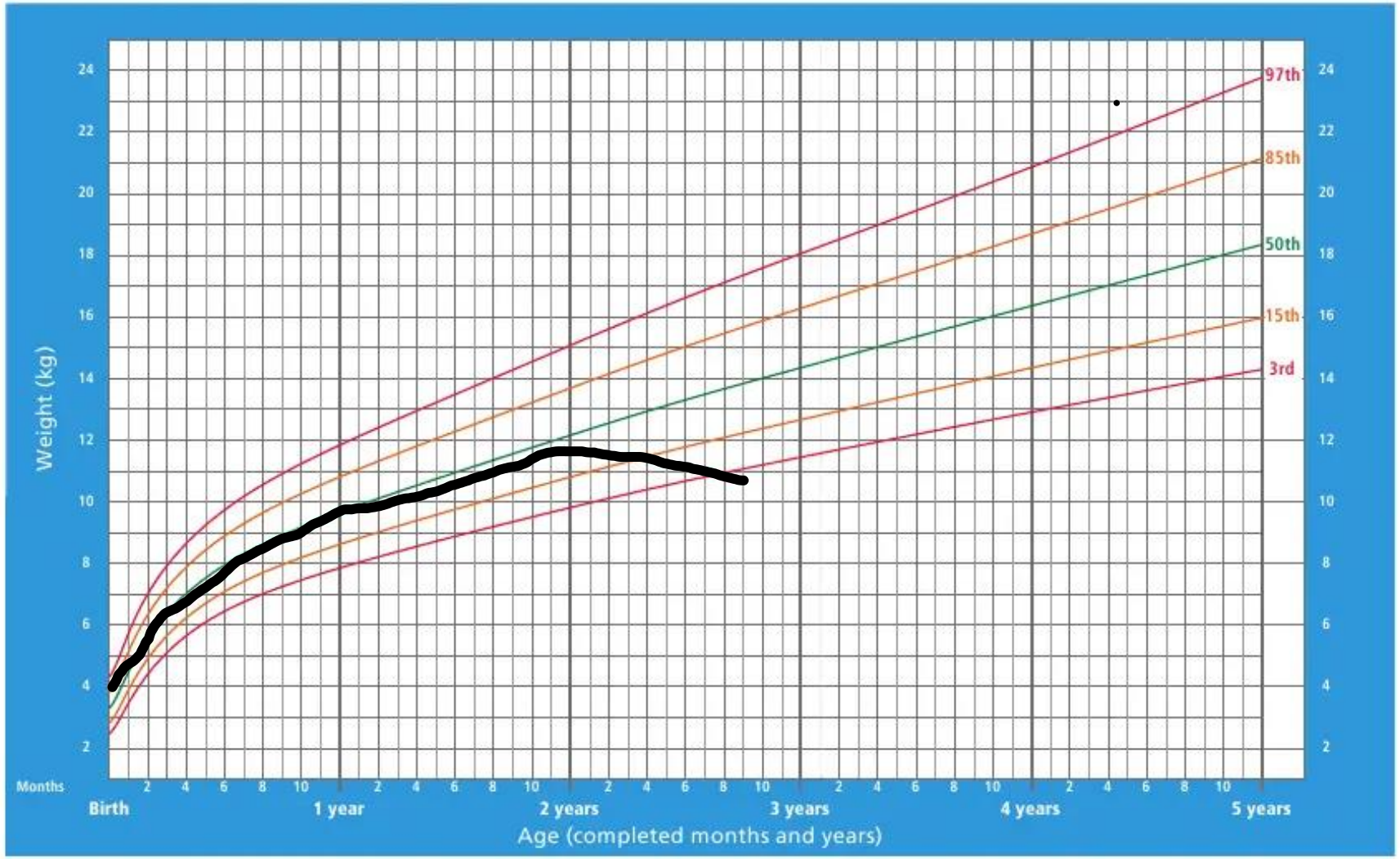
Ideally look at growth over time

- Use the correct growth charts – WHO vs CDC vs prematurity (adjusted age until 2 years)
- Look at growth trajectory over time – understand pattern changes and possible explanations
- Consider genetics
- 50th percentile is not the goal
- Reassure parents

Weight-for-age BOYS

Birth to 5 years (percentiles)

World Health Organization



WHO Child Growth Standards

1

Explore underlying causes

2

Discourage pressure tactics

3

Understand normal growth

4

Work on LT not ST

5

Set realistic expectations

The goal should be to build **competent eaters**

Create **positive relationship** with food

This takes **time**, **patience**, regular **exposure**

Remind parents of the Division of Responsibilities

Parent's Job	Child's Job
What	How much
Where	Whether
When	

Ellyn Satter – Division of Responsibility in Feeding

But most parents don’t follow sDOR

Orell-Valente et al (2007) Appetite

In this observational study of 142 kindergarten families, **85%** of parents tried to get their child to eat more.

Sherry Bet al (2004) J Am Diet Assoc

Focus groups with 101 moms of 2-5 year-olds

Over 90% bribed, rewarded, short order cooked or pacified children with food. And they didn't believe children when they said they were full.


You Provide, They Decide

1

Explore underlying causes

2

Discourage pressure tactics

3

Understand normal growth

4

Work on LT not ST

5

Set realistic expectations

What is the feeding dynamic between child and caregiver?

Parents can experience:

- reduced capacity for intervention
- overwhelm
- embarrassment
- burden of concern (growth faltering)

- Understand the parent's expectations & own readiness for behaviour change
- Support and reassure
- Look at intake week by week not day by day
- Encourage responsive feeding practices

Parents need to be a positive participant in the feeding relationship

Family Strategies for Picky Eating

Create a

Positive

environment

Start to

Regulate

appetite

Introduce

New

food


kids eat in
colour

References

References

1. Manson A et al. The food and nutrient intake of 5- to 12-year-old Australian children during school hours: a secondary analysis of the 2011-2012 National Nutrition and Physical Activity Survey. Public Health Nutr. 2021 Dec;24(18):5985-5994. doi: 10.1017/S1368980021003888. Epub 2021 Sep 8.
2. The Australian Health Survey: Nutrition First Results – Foods and Nutrients, https://www.abs.gov.au/statistics/health/health-conditions-and-risks/australian-health-survey-nutrition-first-results-foods-and-nutrients/latest-release
3. Netting, M.J.; Moumin, N.A.; Knight, E.J.; Golley, R.K.; Makrides, M.; Green, T.J. The Australian Feeding Infants and Toddler Study (OzFITS 2021): Breastfeeding and Early Feeding Practices. Nutrients 2022, 14, 206. https://doi.org/10.3390/ nu14010206
4. Netting, M.J.; Moumin, N.A.; Makrides, M.; Green, T.J. The Australian Feeding Infants and Toddlers Study (OzFITS) 2021: Highlights and Future Directions. Nutrients 2022, 14, 4343. https:// doi.org/10.3390/nu14204343
5. Feeding Matters - www.feedingmatters.org
6. Feeding Matters. Paediatric Feeding Disorder Fact Sheet. https://www.feedingmatters.org/wp-content/uploads/2021/09/Toolkit-PFD-Fact-Sheet-1.pdf
7. Ellen Satter Intitute – Division of Responsibility, Eat and Feed and Joy. https://www.ellynsatterinstitute.org/
8. Goday P et al. Pediatric Feeding Disorder - Consensus Definition and Conceptual Framework. Journal of Pediatric Gastroenterology and Nutrition 68(1):p 124-129, January 2019.
9. Silverman AH, Kristoffer BS, Linn C, et al. Psychometric Properties of the Infant and Child Feeding Questionnaire. Journal of Pediatrics. 2020 August;223:81-86.e2. DOI: 10.1016/j.jpeds.2020.04.040
10. Smith B, et al. The relationship between sensory sensitivity, food fussiness and food preferences in children with neurodevelopmental disorders. Appetite. 2020;150:104643.
11. Margari L, et al. Eating and Mealtime Behaviors in Patients with Autism Spectrum Disorder: Current Perspectives. Neuropsychiatr Dis Treat. 2020;16:2083-2102.
12. Drechsler R, et al. ADHD: Current Concepts and Treatments in Children and Adolescents. 2020;51(5):315-335.
13. https://www.servicesaustralia.gov.au/chronic-disease-gp-management-plans-and-team-care-arrangements?context=20#a5

Thank You

Simple Steps Nutrition

Email: gina@simplestepsnutrition.com.au

Mobile: 0409 155 629

Website: www.simplestepsnutrition.com.au

Questions?