

# Introducing Sensory Change in Your Child's Diet

Presented by Angela Lee APD

Session One



## TLC Nutrition

Dietitian-Teacher



TLC Nutrition

# Brief Intro



TLC Nutrition

Home Services Contact Blog About

Book Now



Cut Health Inside and Out

Evidence Based Nutrition

Specialist in The Low FODMAP Diet

Learn More



Meet the dietitian

Hi, I'm Angela an Accredited Practising Dietitian with experience in helping clients with IBS/IBD, Diabetes and Food Intolerances.

Monash University Certified



## IBS Dietitian

Low FODMAP diet



Boronia HillView Medical

Ph:90881962

[www.tlcnutrition.com.au](http://www.tlcnutrition.com.au)



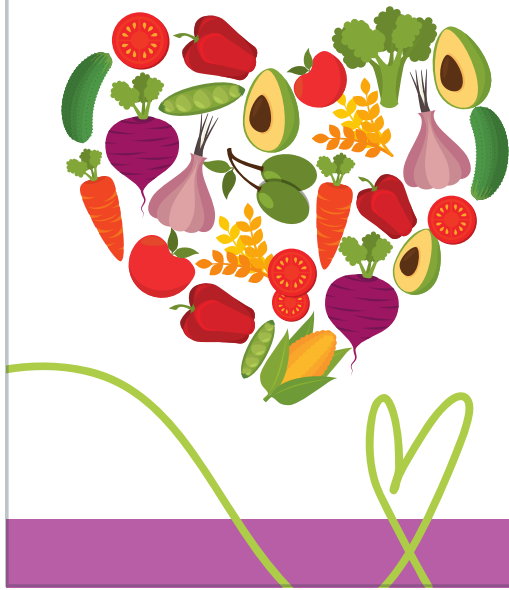
TLC Nutrition



Accredited Practising Dietitian

TLC Nutrition

# Today's Agenda



Brief Intro  
Why Children Dont Eat  
Fussy eaters Vr's Problem Feeders  
Strategies for Problem Feeders  
Hypo and Hyper Sensitive  
Food Chaining  
How Much to Feed  
Nutrient Requirements  
Nutrients of Concern  
Sensory Food Based Activity

## Reasons why children won't eat

### History with food

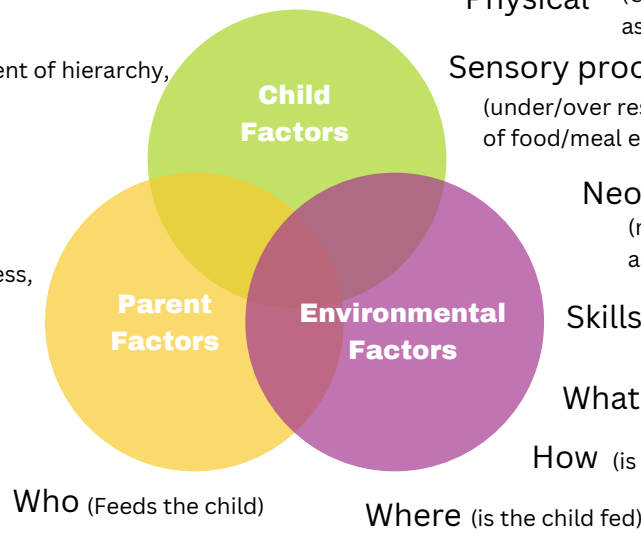
(offer liked foods, development of hierarchy, culture)

### Parenting Style

(demandingness, responsiveness, control, supportive)

### Stress

(pressure, stimulation, don't read child's cues)



**Physical** (GORD, pain nausea, constipation, aspiration, choking)

### Sensory processing

(under/over responsive, sensory aspect of food/meal environment)

### Neophobia

(rejection of new foods, sensory aspect of food/meal environment)

**Skills** (skill level, skill deficits)

**What** (is the child fed)

**How** (is the child fed)

3 factors

## Understanding Selective Eating

### Processing style

(How the food is presented)

### Predictability

Needs things to be the same due to repetitive nature - ritualistic



### Physiological factors

(GI factors not known - poor recognition of hunger)

### Psychological factors

Anxiety, distress, depression

### Social motivation

(Difficulty coping with social environment at meal times)



3 factors

## Fussy Eater

Eats a range of foods

Can tolerate new foods on a plate (touch, taste)

Growing well

Asks for food - healthy hunger between meals

Will respond to nutritional strategies

Eats more than one food from each texture group

Eats with family but usually different meals

Able to add new foods to current intake in 15-25 steps



## Problem Feeders

Eats different food from the family, often eats alone  
No improvement with decreased milk or routine with breaks  
Will eat a very narrow range of foods  
Cries falls apart with new foods  
Rejected foods are not required  
Refuses entire food groups 1.  
Refuses food entire textures 2.  
Force feeding  
Adds new foods in >25 steps 3.

Vr's Fussy Eater  
who will responde to nutritional strategies

Affects smaller number of children 5-16%  
Vr's  
Fussy eaters 6-59%

Brand specific 4.  
Eat different food from family  
Less than <20 foods  
Poor growth  
Food Jags 4.



TLC Nutrition

### Problem feeders

ASD

ADHD

AFRID- avoidance restrictive food intake disorder

#### 1. Refuses entire food groups

- only eats dairy no meat

#### 2. Texture refusal

- food with lumps, runny, crunchy or chewy foods, food with skin on, seeded fruit

#### 3. Difficult to add new food if not impossible

#### Brand Specific

4. Specific milk/bread

Personal example- son

Milk Woolworths brand or cheese from Aldi

'What's wrong with the milk it taste different'

eg. Specific cup/plate

#### 4. FOOD JAG

Occurs when a child eats the same food prepared in the same way every day - High risk of being permanently lost from child's diet.





## Strategies for Broden Problem feeders

### Dietary Intake

- SOS approach
- Shaping and Fading
- Sensory based food play
- Systematic desensitisation
- Play based approach - Sensory Toolkit
- Food Chaining



TLC Nutrition

All approaches are evidence based

sos

\_sensory needs

-enhanced drinking /feeding

-motivated to try new foods

-Adequate intake

-appropriate growth

-positive parenting

Sensory food base play - sensory stimulation ( looking, touching listening and tasting)  
Support food acceptance through visual stimulation.

Food shaping/fading - improving food acceptance starting with small bites until age portion is consumed FADING - Transitioning a child from food he like to accepted foods he dislikes. eg. child like cordial but not water - cordial can be gradually reduced in water until no cordial is needed and the child will drink plain water.

Sensory play based toolkit includes (SOS, food chaining, sensory based food play) FREE on line activities to work through

## Before Trialing any Strategies

- Rule any underlying medical conditions with your GP
- Oral motor difficulties
- Trial strategies to handle meal time behaviours



TLC Nutrition

### Before trialling

1. Rule out any underlying medical condition with GP or Paediatrician

eg digestive disorder contributing to feeding problem any food allergies

2. Oral motor child - making it diff to chew /swallow foods

A speech pathologist/OT can help you understand how your child handles sensory input

3. Trial strategies to handle negative meal time behaviours

!meal structure

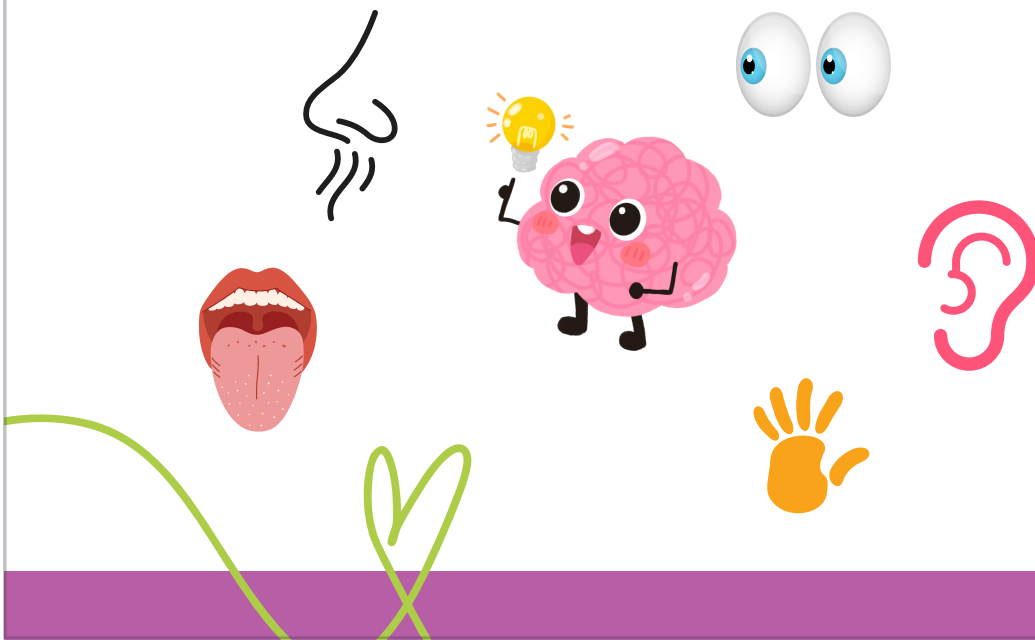
!parenting style

!calm environment

covers in detail in my last session

Food chain helps determines why your child accepts certain foods

## Sensory Processing



Sensory processing difficulties in

children with sensory processing disorders or feeding aversions can have negative response to one or more sensory systems  
eg: taste, texture, noise, feel, smell.

The senses are how they relate to their environment fight or flight response

noise - may not like a noisy environment to eat this may trigger the flight response.

## Sensory Dysfunction at meal times

### Over Response

#### HYPER

Child Highly Sensitive to Sensory information

- Increased anxiety of non-preferred food
- Reluctance or distress when touching or being close to non-preferred food or texture
- Avoidance behaviours



### Under Response

Child requires more sensory information

- Appears tired or disinterested
- Difficulties in pacing their eating
- Spilling food unaware
- Fatigued /tuned out

#### HYPO

TLC Nutrition

### 1. Over responders HYPER SENSITIVE

Children expecting all foods served at room temperature

which might mean cold foods such as ice cream are not tolerated or cooked foods need to be called to room temperature before children will eat them

### 2. Under responders HYPOSENSITIVE

require more sensory information may appear tired, disinterested.

plain biscuits may be disinterested

eg: try different shaped biscuits curly edges, squares, hearts, different spreads PB, vegemite.

## SOS Approach

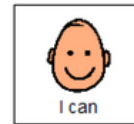
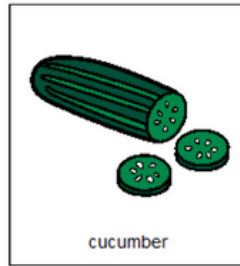









TLC Nutrition

Hyper-sensitive

Video link <https://www.youtube.com/watch?v=-J3PpokdRDg>

## SOS Approach



 look at	✓
 touch	
 smell	
 kiss	
 lick	
 nibble	
 swallow down into my tummy	

Tolerates - interacts with - looks - smells- touches- tastes - eats

increase comfort level with food through play

## How do we introduce NEW foods into our child's diet

### Food Stretching



- Aim to stretch preferred foods using accepted foods and rituals.

Redefine Trying It!

### Eating is complex

- TASTE, TOUCH, SMELL, INTERACT WITH, TOLERATES

Offer foods previously rejected

Re-offering expands food repertoire <12

Children can detect even the smallest change they need predictability

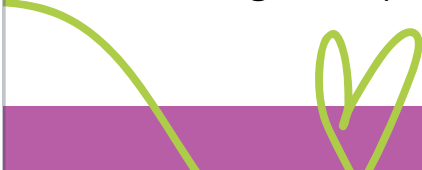
Non pressured- use language like

- That's fine lets get comfortable with it

- I like this is how I like to eat it - model show eating might not create a negative reaction



## Gradual Exposure

1. Used to introduce new or disliked foods slowly and gently
  2. Start with small serves and small tastes in a non-pressured responsive -feeding environment
  3. Starting with more predictable foods such as canned or dried fruits can help
  4. Offer new foods with a desired food can help accelerate the process
  5. Strategic and planned, not haphazard
- 

No pressure  
No coercion

3. eg pureed foods, apple tart

4. eg. one small sliver of lettuce to a burger masked with tomato sauce or avo in a taco shell



## Food Hierarchy Desensitisation

TOUCH

SMELL

KISS

LICK

BITE

CHEW  
SWALLOW

### Steps

- Begin with 7-10 foods
- Always start with a preferred food
- Last food - chewy/sweeter food
- Drink follow last food
- Food remains the same for the first 3 exposures
- Then change 25-50% of foods

*Starting with a preferred food helps the child feel safe and successful, gets eating started ensures at least one food is eaten"*



TLC Nutrition

Food Hierarchy Desensitisation - Slow and systematic introduction of new and non-preferred foods to a child through exposing a child to a graduated hierarchy of anxiety producing foods that help them overcome their fear of food and eating.

Graduated exposure/systematic desensitisation = re exposure to targeted foods

Reinforcing graduated exposure by - can reduce the likelihood of reinforcing inappropriate meal time behaviours tries to reduce the motivation to escape the task as food consumption is not required for a correct response.

Calm not controlling- give child some control or let them think they have control

Safe space for child to place food close to table mat move food onto the plate encourage to touch, lick only put in their mouth and eat and chew the food.

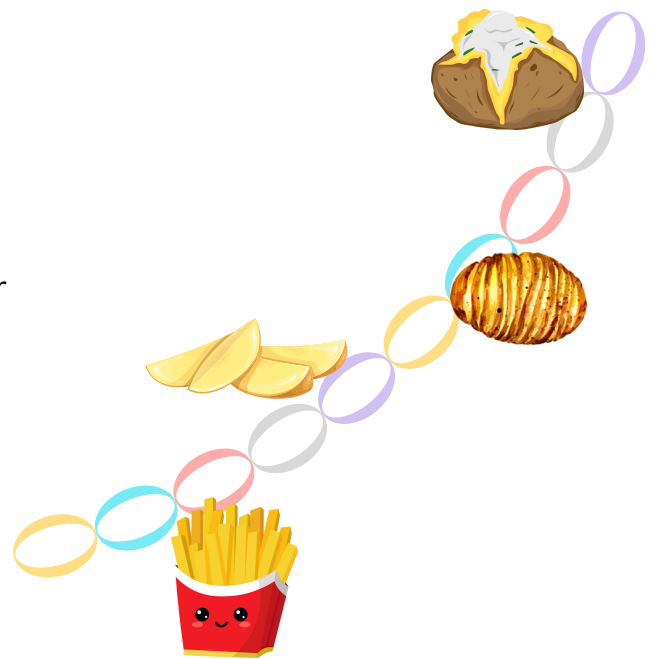
Expectation that the food will remain on the plate/place mat.

## Food chaining

Instead of forcing your child to eat food they do not find appealing/appetising.

Food chaining begins with a list of preferred foods that have the same texture, flavour, after taste, that your child already eats.

Food with similar characteristics are chosen to gradually expand on your child's preferred food.



Based on premise you child will eat what they like!

This method will allow introduction of more food variety with similar flavour, texture of there core foods they are already eating

## Tips on 'how to food chain'

- Make a list of foods that have the same features as the foods you child currently eats
- Use the preferred foods to decrease anxiety around new foods
- Use a safe flavour/texture to help introduce a new food
- Only change something at a time e.g shape, brand, colour, texture
- Gradually separate the preferred and non-preferred food (work towards changing the ratio)
- It may take >20 presentations of a new food for a child to accept it

Mc  
Donalds  
chicken  
nugget

Another  
brand  
chicken  
nugget

Crumbed  
chicken  
nugget

Crumbed  
chicken  
strips

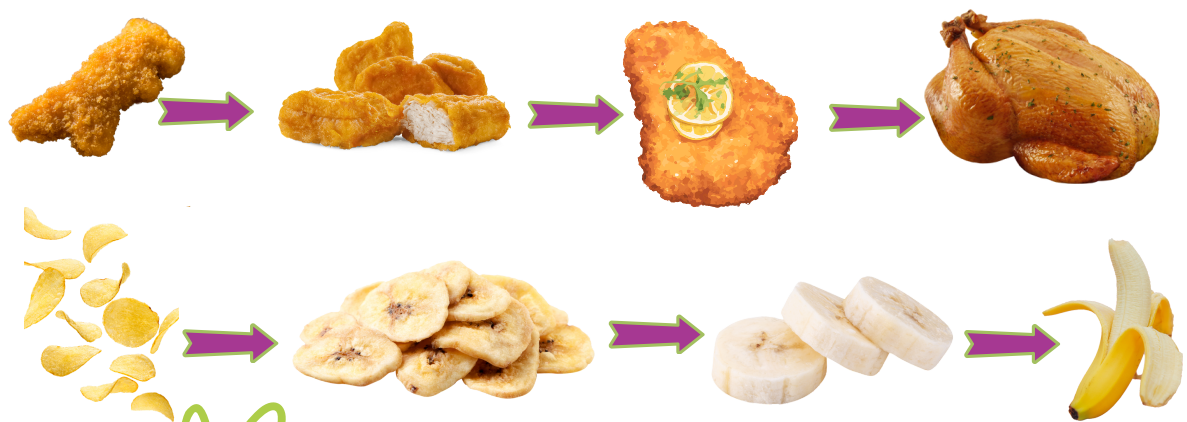
Crumbed  
turkey  
strips

Crumbed  
fish strips

FOOD CHAINING - requires intention /planning

## Food Chaining

Preferred food - to introduce new foods through food chaining

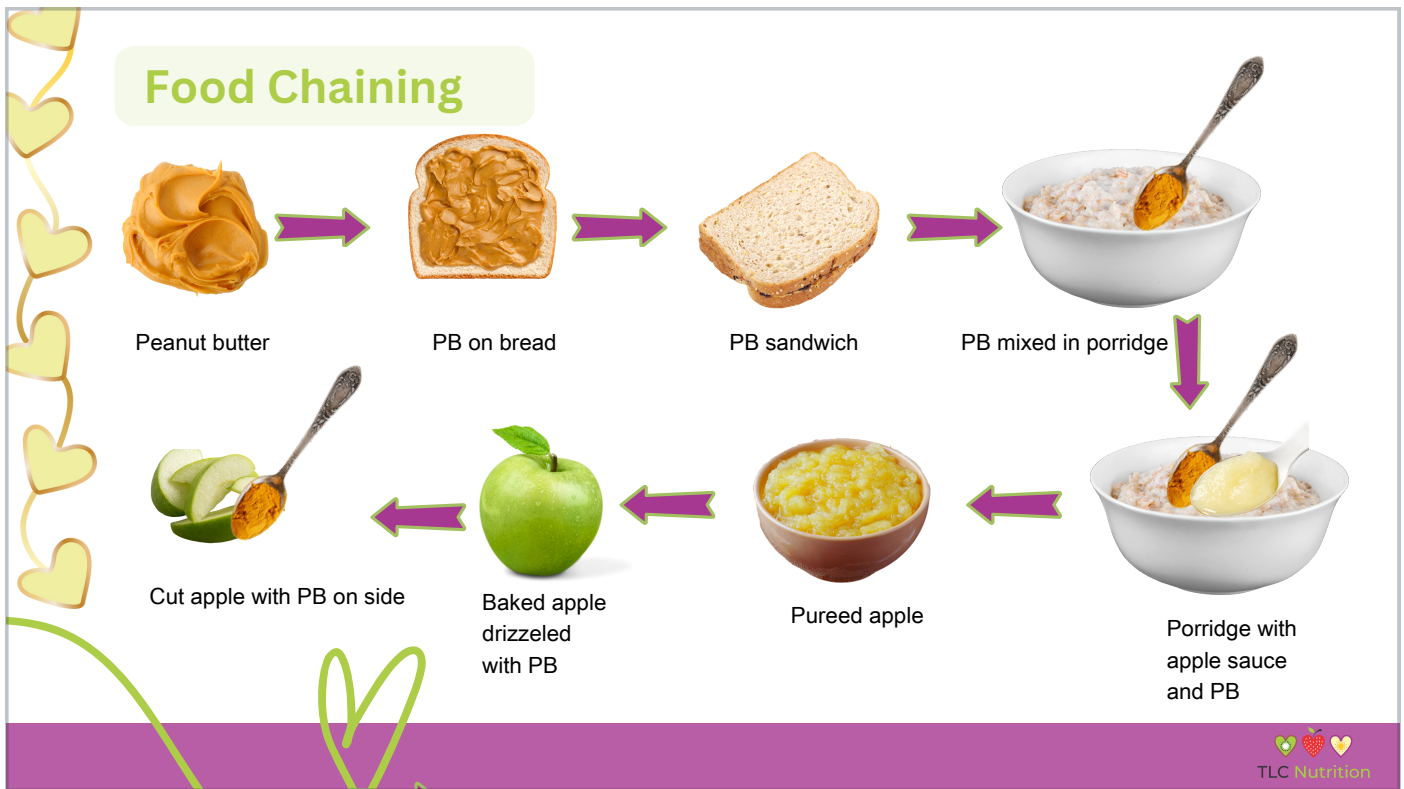


Food Chaining - small changes colour, shape, texture, diff brands

eg two chains

-animal chicken nugget to roast chicken

-Potato crisps to banana



Food chain originates with an accepted food ends with the goal food! Way to get a selective eater to try new foods! Child still needs access to preferred foods to meet volume but still needs exposure to new foods

A chain is created by making excepted change to the preferred food. May start with child favourite chicken nuggets and end with a baked fish.

Early stages of chain diff brands and shapes gradually as the child begins to routinely accept the new foods. Move onto something similar but completely diff crumbed fish, small changes to colour, texture or shape.

## Eating Environment



Use the same place for meals

- family dinner table

Create a Routine to the meal

- child help prepare, serve, clean up
- talk about cooking and the food
- family style serving

Present only **THREE** foods on the child's plate

At least **ONE** preferred food at every meal

Limit main meals to 30 min and snacks to 15min

- child knows there's an end to the meal

Don't pressure child or force child to eat

## Sensory strategies



- Use timers, visual supports, mirror
- Involve child in food preparation
- Prior - Calm alert state (quite time)
- During - reduce sensory input (headphones, fidgets weighted blankets, lap pads, move n'sit cushion, chairs with arms)

enhance predictability

## Familiarise about food



- Games and songs about food
- Painting/drawing food
- Grow food - herb/vegetable garden
- Messy play indoor/outdoor
- Cook food together meals/baking
- Supermarket shopping game
- Make your own placemat

\_ get a set of ingredients out and allow your child to put ingredients in to make their own creation- I tried this with my son - making chocolate muffins  
creativity- fun - learning



## What and how much to feed!

Try not to overload child's plate

Offer 5-6 smaller meals and snacks throughout the day

Avoid preparing separate meals from the family

1.Ensure foods are child's preferred texture

Include food from all core food groups  
Healthy Eating Plate

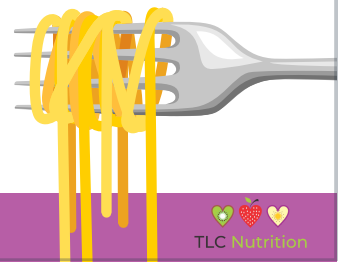
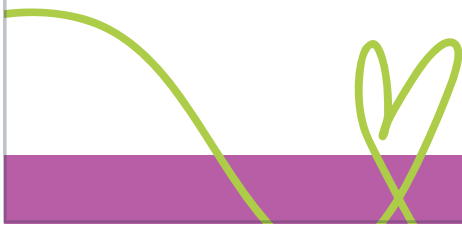
2.Limit milk and dairy foods to 500ml daily

Offer water only btw meals  
(not to decrease appetite)

3.Provide your child with two options only  
(2 diff fruit 2 diff fillings in a sandwich)

Ensure foods are child's preferred texture

Limit juice -decrease appetite



1.texture - acceptable

struggling with chewy meat try mince

cooked veg try raw grated

skin - try peeling first

2.limit milk to 500ml milk- prevent decreased appetite

3.options

- respect like/dislikes

- 2 diff sand fillings or 2 diff fruit

## Nutrient Requirements

### Healthy eating for children

TEACH YOUR CHILD HEALTHY HABITS FOR A HEALTHY LIFE



www.eatforhealth.gov.au



Recommend serves from each food group for 4-8 year olds



1 x protein + 1 x starch + 1 fruit/veg for each meal or snack (1 Tbsp per year of age up to 10yrs)

TLC Nutrition

Healthy Guidelines for Children - have some here today you are welcome to take a copy.

Guidelines for nutrients change as the child grows and develops.

Child's fist size - stomach volume at resting capacity.  
stomachs smaller than adults include small amounts of food groups across all 5 food throughout the day.

large serving sizes can be overwhelming for younger children

## Parents Responsibility!

- ✓ WHAT food is offered
- ✓ WHEN food is offered
- ✓ WHERE food is offered



TLC Nutrition

Parent child relationship provides opportunity forming attachments, regulating, emotions socialising

They learn to eat what their parents eat!

Parent trust children

## Child's Responsibility!



- ✓ **HOW** much they will eat  
(As many servings as they like)
- ✓ **IF** they will eat  
They may choose not to eat

Role modelling is essential part of relationship

## Nutrient Concerns

*Nutrient Deficiencies  
occur due to a  
restricted food range  
where  
MICRO nutrients  
are no longer being met  
through diet !*



MACRO- being met still (growing)

Iron- ferritin

-Immune response

-Sleep

-Growth

-concentration

-Fatigue

high intake non-iron rich foods (milk)

Vitamin D

Assist bone development

Best source Sunlight - indoors/sunscreen

reduced exposure

ZINC

Immune function

sexual maturing

VIT A

Immune function

night vision

B12

Release energy from food  
cell growth DNA production



## IRON

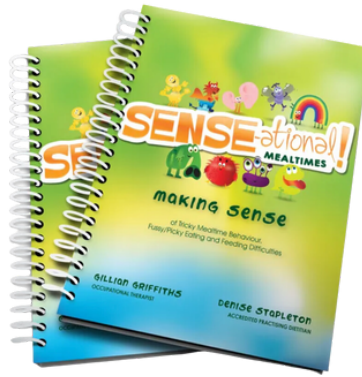
Heam - animal sources

Non- Heam need more to reach requirements

Eat Non- Heam with Vitamin C help absorpction

## Helpful Resources

Link for FREE Sensory Play booklet



[www://sensoryplaytoolkit.weebly.com](http://www://sensoryplaytoolkit.weebly.com)





## Sensory Food Activity

TOADSTOOL

## Garden Salad



SERVES 2

### INGREDIENTS

#### SALAD

2 boiled egg  
1 tomato  
2 ice berg lettuce leaves  
2 celery sticks  
2 pineapple rings  
2 Tbsp sultanas  
1/2 carrot  
1 slice cheddar cheese  
1/2 Lebanese cucumber

#### GARDEN CRITTERS

11 green grapes  
11 red grapes  
2 slices apple  
2 slices orange  
2 Tbsp ricotta cheese  
2 Tbsp nut butter  
2 pair icing eyes  
2 mini cucumbers  
ICE

#### METHOD

1. Boil egg for 10 minutes, run under cold water and peel shell.
2. Prepare celery and leave ice cold water bath to curl.
3. Vandyke tomato, shred lettuce and grate the carrot.
4. Make the cheese spots using an apple corer, arrange on plate.
5. Prepare garden critters as shown, arrange on plate.