

SENSORY FEEDING PROGRAMME

DISCLAIMER: This feeding programme has been produced for children who are having difficulty in eating a range of foods. It is expected that any strategies used within this advice are adapted to individual children (including consideration of any food allergy or intolerances) and that any queries are discussed with a relevant health professional for that child prior to being tried. This information is not for children who have any physical reason that makes eating difficult. This guidance should not be shared or implemented for individual's presenting with any of the following:

- Chewing and Swallowing difficulties
- Weakness in muscles of mouth or throat
- Head or neck surgery
- Problems with the esophagus
- Fitting of Percutaneous Endoscopic Gastrostomy (PEG)

As feeding is a complex and multisystemic challenge, providing services for this presenting problem requires substantial additional study, training, and supervision and necessitates the expertise and input of several other disciplines. Consideration should therefore be given to current input from any of the following services, and where sensory need fits within this. Is the child under the care of:

- Speech and Language Therapy (SALT) – Feeding and Swallowing Service
- Dietician
- Occupational Therapy Posture Management
- Gastroenterology

1. Introduction

- 1.1 As adults, over time we have become desensitised to the textures, flavors, and smells of food but many children have not. In the first few years of life, mealtimes are all about processing the sensory input they are receiving from various foods. Often when children display picky or fussy eating, especially those with food aversions and difficulties with the touch, taste, or smell of food, this experience is being processed in their brain as unpleasant in some way. Just like some people may dislike nails on a chalk board or touching something slimy, the same responses may be felt by some children when they touch, smell or feel the texture of certain food types.

- 1.2 Some children may have more extreme responses such as gagging or vomiting. They have no control over their responses due to the aversion of the smell, taste or feel of the food. Over time as these negative experiences become more heightened just the smell or sight of certain foods can trigger a negative response from a child.
- 1.3 Children's brains are extremely plastic and adaptable, they are able to easily learn new things. **When a child learns something new or experiences something different, a new connection is made in their brain.** The more they have that same experience, the stronger that connection gets, and then they are able to react differently than they have previously because their brain is using a new connection to process the information.
- 1.4 Not processing input well can also cause fussy eating because children may not feel certain soft textures in their mouth (as if the sensation is dulled), and thus avoids them. These children in particular may prefer crunchy foods and dislike soft foods, or they may over-fill their mouths to try and 'feel' the food.
- 1.5 **Hypersensitive** or '**orally defensive**' children dislike experiencing various taste and texture sensations in the mouth. Orally defensive children often have a limited repertoire of foods he/she will eat, perhaps only mushy foods, only crunchy foods or only bland foods etc. They may avoid chewy foods and foods with mixed textures or lumps. These children may gag easily and may avoid using their lips (use teeth only) when eating off a fork or spoon. Some may be overly sensitive to brushing their teeth or being touched around the face and lips.
- 1.6 When a child eats a very limited amount of foods because they have difficulty with how foods smell, taste, and feel this could be because of the way their brain is interpreting the sensations they get from food.
- 1.7 The programme aims to reduce food aversions gradually in a positive manner with the goal of enabling children to consume a wider range of foods throughout the day.
- 1.8 Strategies and advice should be introduced and implemented in the home and school environment.
- 1.9 **Step 1: Make a list**
 - Make a list of everything your child will eat and likes to eat, this will help to identify any food patterns/preferences, e.g. crunchy foods, sweet foods etc. **Recognise** the textures and types of food that they like to eat, take note of the textures and colours, is the food crunchy, soft, dry, wet, sloppy white, spicy?

- Use preferred textures when introducing new foods. Do not simultaneously introduce a new taste and texture as this will be overwhelming.
- Next, take the preferred food list and write down similar foods next to the original. This will help you identify/'build a bridge' to new foods. Although it takes a lot of repetition and patience consistently offering very similar foods at meals, it can help to expand the variety and break down specific food preferences. Present new foods regularly for them to try.

1.10 **Step 2: Assessment**

Trying new foods can be challenging so first explore what your child is comfortable to do. Prepare small portions of the 'bridging' food types and complete this chart -

Food type	I can touch it	I can bring it to my lips	I can taste it with my tongue	I can put it on my teeth	I can put it in my mouth	I can swallow it

1.11 **Step 3: Tasting sessions**

Everyone has food preferences, some more than others, but it takes at least 10-12 times to know if we really don't like something and so eating is a learning process. This does not mean you have to present the same food item 12 times in a row! Try presenting the food in different ways and on different days. Complete the food chart -

Name of Food	Texture <i>(e.g., hard/ soft/ chewy/ crispy/ crumbly/ mashed/ juicy)</i>	Taste <i>(e.g., bland/ creamy/ delicious/ bitter/ spicy/ mild/ fresh/ healthy/ unhealthy)</i>	Temperature <i>(hot/ cold/ warm)</i>	Smell <i>(e.g. stinky, nice, nutty, fruity)</i>

If the food is declined, put the taste to one side. Repeat the same tastes over a week.

1.12 **Step 4: Introduce change gradually**

- Present food in easily manageable size pieces (i.e. easier to chew as this reduces risk of choking).
- First let your child look at the food, in their own time encourage them to touch and smell the food, hand over hand facilitation will be required initially. They may then want to further investigate the food by bringing it to his lips or maybe by licking or kissing the food.
- Slowly introduce other combinations of the preferred foods, e.g. bananas = try banana yoghurt – then strawberry and banana yoghurt and then a strawberry yoghurt.
- Have a preferred food at each meal, along with the new food.
- Sit at the table to eat the meal. Ensure a good posture while eating as good posture helps ensure good digestion.
- Position so other people are not walking behind/around them while they are eating. Try to reduce noise distractions as much as possible.

1.13 **Step 5: Introduce and encourage cooking and baking**

- Support to get involved with the preparation of meals and different foods. Cooking and baking activities will encourage them to handle and experience the different textures and smells of food.

Food play is a good way to introduce new food tastes and textures:

- Finger paint on a cookie sheet with puddings of different flavours such as whipped cream, apple sauce, oatmeal, cream of wheat.
- String fruit loops, Cheerios or pretzels to make jewellery, push a blunt needle through other cereals to string them.
- Knead bread or pretzel dough, add raisins or chocolate bits to give it a lumpy texture.

In general, introduce new tastes and textures gradually - only one new experience within a given time period.

Other aspects to consider:

- Introduce new foods gradually. First let your child look at the food, in their own time encourage them to touch and smell the food. They may then want to further investigate the food by bringing it to their lips or maybe by licking or kissing the food.
- Allow your child to eat the food they prefer at mealtimes, this will help to establish the routine of eating, try to keep the environment positive and calm.
- Avoid introducing new foods at mealtimes, this may contribute to them disengaging with eating and may also increase anxiety.
- When introducing new foods present them on a 'trying plate' this plate should look different to the other plates that are used during regular mealtimes.

Note - Don't 'force feed' as this creates negativity around meals and children may start to avoid them altogether. Forcing to eat may also make a person distrustful at mealtimes as they may feel like they have to be on guard and become defensive, which could result in them eating less and disengaging.

2. Olfactory

- 2.1 The olfactory system can play a part in why a child will or will not eat certain foods. A child who is hypersensitive to smells is over-responsive and tends to avoid people, objects, food or places associated with smells that are offensive to him. Consider that a particular odour may be the reason why a person refuses to enter certain classrooms, dinner halls, gyms, a relative's home, a shop or restaurant.
- 2.2 The kitchen generates many odours as do certain foods. An over-responsive child may dislike perfumes, the smell of metals and other substances and may be reluctant to touch things for fear of getting the smell on their hands.

2.3 Use scents that cover up the undesired odours such as:

- Apply a lotion or cream that the child likes under the nostrils prior to entering an undesirable environment.
- Provide pocket-sized lotion, cream or perfume that the child can pull out to mask a smell when needed.

An under-responsive child may seek out odours or be unaware of them. Some may have a compulsion to smell objects in the environment, even those seeming to be odourless. Some may have difficulty discriminating good odours from bad odours, creating safety issues with poisonous substances. Some hyposensitive children need to use their sense of smell in inappropriate ways as they interact with people or objects.

Sensitise a child with poor odour awareness with smelling games such as:

- Put a few drops of a scent (vanilla, lemon, banana, peppermint, vinegar, etc.) onto 2 cotton balls for each scent; mix up the cotton balls and have child match the scents.
- Place familiar items under the nose of the child while blind-folded and have them guess what they are.
- Invite them into the kitchen while you are cooking; talk about the different ingredients and smells
- Take a "smelly walk" outside and talk about the odours of the flowers, grass, mulch, etc.

Calming the body before a meal

- Playing with food - use the food on the plate to make a picture such as a face, house or dog. This helps the child to touch foods without alarm
- Write a letter of the alphabet or draw a picture in sources and pureed foods
- Decorate breads, waffles and pancakes with icing, sprinkles or Jelly.
- Dip food such as pasta, carrot sticks, grapes, hot dogs chunks and French fries into different colourful sources, then paint pictures with them on a plate or table top
- Have children help with
 - selecting recipes from a Childs cookbook
 - Finding ingredients for recipes in cupboards and the fridge
 - Washing, peeling and cutting of fruits and vegetables
 - Measuring ingredients
 - Stirring a bowl or a pot
 - Setting the timer