







Welcome to the toolkit
About my child
New Foods
The Sensory World
Sensory Play
Sensory Chaining 11
Food Games
Non-food Games14-15
Create your own Games16-17
The New Foods Challenge
Troubleshooting
About the Toolkit Developers

Welcome to the toolkit

This toolkit aims to help you to increase your child's confidence to try a few more foods - and to enjoy doing it - using sensory activities. It is aimed at children between 2-7 years.

We believe in making eating a fun, rewarding activity.

We specialise in non-taste techniques; this means encouraging your child to interact with foods and food stimuli, but without the pressure to try them.

This toolkit is for families who children who are avoidant, picky or fussy eaters. A lot of advice about eating is based on promoting healthy foods such as fruits and vegetables. For children who are currently refusing a lot of foods, focusing on fruits and vegetables and a 'healthy' diet may be unhelpful and unrealistic, and any pressurising can make the problem worse.

We wanted to devise a toolkit for parents to use with their child when they need a slower, gentler approach to helping their child try more foods.

At the beginning of the toolkit we will ask you to think about your child and their behaviour and to write down some of this information; this is to help you understand how your child may react to the games.

Then, we will give you some ideas for sensory games and activities, which you can play. The idea of these games is to gradually increase your child's confidence with different sensory experiences.

When you and your child are ready, we have included a section towards the end of the toolkit that aims to help you when trying to introduce some new foods.

The final part of the toolkit is a troubleshooting section, which includes some suggested tips and phrases to help with common questions and concerns.





Ask your child to draw their favourite foods

Ask your child to draw some foods they may want to try one day

Does your child want to change their eating?

If they don't then just initially play the sensory games: it is best to see this as a slow and gradual process. If they do, then you can talk to them about completing the section on trying new foods at the end of this toolkit on pages 19 - 20

Many children get to a point in their lives where their eating becomes socially embarrassing for them, which drives them to change their eating.

New foods

A lot of children don't like tasting new, unfamiliar foods; this is called *food neophobia*. This is a very normal part of development, and even as adults we all vary in how open we are to new food experiences.

The following questionnaire will give you an idea of how food neophobic your child is. Please circle the answer which best describes your child's typical behaviour. My child does not trust new foods Strongly agree (4) Agree (3) Disagree (2) Strongly disagree (1) If my child doesn't know what is in a new food s/he won't eat it Strongly agree (4) Agree (3) Strongly disagree (1) Disagree (2) My child is afraid to eat things s/he has never had before Strongly agree (4) Agree (3) Disagree (2) Strongly disagree (1) My child will eat almost anything Strongly agree (1) Agree (2) Disagree (3) Strongly disagree (4) My child is very particular about the foods he or she will eat Strongly agree (4) Agree (3) Disagree (2) Strongly disagree (1) My child is constantly sampling new and different foods Strongly agree (1) Agree (2) Strongly disagree (4) Disagree (3) Add up the numbers beside the responses you gave... My child's score is: Δ

Above 18

Very Neophobic

This is not a diagnosis, but it does mean that trying new foods is a challenge for your child. Try the sensory play techniques suggested later in the toolkit, but be aware that change may be a slow process.

12-18

Moderately Neophobic

This suggests that your child can be wary of unfamiliar foods, but should be fairly open to experiences that help increase their familiarity and experience with foods. Try some of the techniques suggested later to help your child to increase their food acceptance.

6-12

Not Very Neophobic

You shouldn't have too much trouble expanding your child's diet as they are generally quite willing to taste new things. If your child becomes familiar with foods, especially through non-taste techniques, we hope that they will start to try more.

For many children neophobia is a developmental stage and they will become gradually better at trying foods as they get older, particularly if they get to see different foods in their environment; for example, in the kitchen, at mealtimes, and at nursery/school.

(Pliner & Hobden, 1992, adapted for children by Wardle, Carnell & Cooke, 2005)



The Sensory World

Some people are much more sensitive to sensory experiences. For them the world is a brighter, louder place. We have found that children who are sensitive to touch (tactile sensitive) also don't like as many foods, as the textures are more intense in their mouths. The following list includes common tactile sensory activities and textures that children who have tactile sensitivity often find difficult. As you can see, some activities are those we do for or with the child, some relate to the sensation of substances and materials on their skin, and some relate to general messiness.

Try to rate how much the following behaviours are true of your child: Are there any other textures and sensations that your child dislikes? please list any more that you can think of in the spaces in the table

	not true	maybe	yes	
My child dislikes hair brushing				
My child dislikes nail clipping				
My child dislikes face washing				-
My child dislikes tooth brushing				
My child sometimes walks on tiptoes, especially when barefoot				
My child is irritated by cuffs				-
My child is irritated labels	L			-
My child is irritated certain fabrics				-
My child really hates having messy hands				-
My child really hates having a messy face				-
My child really hates having messy clothes				-
My child hates the feel of sand				-
My child hates the feel of goo				-
My child hates the feel of soil			FIL	
		K.	1111	

If you have answered 'yes' or 'maybe' to more than 6 of the sensory activities, then your child may be sensitive to touch. This means they can find the feel of things unpleasant.

We suggest that you try to introduce a wider range of textures into your child's life gradually. Find the textures that they like, and try to make time each week for sensory play (see page 12 - 15 for sensory play ideas).

If you have answered 'not true' to most of the questions, then your child should respond well to the games, especially those with non-foods. Try to focus more on the food games to increase familiarity with new foods

Are there any textures your child enjoys? For example, some children like the feeling of silky or smooth objects and substances.

If so, please list them below; these enjoyable substances will be good textures to start with in your sensory games.

Textures my child likes:



If your child is not tactile sensitive then they should be able to tolerate the textures of different foods in their mouth and on their hands, so the sensory play games will be more enjoyable.

sensa / Play

This section contains ideas for sensory play games

The sensory approach is meant to be FUN, to help your child develop positive relationships with food, so it is important in these games that there is **NO PRESSURE** to taste foods.

Starting off

- 1. If your child really hates picking up food, start with non-food games or play with foods that they already like. Then try sensory chaining (see page 11)
- 2. If your child doesn't like touching many substances and doesn't like to get messy, start with smoother substances that don't leave a trace.
- 3. Start sensory play in the bath, as children will be used to the feel of water and bath products on their skin. Vary their bath toys to include hard, foam, slippery and spongy textures, and get them to wash their feet, hands and tummies themselves.

Overcoming reluctance

- Not everyone will take to sensory play immediately. It is fine to start slowly, or stop doing something that isn't enjoyable.
- The adult play partner (you) should enjoy playing the games with their child, and talk about how it feels.
 Your child can direct your play if they are not ready to touch anything yet.
- Your child may not want to touch something with their fingers straightaway. A 'tool' can help them bridge this gap. This can be anything...a spoon, a sponge, a paintbrush, a cloth.
- An interesting storyline can encourage children to get past their reluctance (see sections on food and non-food games later in the toolkit for tried and tested ideas if you are stuck)

Love the idea of sensory play, but hate mess in your house?

Go to a playgroup, as they will have sensory activities there Go to the park, and use natural materials in your games (less waste too) Play games in the bath, in the garden or on a large mat.

Choosing what to play with

There are many substances that you and your child can experiment with. You can increase children's non-taste sensory exposure by increasing the variety and intensity of sensations they encounter. There are some sensory suggestions below.

If your child is tactile sensitive, then try the textures they like first and gradually move onto textures they are not as keen on. Be patient, as it is normal for progress to be very slow.

Water play	Water	Soapy/ coloured water	Toys in water (hard)	Slippery toys in water
Art play	Play-doh	Finger paints	Cutting paper	Glue and sticking
Around the house play	Sand	Soil (gardening planting)	Flour (baking or hiding toys)	Rice bins (see page 13 for game)
Sticky play	Magic ball mixture (see page 14 for recipe)	Jelly mixture (agar)	Chia/basil seeds in water	Pasta in oil
Food preparation	Crispy crunchy pictures (Crisps, crackers)	Bread/ sandwiches/ cutting shapes	Fruit kebabs/ picture	Biscuits/ cutting shapes in dough

Some of these are readily available and free

What sensory characteristics of foods does my child like or dislike?

Some sensations are more difficult than others.

Please indicate how your child reacts to the following sensory features of foods, by placing a tick in the box. Start food games with sensory features they like, and gradually introduce one they are not as keen on. Can you see any emerging patterns about what your child will and won't eat? It may be best to start with new foods with sensory features that your child prefers.

		Eats all of these foods	Eats some of these foods	Refuses many of these foods	0
Consistency	Puree				
	Mash				
	Smooth				
	Lumpy				
Texture	Crunchy				
	Melting				
	Slimy/gooey				
	Hard				
	Chewy				
Flavours	Sour				
	Spicy/chilli				
	Herby				
	Sweet				
	Salty				
Colour	Green				
	Beige				
	Red				
Temperature	Hot				
	Frozen				
	Cold (fridge)				
Food	Mixed in pieces (stew)				
combination	Blended (soup, smoothies)				
	Separated/non-touching				
10	Sauces on food				



If your child is reluctant to touch very different substances, have a go at sensory chaining. You will need to start by identifying a substance they like touching, and then try to make changes to it.

Put a substance that your child likes the feel of in the right-hand column. Start your games with these, but then try to chain these substances to less-familiar ones. Think of a slightly different substance that is unfamiliar but similar, or try mixing less-familiar substances in the familiar one.

Liked texture	Similar texture with small change	Liked texture mixed with unfamiliar	Changing the liked texture
E.g., Flour	Cocoa powder, cornflour	Flour with couscous or rice	Gradually add water to flour





The name of your game The smell challenge Choose a substance they like Use five foods with a range of smells put a blindfold on your child What will you put the substance in? On a plate or bowl Choose a story that fits the substance How many foods they can identify by smell. Get them to do the same to you! The smell of a food is closely related to its flavour.

The name of your game The feel challenge Choose a substance a range of different foods What will you put the substance in? You can put them in a sock or a bag, or a bowl. Use a blindfold. Game See how many foods can they identify by feel. Get them to do the same to you!



The name of game The restaurant game Choose a substance any range of foods (your children can make a menu) What will you put the substance in? A plate Game You are working in a restaurant and need to make a beautiful plate of food to serve to the customers. Let's make it look really beautiful.



The name of the game The shop game Choose a substance Let your child either choose packets of food or foods themselves for more sensory play What will they put the substance on a tray or table top Game You have a shop, make prices for the foods. Take turns to be the customer and shopkeeper and buy foods.

The name of your game Buried treasure game Choose a substance they like Goo (agar, agar or jelly), lentils, uncooked rice or cooked pasta. Hide small toys underneath. What will you put the substance in? A bowl Choose a story that fits the substance There are (animals/treasure) buried under here. How quickly can you rescue them?

The name of your game Tadpole and fish rescue Choose a substance they like Peas and sweetcorn for tadpoles, fish shapes of foil or plastic for fish.

What will you put the substance in? In a bowl or 'pond'. You can put bubbles in the water to make it harder to find the tadpoles and fish. A cup with water to put the rescued creatures in

Choose a story that fits the substance A big cow is coming to drink the pond water, we need to rescue the tadpoles and fish and put them in this clear cup.





non-food games

These are messy games with a variety of substances, which expose children to textures. Children who do not mind getting messy also tend to eat a greater variety of foods.

The name of your game

Magic snowman game **Choose a substance they like** Make a white mouldable substance with a similar texture and crunch to snow. **Magic snow is made to the following recipe:** 2 cups of cornflour (in US corn starch) and 1/3-1/2 cup of baby oil. What will you put the substance in? A paper plate to make their snowman on **Choose a story that fits the substance** Let's make a beautiful snowman out of this snow.

The name of your game Magic ball game Choose a substance they like

This game is made with a cornflourwater mixture, which changes between liquid and solid (450g/16oz cornflour to 475ml/16fl oz water).

What will you put the substance in? A small bowl

Choose a story that fits the substance Show your child how you can make a ball by rolling the substance together, which flows through your fingers when you hold your hand still. Time how long can they keep the ball in their hands or see who can make the biggest ball.

The name of your game Sniffer dog game

Choose a substance they like This game is based on the smells of anything in the home. Ask your child to find 5 things in the house that smell. Then put a blindfold on them. What will you put the substance in?

Any surface Choose a story that fits the substance

They are a sniffer dog, and they need to correctly identify what smell belongs to what object. Let them sniff each object and see if they identify the correct smell!

The name of your game

Park rescue (to be played in a park or garden) Choose a substance they like Leaves or sticks or stones. Or small toys from home. What will you put the substance in? You need to make a hiding place in a tree or in a hedge. Let your child decide the best place to hide The name of your game Magic superhero power juice Choose a substance they like A mixture of liquids, gels, glitter, anything they want to include from around the house

What will you put the substance in? In clear jar with a screw top lid. Choose a story that fits the substance Lets make a flying potion to turn your toys into superheroes. You have to stir it with your fingers to make it magic before you put the lid on. Give it to your toys and make them fly! The name of your game Scrub the decks Choose a substance they like Different sticky or messy substances from the house; shampoos, flour, and a sponge to clean the deck. What will you put the substance in? Put the substances on a tray Choose a story that fits the substance You are working on a ship for the captain and you need to scrub the desks for inspection. Use this sponge and see how quickly you can make them clean. Sing scrub a dub dub.

The name of your game The Witch's Brew Choose a substance they like Water and washing up liquid What will you put the substance in? In a bowl or 'cauldron' Choose a story that fits the substance You are making a spell and have to put small items (toys/balls) in the liquid and stir it with your fingers to make the spell. Think of the magic words for your spell.

The name of your game

The Finger/Crayon people go on an adventure

Choose a substance they like

Either their own fingers or wax crayons. You can draw a face on them to turn them into people.

What will you put the substance in? Get a tray or a table top, with areas of different substances; grass, leaves, sticks, flour, goo, a saucer of water Choose a story that fits the substance We are going on an adventure with our finger/crayon people to hunt for(A monster, a bear, treasure, a fairy, granny, your friend). We have to splash through the puddle, swish through the leaves, crunch over the sand.

Create your own games

Children are motivated by different stories; some love animals, others love cars, or magic. You can even feature a favourite TV, film, or book character. They can play alongside other children or family members.

Game One

The name of your game	
Choose a substance	
What will you put the substance in?	
Choose a story that fits the substance	

Game Two

The name of your game	
Choose a substance	
What will you put the substance in?	
Choose a story that fits the substance	
·	

Game Three

The name of your game
Choose a substance
What will you put the substance in?
Choose a story that fits the substance
·

Game Four

The name of your game Choose a substance	
What will you put the substance in?	
Choose a story that fits the substance	

Game Five

The name of your game
Choose a substance
What will you put the substance in?
Choose a story that fits the substance
·

Trying new foods with your child Turning 'no' into 'yes'

If your child is an avoidant, picky, or fussy eater, it is likely that they have an automatic 'No' response to foods. This is the safest strategy to avoid eating something that they might find distasteful or disgusting. The issue is that this can become so automatic that they don't even give foods a try, and may not even touch them.

In addition, we often ask children to eat a whole portion of something; this can be off putting and means that the food is in their mouth for a long time. When trying something new, it's often better for you and your child to aim for a touch, a lick, or a tiny bite. Try to think of acceptance as a chain...even sniffing or touching a new food is part of the chain of acceptance.

Sniff /smell	Touch,	Kiss, touch	Nibble /	Bite, but	Eat a
	poke, prod	with tongue	tiny taste	don't eat	small piece

To encourage your child to start to say 'yes' or 'maybe' rather than 'no', it helps to start by offering foods that are similar to the foods they like. This is often referred to as food chaining. By making subtle changes, your child is more likely to achieve a successful taste.

Try to be patient and realistic with food chaining; if your child is very sensitive to changes then aim for very small differences between foods, and remember that the goal at this point is a lick, bite or a taste rather than the child needing to eat the whole portion.

Try food chaining by filling in the boxes below, starting with a food your child really likes... An example is given for you'

White	e 50	0-50	White bread,	White	White	White	White	Brown
sliced	d br	ead	different	bread	French	Bagel	bread roll	sliced
brea	b		shape	toasted	bread			bread

Children need to feel in control of what goes into their bodies; if your child is old enough, get them to decide what to try. Perhaps your child will be more likely to try something if they feel in control of the process.

	Name of food	Lick, sniff, or bite!	Would they have it again?	
/				

Parents: you can give the child a non-food reward for completing the chart, such a sticker, toy or trip somewhere. Food rewards such as chocolate or sweets are not a good idea, as using those foods as a reward makes them more desirable but not the food you're trying to increase liking or acceptance of.



My child doesn't want to touch novel foods

Some children are very sensitive to touch. The main way to help them with this is to find the textures they don't mind touching and find similar (but slightly different) textures. Try to choose new foods that are very similar to ones they like (and make those verbal connections). Start with non-food play.

My child has no interest in foods

All children have different appetites. If you show pleasure in the food you are eating and talk about it in a positive and relaxed manner, focusing upon taste (not health), then your child will gradually show more interest in food. Give your child very small portions of food, and small tastes, as large portions can be off-putting.

My child will play with food but will not eat it.

It is important to let your child explore their food. However we are not advocating that food should be thrown around the room! Let your child explore their food, but then take it away after a period of time if they are not interested in eating it.

My child eats the same foods every day

Ensure that there are some foods your child likes at mealtimes. You could have a few foods in some bowls on the table, so they have control over which they put on their plate, and how much they want. This gives them a sense of control which is rewarding. This approach also offers the opportunity for exposure to foods without the added pressure of expected consumption.

Toolkit Developers



Helen is a Reader in Lifespan Eating Behaviour at De Montfort University. She has been carrying out research since 1998, mainly focusing on factors associated with fruit and vegetable consumption across the lifespan. She is particularly interested in individual characteristics that lead to food rejection such as food neophobia, disgust, sensory processing and anxiety. She has recently been developing interventions for children that are based on making fruits and vegetables fun and rewarding by using game-based strategies. These are often messy but work really well for developing children's positive relationships with healthy foods.

Dr Vicki Aldridge

Vicki is a Senior Lecturer in Psychology at De Montfort University. Her research interests include the development of eating behaviour and dietary change across the lifespan. She has a particular interest in problematic and disordered feeding behaviour in childhood, such as Avoidant/Restrictive Food Intake Disorder (ARFID), and the factors that might be associated with their development, maintenance, prevention and intervention. She is also interested in the physical, psychological, and social outcomes of different eating patterns.



